A manual of medical jurisprudence for Bengal and the North-Western Provinces / by Norman Chevers.

Contributors

Chevers, Norman, 1818-1886. Francis A. Countway Library of Medicine

Publication/Creation

Calcutta: F.Carbery, Bengal Military Orphan Press, 1856.

Persistent URL

https://wellcomecollection.org/works/t8bkzewh

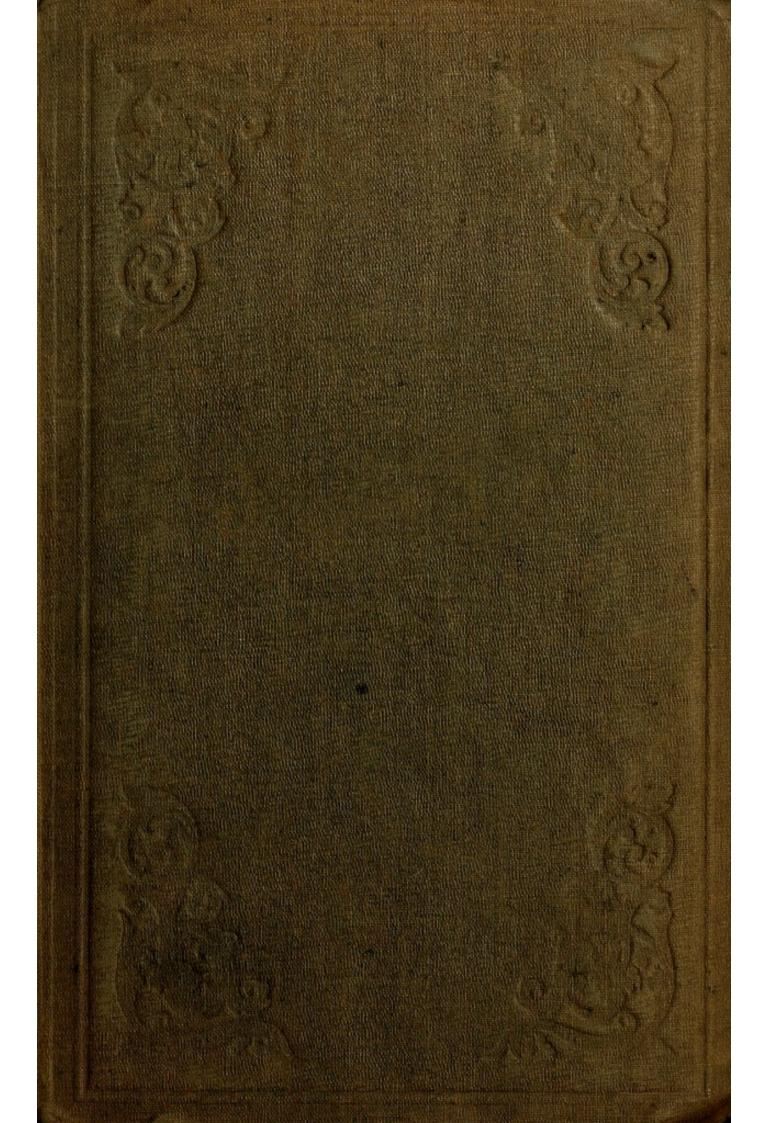
License and attribution

This material has been provided by This material has been provided by the Francis A. Countway Library of Medicine, through the Medical Heritage Library. The original may be consulted at the Francis A. Countway Library of Medicine, Harvard Medical School. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

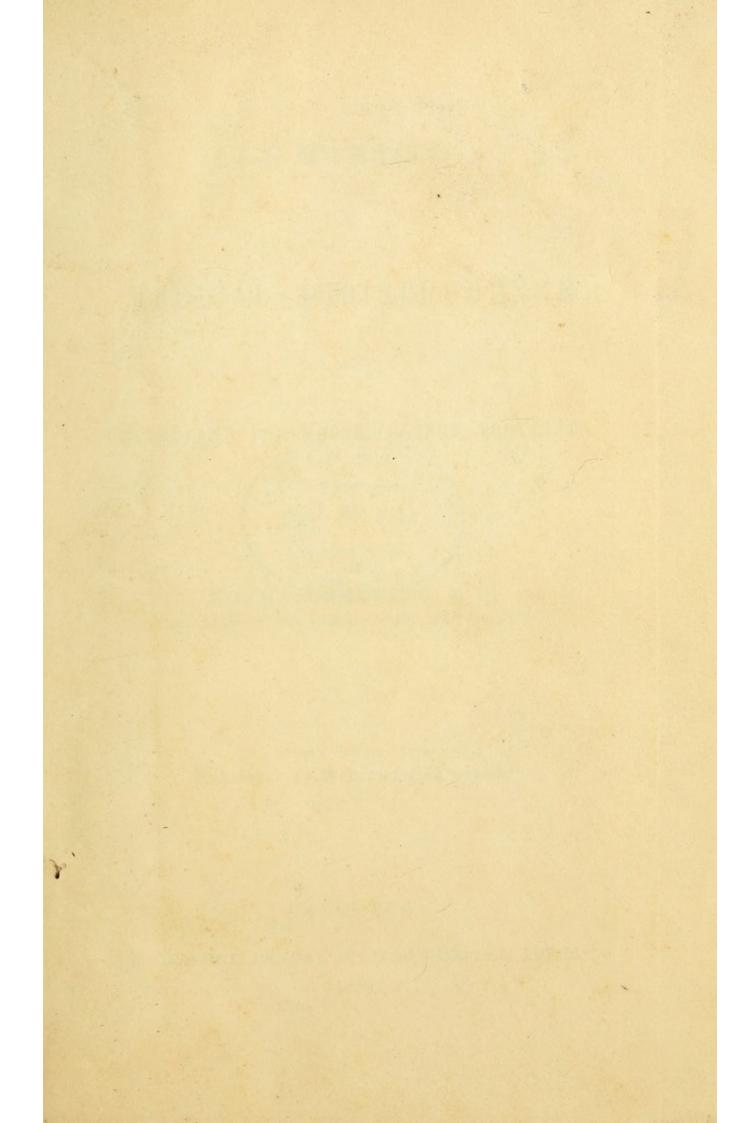
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.

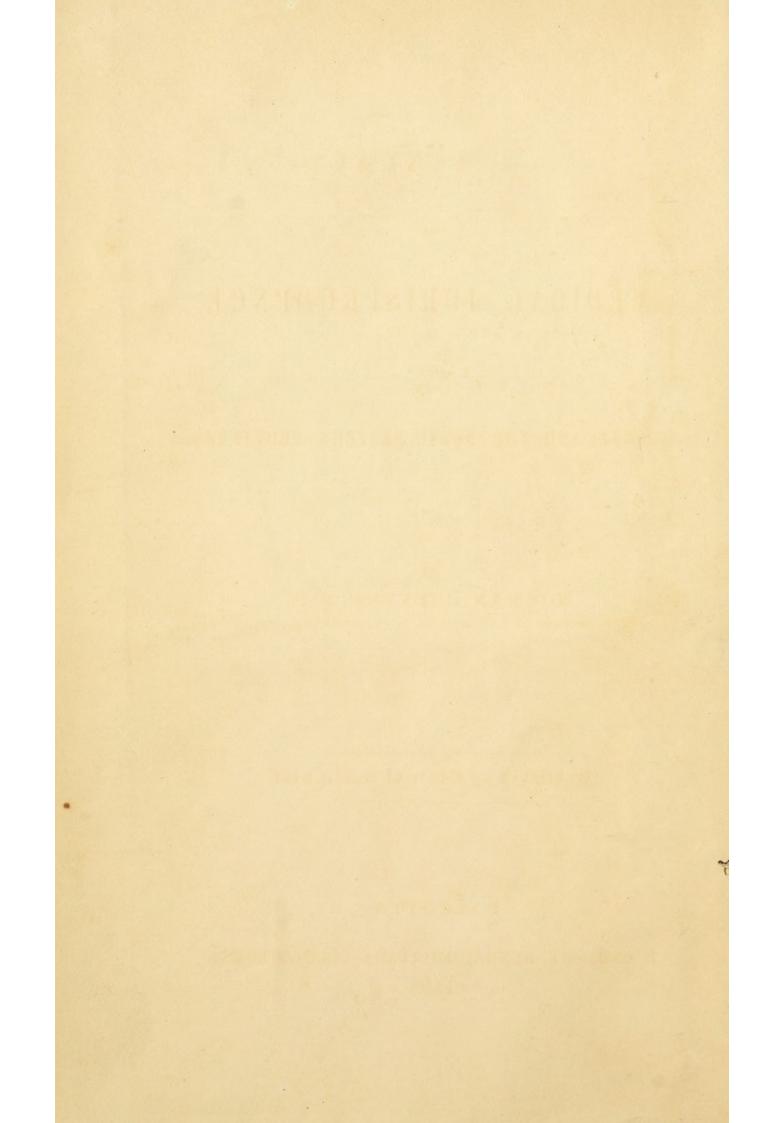


Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org



34. A. 158.





AMANUAL

OF

MEDICAL JURISPRUDENCE

FOR

BENGAL AND THE NORTH-WESTERN PROVINCES.

NORMAN CHEVERS, M. D.

SECRETARY TO THE MEDICAL BOARD, FORT WILLIAM.

Bublished by Order of Cobernment.

CALCUTTA:

F. CARBERY, BENGAL MILITARY ORPHAN PRESS. 1856.

PREFACE.

The remarks embodied in this volume first appeared as a "Report on Medical Jurisprudence in the Bengal Presidency," published in the Indian Annals of Medical Science, for October 1854. They are now reprinted, by direction of the Government of India. In the present edition, however, the original article has received so many and such extensive additions and alterations, that it may be said to have been almost entirely re-written. The chief of these additions consists in the insertion of a great number of important facts and cases, chiefly derived from the printed Reports of the Court of Nizamut Adawlut of the North-Western Provinces,—these quotations have, for greater facility of reference, been marked in the notes by distinctive letters.*

It is hoped that these additions will render the work equally useful, to Judicial and Medical Officers, in Bengal and the North-Western Provinces.

It should be clearly understood that this Manual is not professed to embody even an outline of the well-

^{*} Thus-" Nizamut Adawlut Reports, N. W. P."

known principles of Medical Jurisprudence,—the writer's object has merely been to bring together those facts, bearing upon Medico-Legal questions of frequent occurrence in this country, which are not to be found in the works of our standard authority on the subject, Dr. Alfred Taylor;—the "Manual of Medical Jurisprudence," and the "Treatise on Poisons."

The author trusts that, without deviating from the main object of his work, he has succeeded in embodying in this volume some useful contributions towards A History of Crime Against the Person in India. A knowledge of the principal facts of which this outline is made up, while it is altogether indispensible to the Judicial Officer in the daily performance of his duty, is required by the Surgeon in the investigation of nearly every Medico-Legal Question that can be brought before him in this country.

This sketch is, avowedly, a very slight and imperfect one; still it is believed that it is the first that has been attempted; and it is trusted that it will, at least, serve to demonstrate the importance which would attach to a thoroughly complete and elaborated History of Crime in India.

In performing this not uninteresting task, it has been found necessary to dwell somewhat at length upon many painful details; this, however, has been done unhesitatingly, under the conviction that, for the censor of morals and the dispenser of laws, the vices of society must be laid bare with a strong and untremulous hand:—knowing where the moral canker

lies, it is a resolve neither of wisdom nor of delicacy to permit it to fester on in concealment.

The Legal Authorities referred to in this Manual are—

Taylor's Manual of Medical Jurisprudence. Fifth Edition,

Baynes's Notes on Medical Jurisprudence in India (A carefully drawn out abstract of the leading portions of Taylor's larger work, with notes from the Editor's own experience, especially intended for the use of Judicial Officers.)

The Institutes of Menu.

Mahomedan Law. Harington's (Erroneously cited in the Notes as "Sale's") Analysis of the Laws and Regulations, &c. Folio, 1809.

Beaufort's Digest of the Criminal Law.

Shipwith's Magistrate's Guide.

Macnaghten's Reports.

Reports of the Nizamut Adawlut of Bengal.

Ditto of the North-Western Provinces.

The Reports of the Superintendent of Police, Lower Provinces.

The author will feel greatly obliged to those gentleman who may supply him with additional facts illustrative of questions of Medico-Legal importance in this country.

Calcutta: 10th January, 1856.

Digitized by the Internet Archive in 2010 with funding from Open Knowledge Commons and Harvard Medical School

TABLE OF CONTENTS.

								Pe	age.
Introductory	Rema	rks,						M	1
Criminal Char	racter	istics	of the	People of	of India	1,			5
Rules for the	Tran	smissi	on and	Exami	nation	of Wo	unded	Per-	
sons and	of D	ead B	odies,						14
Information s	ent to	Civil	Surge	ons,					16
Rules to be o	bserv	ed by	Darog	ahs, in s	sending	Dead	Bodi	es to	
the Sudd	ler St	ation	for exa	mination	n,	****			24
Uncertainty of	of Ge	neral :	Eviden	ce in In	dia,				26
MEDICAL I	EVID	ENC	Е,						30
IDENTITY	OF	BODI	IES,						33
DYING DE	CLAI	RATI	ONS,						42
SEARCH F	OR T	HE :	BODII	ES OF	MISS	ING I	PERS	ONS,	44
POISONS,									64
List of Poison	ns mo	st com	monly	used in	India,				69
Arsenical Poi	soning	g,							ib.
Orpiment,								74 and	584
Realgar,					•••				76
CATTLE Pois	ONING								ib.
Aconite,								81 and	584
THUGGEE	BY :	POIS	ON,						89
Datura,								121 and	591
Cannabis Ind	ica,								138
Nux Vomica								139 and	595
Opium,									142
Plumbago Ro	sea,			graf					151
EMPLOYMENT	of]	Poisor	NS BY	NATIVE	PRACT.	ITIONE	RS,		154
Sulphate of C									ib.
Bish Boree,								Contract,	155
Preparations									158
Name of the Party									597
ADMINISTRAT	TION (of Mi	XED P	oisons,					161
RARE CASES								20.	164

							I	Page.
Oxalic Acid,		•••		•••				164
Sulphate of Zinc,					•••			165
Sulphuric Acid,								ib.
Acetate of Copper,	•••				•••	•••		595
Oleander,	•••							166
Terminalia Belleric	a,				•••			168
Euphorbia,								170
Hura Crepitans,		•••						ib.
Gamboge,								597
Anacardium Orient	tale,							ib.
Pounded Glass,								171
ACCIDENTAL POISO	NING,							172
Copper,								ib.
Carbonic Acid,								173
Tartarized Antimor	ıy,							174
Hydrated Oxide of	Lead,							ib.
Poisonous Grain	ND LE	GUMES	,					176
Rice,								ib.
Lathyrus Sativus,								177
Leera in Barley,								598
Examination of the	Medic	einal S	tocks o	f Bunn	eeas,			180
Recognition of Veg	getable	Poison	ıs,					181
Manner in which I	oisons	are us	ually a	lminist	ered in	India,		183
Outward Aspect	of the l	Body a	and Co	untena	nce in l	Death	from	
Poisoning,								183
Mode of Transmitt	ing Su	aspecte	d Mat	ters for	Chemi	ical Ex	ami-	
nation,								187
Identification of ma								191
Medical Evidence	in cases	s of Po	isoning	,				193
Laws in force for								
Poisoning in	India,							198
Of Administ	ering I	oisono	us Drug	gs with	a view	to Robl	bery,	199
WOUNDS,								200
TORTURE,								200
Origin of Torture					•••			201
Torture of Children								203
Torture by Heat,								598
by Suspen								
- by Irritati								

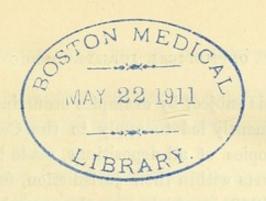
Rectum, &c., — by Compression, — by Binding, — by Constraint in Painful Positions, Various other Modes, — by Means which leave no Traces, Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, 363 and ASPHYXIA, Suffocation and Smothering,	
—— by Binding, —— by Constraint in Painful Positions, Various other Modes, —— by Means which leave no Traces, Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, 315 and Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, 363 and ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, Suicide, Simulated Death, RAPE,	218
—— by Constraint in Painful Positions, Various other Modes, —— by Means which leave no Traces, Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Autilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	223
Various other Modes, —— by Means which leave no Traces, Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Question of Power to Inflict Wounds, Blood Marks, Blood Marks, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Burying Alive, SUICIDE, Simulated Death, RAPE,	227
Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, Simulated Death, RAPE,	228
Modes of Degradation, HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, Simulated Death, RAPE,	231
HUMAN SACRIFICE, Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, Simulated Death, RAPE,	233
Recognition of Wounds Inflicted after Death, Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, Simulated Death, RAPE,	234
Self-inflicted Injuries, Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	237
Injuries inflicted by Wild Animals, Wounds Inflicted with weapons commonly in use, Hacking the Neck, Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	247
Wounds Inflicted with weapons commonly in use, Hacking the Neck,	254
Hacking the Neck,	260
Decapitation, Cut Throat, Fractures and Dislocations, Rupture of Internal Organs, Mutilation, Question of Power to Inflict Wounds, Blood Marks, Deaths from Beating, Causes of Death after Injuries, BITES OF VENOMOUS SERPENTS, Strangulation, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	262
Cut Throat,	272
Fractures and Dislocations,	279
Rupture of Internal Organs,	285
Mutilation,	302
Mutilation,	
Question of Power to Inflict Wounds,	STATE OF
Blood Marks,	344
Deaths from Beating,	
Causes of Death after Injuries,	
BITES OF VENOMOUS SERPENTS, 363 and ASPHYXIA, Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	357
ASPHYXIA,	
Strangulation, Hanging, Suffocation and Smothering, Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	374
Hanging,	ib.
Suffocation and Smothering,	393
Drowning, Burying Alive, SUICIDE, Simulated Death, RAPE,	411
Burying Alive,	416
SUICIDE,	452
Simulated Death,	455
RAPE,	460
	ib.
Fatal Injuries in the first act of Connexion,	479
UNNATURAL CRIME,	485
PREGNANCY,	488
CRIMINAL ABORTION,	489
Question of Medical Responsibility in the Induction of Premature	100
Labour,	513
DELIVERY,	507

INFANTICIDE,							515
Death caused by Exposure,							519
Injury to the Head,		,					521
Suffocation and Strangling,							523
Question of Live Birth,							527
INSANITY,							533
Effects of Opium and Hemp	,						534
Running Amok,							535
Drugging with Datoorah,						•••	549
Delirium of Fever, Pain, &c	·.,						550
Plea of Intoxication,						556 and	602
Examination and Manageme	nt of	Crimi	nal Lun	atics,			559
Fanaticism and Religious M	onom	ania,					561
Eccentricity of Conduct in 1							
Homicidal Monomania,							577
Feigned Insanity,							572
Legal Definitions of Sounda	111	d Unse	nundnes	s of M	ind,		607
A LIST OF POISONS, (583

ERRATA ET CORRIGENDA.

Page 14.-Line 12 from foot, for "of sending," read "for sending."

- " 23.—First line of foot note, for "regard," read "reject.
- " 44.—First line of foot note, for "name a declaration," read "make a declaration."
- " 280.—Note, 3rd line from foot, for "prescribed instrument," read "prescribed punishment."
- " 295.—Line 11 from foot, for "save life in an instant," read "save life in an instance."
- " 322.—Note, line 9 from foot, for "hypertrophid," read "hypertrophied."
- " 424.-Line 2, omit the word "she."
- " 511.—Line 7 from foot, omit the semi-colon.



MANUAL

OF

MEDICAL JURISPRUDENCE

FOR

Bengal and the N. W. Provinces.

INTRODUCTORY REMARKS.

In performing the duties of a Civil Surgeon, I have frequently been struck with the remarkable singularity and intricacy of the medico-legal questions upon which my opinion has been required by the Magistrates and Judges of the districts; and I have long felt that our Indian Medical Literature stands greatly in want of a treatise on Medical Jurisprudence, embodying clear and practical expositions of the various and peculiar modes by which the natives of this country are wont to effect crimes against the person, and to attempt their concealment; as well as full illustrations of the many difficult questions regarding Unsoundness of Mind, Identity, Suicide, Torture, &c., which frequently occur here, under circumstances entirely dissimilar to those which call for the like investigations in Europe.

Dr. Mouat lately informed me that, while occupying the chair of Forensic Medicine in our College, he became so strongly convinced of the necessity of illustrating the leading principles of his subject by examples occurring in India, that he was subsequently led to apply to the Court of Nizamut Adawlut for copies of all depositions, made by Surgeons in the Zillah Courts within their jurisdiction, forwarded to the Judges since 1840, in which year the several Magistrates of Bengal were directed to take the depositions of Medical Officers in cases of murder or wounding. Full copies of nine years' reports were furnished by the Court. These, Dr. Mouat kindly made over to me, previous to his departure on furlough, for analysis in the *Indian Annals of Medical Science*.

I have attentively gone over the whole of these interesting documents. The principal facts which they contain are embodied in the following pages.

I have also carefully gone through and cited Macnaghten's Reports of Cases determined in the Court of Nizamut Adawlut, between the years 1805 and 1826, and the Reports of the Nizamut Courts of Calcutta and the North-West Provinces from 1851 up to the end of the year 1854.

I have also perused and made use of the records of the office of the Chemical Examiner to Government, which (together with a published report by Dr. O'Shaughnessy,) comprise details of all the Chemical Examinations made in cases of poisoning, &c., by Dr. O'Shaughnessy, Dr. Mouat, Mr. Siddons and Dr. Macnamara, from 1840 to 1844, from January 1849 to January 1851, and from May 1852 up to June 1854.

Although the formation of a judicial opinion upon the general merits of cases in which his medico-legal evidence may be required is, of course, altogether beyond the province of the Medical Jurist, it is generally necessary—First, that he should possess an intimate acquaintance with the dispositions, customs, prejudices and crimes of the people among whom his investigations are to be pursued; and, Secondly,—

that he should be made acquainted, as fully as possible, with every ascertainable detail of the cases upon which his opinion is demanded.

In the first place, the circumstances which generally lead to the perpetration of various crimes against the person, the descriptions of crimes usually committed, and the means commonly employed to effect and to conceal them, form an essential portion of the Medical Jurist's knowledge. A very few illustrations will sufficiently set forth this principle.

The body of a woman is discovered on the floor of a London garret. The evidences of want and sorrow are stamped upon her countenance, as deeply as the recent gashes and bruises which disfigure it. The surgeon and the policeman hold an undivided opinion upon this case;—it is not one of accident or robbery; life has been taken away by the hand sworn to protect it; and the criminal must be sought for with the fumes of liquor still in his brain, and with his victim's blood still upon his clothes and behind his nails.

A girl lies dead in a small room in Paris; the Medical Inspector, on entering, presses his handkerchief to his face, to exclude the suffocating atmosphere, glances at a charcoal pan beside the bed, tears out a caulking of rags from the crevices of the sash;—and the leading facts of the case are before him.

In like manner, the body of a female is discovered beside a tank in Bengal, mutilated by a dozen wounds, each sufficient to cause almost instantaneous death. The skull is cloven, a hand has been lopped off, the shoulder is gashed through muscle and bone to the lungs. Whether the remains are those of a Hindu woman or of a Mussulmaunee, the matter scarcely admits of a doubt;—the murder has been committed by her husband or paramour, in a fit of jealousy; search must be made for a dhao, or bill-hook, which will probably be discovered with the evidences of crime upon its blade.

Still again,—the body of a native of good condition would be found buried near a water-course, scored from head to heel with enormous gashes; these, however, would be entirely passed over in the examination, the evidences of strangulation by a Thug's girdle would alone be sought for.

Various as are the modes of effecting and of concealing crime in different countries, a large experience will always show that a really new crime is an unexampled event in the criminal annals of any land. As the hunter and the brutetamer learn to approach and to subdue the cunningest and the strongest beasts and the most venomous reptiles, the detective officer follows the criminal through all his feints and doublings towards escape; while the medical jurist,guided here by a scratch or a blood spirt, there by a dingy stain, or an almost invisible speck of powder, or a metallic film weighing the twentieth part of a grain,-tracks out and lays bare the evidences of his crime, almost with the certainty of an irresistible fate. To start fairly on the scent, however, it is necessary, as we have seen, that he should know something of the propensities and customs of the criminal, and be thoroughly practised in the unravelling of similar cases.*

A very large proportion of the experience and tact essential to the attainment of this end in India has yet to be gained; somewhat, however, is known at present, and sufficient for all practical purposes may, doubtless, be acquired by the combined labours of several close observers, pursuing their investigations in various parts of the country, each noting the varieties in the modes of effecting and of concealing crime, according to the religious classes, habits and races of the offenders.

^{* &}quot;As a hunter traces the lair of a wounded beast by the drops of blood; thus let a King investigate the true point of justice by deliberate arguments"—Menu.

CRIMINAL CHARACTERISTICS OF THE PEOPLE OF INDIA.

It would probably be impossible to point to any races of men whose great crimes more distinctly emanate from and illustrate their national character, than is the case with those various classes of natives who inhabit the British possessions in India. A thorough insight into the intimate peculiarities of the native character could only follow a life-long acquaintance with Hindus and Mussulmauns of all classes, and has probably never yet been fully mastered by any European. Still, the strong broad features which stand prominently forth upon the surface of their national characters, and which are displayed with the greatest expression in the details of their crimes are, of course, open to every cautious observer, and especially demand the study of the Lawyer, the Physician and the Medical Jurist.

I shall, therefore, make no apology for citing here the opinions formed of the moral characteristics of two foremost classes of the people in India, as viewed by two great lawyers:—verdicts evidently weighed on the judgment-seat with regards unrelentingly directed to the criminal aspects of the natures judged:—

"The Rajpoots are the representatives of Hinduism. In them are seen all the qualities of the Hindu race unmitigated by foreign mixture, exerted with their original energy, and displayed in the strongest light. They exhibit the genuine form of a Hindu community, formed of the most discordant materials, and combining the most extraordinary contrasts of moral nature; unconquerable adherence

"The physical organization of the Bengalee is feeble even to effeminacy. He lives in a constant vapour-bath. His pursuits are sedentary, his limbs delicate, his movements languid. During many ages he has been trampled upon by men of bolder and more hardy breeds. Courage, independence, veracity, are qualities to which his constitution and his situation are equally unfavorable. His

to native opinions and usages, with servile submission to any foreign yoke; an unbelieving priesthood, ready to suffer martyrdom for the most petty observance of their professed faith; a superstition which inspires the resolution to inflict, or to suffer the most atrocious barbarities, without cultivating any natural sentiment, or enforcing any social duty; all the stages in the progress of society brought together in one nation, from some abject castes, more brutal than the savages of New Zealand, to the polish of manners and refinement of character conspicuous in the upper ranks; attachment to kindred and to home, with no friendship, and no love of country; good temper and gentle disposition; little active cruelty, except when stimulated by superstition; but little sensibility, little compassion, scarcely any disposition to relieve suffering, or relieve wrong done to themselves or others. Timidity, with its natural attendants, falsehood and meanness, in the ordinary relations of human life, joined with a capability of becoming excited to courage in the field, to military enthusiasm, to heroic selfdevotion. Abstemiousness, in some respects more rigorous than that of a western hermit, in a life of intoxi-

mind bears a singular analogy to his body. It is weak, even to helplessness, for purposes of manly resistance, but its suppleness and its tact move the children of sterner climates to admiration, not unmingled with contempt. All those arts which are the natural defence of the weak are more familiar to this subtle race than to the Ionian of the time of Juvenal, or to the Jew of the dark ages. What the horns are to the buffaloe, what the paw is to the tiger, what beauty, according to the old Greek song, is to woman, deceit is to the Bengalee. Large promises, smooth excuses, elaborate tissues of circumstantial falsehood, chicanery, perjury, forgery, are the weapons, offensive and defensive, of the people of the Lower Ganges. those millions do not furnish one sepoy to the Armies of the Company. But as usurers, as moneychangers, as sharp legal practitioners, no class of human beings can bear a comparison with them. With all his softness, the Bengalee is by no means placable in his enmities or prone to pity. The pertinacity with which he adheres to his purposes, yields only to the immediate pressure of fear. Nor does he lack a certain kind of courage, which is often wanting in

cation. Austerities and self-tortures almost incredible, practised by those who, otherwise, wallow in gross sensuality; childish levity, barefaced falsehood, no faith, no constancy, no shame, no belief in the existence of justice."

MACKINTOSH.

To inevitable evils, his masters. he is sometimes found to oppose a passive fortitude, such as the stories attributed to their ideal sage. An European warrior, who rushes on a battery of cannon with a loud hurrah, will sometimes shriek under the Surgeon's knife, and fall into an agony of despair at the sentence of death. But the Bengalee, who would see his country over-run, his house laid in ashes, his children murdered or dishonoured, without having the spirit to strike one blow; has yet been known to endure torture with the firmness of Mucius, and to mount the scaffold with the steady step, and even pulse of Algernon Sydney."

MACAULAY.

The operation of the great moral defects here laid bare, in stamping a peculiar and distinctive character upon the crimes most frequently committed by the people of India, is abundantly evidenced in every page of our criminal reports. Theft, Perjury, Personation, Torture, Child-stealing,* the Murder of Women and of Aged Men, Assassination, Arson, the Butchery of Children for the sake of their ornaments, Drugging and Poisoning, Adultery, Rape, Unnatural Crime, the Procuration of Abortion, are among the leading villanies

^{* &}quot;This crime is very common in Mahomedan towns, the children being mostly girls stolen to be sold as slaves or for purposes of prostitution."—Mr. Dunbar's Police Report L. P. 1845.

of these ingenious, calm-tempered, indolently pertinacious sensualists.

Faithfully graphic as the above delineations of native character unquestionably are, they still afford but little insight into the deeper and darker recesses of the Bengalee and Hindustanee nature; into those springs of action which develope the criminal characteristics of the people; without a knowledge of which it is impossible that we should acquire the power, -so indispensable to the successful tracing or just weighing of any description of guilt,-of regarding the natives' crimes from those points of view whence they themselves regard them. It is only by thoroughly knowing the people, and by fixing the mind sedulously upon the records of their crimes, that an European can learn how strange a combination of sensuality, jealousy, wild and ineradicable superstition, absolute untruthfulness, and ruthless disregard of the value of human life, lie below the placid, civil, timid, forbearing exterior of the native of India.

When we recollect that all these qualities are ruled by the traditions of custom and of ancient sanguinary laws which, in the absence of what they regard as rightful authority, the people generally still hold to be just and absolute; that the masses have over them a police drawn from their own ranks and, therefore, marked with all the features of the national character; that they are uneducated and borne down by all the temptations and degrading influences of extreme poverty; that the women are even more ignorant and brutalized than the men; that the belief in woman's virtue or man's honesty does not exist amongst them; that, cowardly as the people are, they are all armed, and are often necessitated to act in self-defence; -when we take together these and many other facts which experience will afford, we may gain some insight into the "Pathology" of crime in this country, and into the modes of analysing and of dealing with it.

Between Hindus and Mussulmauns, the disparity is rather in the frequency than in the characters of the offences.* The only prevailing crimes that appear to be inconsistent with the habits of the people are the Dacoities (gang robberies), and Dungas (faction fights) so prevalent in Bengal. In these, however, the ring-leaders are mostly Up-country men, or Bengalees of unusual daring, who calculate rather upon the weakness of their opponents than upon their own prowess. To the eye of the experienced official, the distinctions may probably appear sufficiently broad; but, to the ordinary observer, it would certainly seem to be almost impossible to detect any absolutely characteristic differences between the modes adopted by the Hindus and by the Mussulmauns of Bengal Proper in effecting and in concealing the majority of grave crimes against the person. Indeed the lower grades of these two sects are so closely blended together, -not only as regards means, social position, and the operation of surrounding circumstances generally, but even with respect to their origin, their habits, and their religious superstitions,-that they can scarcely be considered as separate races, adopting broadly distinctive trains of criminal action. It can merely be said, with regard to the crimes of both, that they are, for the most part, essentially "Bengalee" in their characters. Certain descriptions of crime occur nearly alike throughout the

^{*} I have not succeeded in discovering any satisfactory data with regard to the comparative frequency of crimes of magnitude among the Hindu and Mahomedan inhabitants of India. It appears, from the Chief Magistrate's Report for 1852-53, that the number of Hindus committed to the Calcutta House of Correction in 1853, was 704, while that of Mahomedans was 718; showing a very large excess against the latter, when it is remembered that the proportion of Mahomedans to Hindus, in Calcutta, is reckoned as 4 to 10. These numbers, however, do not give a fair idea of the comparative frequency of the graver offences among the two classes—A comparison which is much needed.

whole of India. The chief of these are Dacoity, Dunga, and Thuggee. Mussulmauns and Hindus have combined to perpetrate each of these atrocities in innumerable instances; and,-since the active measures of government have nearly extinguished the profession of Thuggee by strangulation,—the drugging of travellers, with a view to robbery and murder, has appeared likely to become an established practice among criminals of both sects in every part of the Several of the smaller tribes inhabiting our border districts, however, display very characteristic national traits, both in the motives which lead to crime and in the devices adopted in its perpetration and concealment. The Kole, dwelling in the hills which lately formed the South-Western frontier of this Presidency, lays wait for the man whom he believes to have wronged or bewitched him, and effects his deadly purpose without any unnecessary exposure of himself. He shows no anxiety to reveal the crime, which by no means weighs heavily on his conscience; but, upon being distinctly charged with it, he admits his guilt at once, without a shadow of equivocation.* His neighbour, the Khond, with a character full of rude and perverted courage, fidelity and generosity, was wont, until a few years back, to indulge his rapacity and his vengeance to the uttermost, to purchase human victims for sacrifice to his deities, and to perpetrate female infanticide with all the systematic regularity of one who performs a grateful religious duty. Again the Reaug, Cookie or Chuckma, + inhabiting the hills Eastward of Tipperah and Chittagong, with apparently far less developement of the nobler instincts, plunders and lays waste every undefended settlement that attracts his cupidity,

^{*} See Lieutenant Tickell's memoir on the Hodésan (improperly called Kolehan.)—Journal of the Asiatic Society, vol. ix., p. 709.

[†] These tribes are now much divided, but have evidently sprung from a common stem.

employs poisoned weapons against those whom he fears, slaughters every opponent whom he is not desirous to steal, and pours out the blood of his human sacrifices before his gods like water.* Until the advent of European power among them, the Kasias of the hills East of Sylhet, practised human sacrifice and polyandry (which, of course, involved infanticide),-even now they employ poisoned arrows in the chase. Still, with all their distinctive traits of barbarity, the crimes of these four nations would alone be sufficient to stamp them as branches of one great aboriginal family, inhabiting the hill districts of Lower Bengal, who have always remained perfectly distinct from the people of the Delta. Again, certain rather marked characteristics distinguish crime in several of the other districts of India. In his own country, the Ooriah criminal betrays but little craft in effecting his nefarious designs, and displays a singular propensity to confess. Many of the Hindustanee's greatest crimes are committed in moments of ungovernable rage; indeed the frenzy which reproachful language is apt to evoke in these people is so well understood, that the law has provided accordingly ; +-at the same time, it would appear that the weak are usually the victims of their fury. The Hindustanee usually strikes with the sword (tulwar) or iron-bound cudgel (lohar ki latthee). The Bengalee's readiest weapons are the dhao (bill-hook) and the bamboo (bans ki latthee). Class and local position, of course, have their effect in determining the comparative prevalence of various crimes. Sexual jealousy is probably the most frequent cause of homicide among the Mussulmauns; Criminal Abortion and Child Murder are rifest among the unhappy class of Hindu widows. Dungas

^{*} See the case of Joodhomonee and others,—Nizamut Adawlut Reports, vol. ii., part 1 of 1852, p. 899.

[†] Macnaghten's Reports, vol. i., page 53.

occur principally in the great indigo districts, in spots where the estates of rival Zemindars are crowded together; and in situations where, the means of irrigating the land being defective, water rights are mainly insisted upon; Dacoits and other robbers, of course, infest those tracks which are most frequented by natives, and those districts where the probabilities of resistance are least.

Although the proportionate frequency of certain crimes varies much in the two states, I can find no very marked distinction in the characteristics of crime as practised in Bengal and in the North-West Provinces.

Altogether it would certainly appear that, neither in the planning, the effecting, nor the concealment of great crimes, does any class of the natives of India display that remarkable subtlety, calmness and power of baffling investigation which might be expected on observation merely of the tact, duplicity and finesse which characterise their minor rogueries of every-day occurrence.—The timid nature cannot rise with the occasion, it fails under the terrific weight of enormous crime

A deep and cautious investigation into the habits and opinions of the people of India, in their relation to Crime, would afford to any judicial officer an almost untrodden path of research, leading to practical results which would abundantly repay the labour employed. Hitherto, the attention of Magistrates in India has been sufficiently occupied in the difficult tasks of detecting crime and of regulating punishment. The time has now arrived at which the true nature or "Pathology" of crime in India may be investigated with advantage both to the people and to their law-givers. The officially printed Police Reports, and the Reports of the Courts of Nizamut Adawlut of Bengal and the North-West Provinces afford abundant materials for a history of CRIME IN INDIA. Such a work, ably and carefully compiled, while it would materially aid the daily investigations

and decisions of every Judicial officer in the country, would, probably, go further than any other book that has appeared since the commencement of the century in advancing the progress of civilization here, by enabling us to detect and grapple with those deeply-rooted errors in the native character which now, in eluding our notice, most effectually baffle all our best laid schemes of improvement. With this view, I have ventured, in several of the following pages, to digress somewhat from the direct line of my subject, while endeavouring to show the Causes, Antiquity, and Prevalency of the criminal practices which are brought under consideration. Every one who has spent even a month in India will have learned how strong an influence custom has over the conduct of natives of all classes, in all the opinions and actions of their lives.* This "Custom" is inextricably interwoven with the native's religion. He does not generally pause to consider whether this act or that is right or wrong, or will be viewed in the same light by the English as by the Hindu or Mahomedan law; -he is satisfied to act precisely as his forefathers have acted for centuries. Hence the antiquity of a crime must always be taken into account in legal investigations here; indeed the general practice of an

^{*} In their Report of 1838, the Committee on Prison Discipline remark—
"The general morals of the people may possibly be bad enough, but an Indian criminal is probably a better man than any other criminal of the same sort. His general character certainly differs less from that of the mass of his countrymen than would be the case in more civilized and moral countries. A large proportion of the crimes in this country are committed by persons whose tribe have done the same time out of mind, and they are almost as naturally the result of birth as another man's honest trade. Many more are committed as it were professionally, by the members of immense confederations, who are not much worse than other people in matters unconnected with their profession. Owing to feelings and principles which we can never" [?] "comprehend, there is little or no consciousness of moral guilt amongst these classes, on account of the exercise of what they regard as their proper business."

atrocity has usually been received as mitigatory, as in the practices of Sati, Leper Burying, Suicide, &c., until it has been found necessary to adopt extreme measures for its absolute extirpation.

I am only too conscious of the crudity of the above remarks; but, deeply impressed with the principle that it is as essential to the medical jurist as to the judge of criminal cases to possess a full knowledge of the machinery by which guilt is wont to effect its ends, I have ventured to broach these important questions, in the hope that they will shortly find illustration from abler hands.

RULES FOR THE TRANSMISSION AND EXAMINATION OF WOUNDED PERSONS, AND OF DEAD BODIES.

It is, of course, a matter of paramount importance that, on entering upon any medico-legal inquiry, the Surgeon should be made acquainted by the police and others with every ascertainable detail of the cases upon which his opinion is required.

The rules which obtain in this Presidency for conducting and reporting Inquests, and of sending wounded persons and the bodies of those who have died under suspicious circumstances, with all necessary information, to the Civil Surgeons, are as follow:

"505.—On receiving information of suspicious or unnatural deaths, the darogah, or some responsible person deputed by him, shall proceed to the spot and examine the wounds, or other corporal injuries, but he shall not probe them, and he shall record the length, breadth and apparent depth of each, and the weapon with which the wounds appear to have been given, and whether the body appeared to have been brought and laid there. He should also ascertain, if possible, the name of the deceased, and whether any one can recognise him or her.

-Regulation XX. of 1817, Section XIV., Clause 6, Circular Order No. 9, August 10th, 1847.

"508.—After the inquest, the body or bodies shall be given up to the relations, or be buried or burnt, and shall not be sent to the Magistrate except in cases of poison or doubt; and then only if the weather or distance will allow of their being sent without the risk of putrefaction: and the notice of the Sessions Judge shall be directed, on the trial, to the observance, or otherwise, of these rules.—Regulation XX. of 1817, Section XII., Circular Order No. 17, April 19th, 1789.*

"510.—In sending the bodies to the Civil Surgeon for examination, the Magistrate shall furnish him with all available information, as to the cause of death.—Circular Order No. 152, November 24th, 1843.

"1134.—All inquiries held by the police relative to unnatural deaths or woundings, as well as to dacoity and other heinous offences, shall be attested by the Police Officer holding the inquiry, and a sufficient number of creditable person present at the investigation.—Regulation XX. of 1817, Sections XIV., XV.

"1127.—The Sooruthals required by Sections XIV. and XV., Regulation XX. of 1817, in cases of deaths, robberies, &c., shall be sent to the Magistrate, in place of a report, the moment they are drawn up.—Circular Order No. 138, June 16th, Para. 2, Section III.

Experience would certainly tend to show that this is, by far, the safer view of the case.

^{*} In 1853, the Officiating Sessions Judge of Bundlekund recorded his opinion that,—"In all cases where there has been severe wounding, and death subsequently ensues, the corpse should be sent into the station without leaving the police any discretion in the matter." There was a proceeding, dated 3rd June 1845, however, by a former Joint Magistrate of that district to the purport, "that when people are killed by wounds of swords or spears, and there is no doubt but that they have died from such wounds, their corpses should not be sent to the station." Although this order is conformable to the letter of the Law, Regulation XX. of 1817, Section XIV., Clause 12, yet it seemed to him that, in almost all cases of death ensuing a few days after the infliction of wounds, there is doubt whether unskilful treatment or other causes may not have operated, and that nothing can be imagined more injudicious than the above order, the only certainty which we have in this country of the actual cause of death arising from the post mortem examination of the Surgeon.—Nizamut Adawlut Reports, N. W. P., March 24, 1853.

"In cases of murder, homicide, or unnatural death, accompanied with suspicious circumstances, as also in cases of severe wounding, the corpse or wounded person will be forwarded by the police, as soon as the customary 'Sooruthal' has been recorded, to the officer in charge of the subdivision; should his station be in the direct line between the place where the investigation is going on and the Sudder Station of the Magistrate. The deputy or assistant, after inspecting the corpse, or wounded person as the case may be, will lose no time in sending the same on to the sudder station for examination by the Civil Surgeon.—Rule 4 of Rules for the guidance of Deputy Magistrates and Assistants in charge of sub-divisions, Government Circular Order, February 18th, 1846."*

It is held to be the duty of Medical Officers to examine all bodies sent in by the police as soon as practicable after their arrival at the sudder station.

For some years past, Magistrates have been supplied with the following lithographed letter, which is forwarded to the Civil Surgeon, not only in cases of assault, &c., but also in those where an explanation of the cause of death is required:

To

Surgeon

> I am, Sir, Your most obedient servant,

> > Magistrate.

Magistrate's Office, Zillah The 18.

^{*} Skipwith's Magistrate's Guide, 3rd Ed., 4to. 1849.

At the end of this letter, Magistrates usually insert a few words indicative of the alleged cause of death. Such as—"Reported to have died with symptoms of poisoning;" or—"Stated to have been severely beaten;" indeed the form, being printed rather widely on a quarter of a sheet of foolscap paper, does not admit of the insertion of many explanatory remarks. It appears probable that this form was originally intended to be sent only with wounded persons, consigned to the Civil Surgeon for examination and treatment.*

It, however, by no means unfrequently occurs that, either from delay on the part of the Darogah in transmitting the Sooruthal (report of inquest), or from some other cause, the Medical Officer finds himself called upon to examine and to report upon the cause of death in a case regarding which he has not been furnished with a single guiding fact. When, as generally happens, death has taken place several days previously, and decomposition of the body has advanced to a horrible extent, the task placed before the Surgeon, who is really desirous to throw some light upon a case which he doubts not involves questions of vital moment, is a very trying and difficult one. The order forbidding the police to send in bodies for examination whenever it is probable that, on account of the weather or of the distance, they will reach the sudder station in a state of advanced putrefaction, is not always attended to; and account

^{*} Since the first publication of the above remarks, Mr. J. R. Ward, late Magistrate of Howrah, indented for and obtained two separate lithographed forms which appear calculated to answer every purpose. They run as follow:—

The form sent with bodies for examination, has the following additional paragraph:

[&]quot;2nd.—I beg you will be good enough to state whether, as is reported, death resulted from"—

is not generally taken of the rapidity with which decomposition advances in a body wrapped in a sheet of matting, hurried along some 30 or 40 miles through a burning atmosphere, at from two to ten days after death. Judging by my own experience at different stations, a body can seldom be sent in, from a remote part of the district, within less than two or three days after death. Under these circumstances, its very appearance, when freed from its swathings, is almost appalling, even to the initiated :- bloated in every part, almost to bursting, with its limbs widely separated by sheer gaseous distention; the eyes dissolving and forced from their sockets; the tongue enormously swollen and protruded between the teeth, through which the gases of putrefaction bubble with loud crepitations; the skin every where separated, displaying the white surface beneath, marbled with gangrenous blotches and veinings, and preyed upon by gigantic ants and beetles of sinister aspect, and by maggots, which roll forth in measures-full when the cloths are unloosed. A body of this kind offers no very safe or encouraging field for the morbid anatomist's researches.

It is true that, in all such cases, the Civil Surgeon is at liberty to decline making an internal examination; still, if furnished with a distinct clue, he would often be able to throw a light upon the cause of death, sufficient for the purposes of justice, even when decomposition had advanced considerably. Too great stress needs not be laid upon the rule of avoiding to send in bodies, when it is even certain that they will reach the sudder station in an extremely putrid condition, as it will frequently happen that even a single glance at the most decomposed corpse will reveal much to the experienced eye. For instance; a body was sent to my hospital in a very advanced state of putrefaction; the history was not furnished. I was about to desire that it might be buried, when I was struck with something unusual

in the position of the head. Upon further examination, I found a fracture of the vertebræ of the neck. A person was stated by the police to have died in consequence of a severe beating; the accused declared that death had resulted from cholera. The body was so offensive as to be scarcely approachable. No wound or fracture could be perceived,-the presence of solid fæces in the mats, however, enabled me to declare, that the case had not been one of cholera. Still more recently, I viewed the body of a pregnant female, in which the work of decomposition had fully revealed the history of her death. After it had been placed in the deadhouse, accumulation of gas in the intestines had caused the contents of the uterus to be expelled,-there lav a muchdecomposed fœtus of about four months, and with it a portion of the intensely acrid root of the Plumbago Rosea, seven inches and a half in length, thickly coated with inflammatory mucous deposit. Again, in a case of alleged death by hanging, where any idea of dissection was quite out of the question, a close examination of the skin of the neck revealed perfectly convincing traces of the pressure which the rope had occasioned. Many other similar instances might be enumerated; they, however, merely tend to confirm and strengthen the necessity that the Police should furnish ample information for the guidance of the medical officer in every case; and, most especially, in those where it is evident that the task of unravelling the truth will be one of exceeding difficulty. I believe that, in nearly all cases, Magistrates are perfectly willing to afford the medical officer every information and assistance in their power; still it appears probable that there exists a very prevalent idea, that it is merely necessary to place a body, however decomposed, before a medical man, to enable him to reveal fully the causes of death. It is certainly a truth, which the criminal histories of every year show forth with almost supernatural distinctness, that"Murder hath speech, and will declare itself With most miraculous organ"——

Still, a very close devotion of twenty years to the study of morbid anatomy has convinced me, that this is one of the most unfair and most unsafe questions that can be put to a medical man. In England,-where such investigations are, of course, made with so much greater facility than in India,—a difficulty of this kind exceedingly rarely comes before those who are most engaged in post mortem examinations; there, in at least ninety-nine cases out of every hundred, the operator is enabled to obtain, beforehand, some kind of clue which may guide him in his obscure inquiry. Except in cases where it is found absolutely impossible to obtain information, no surgeon can be fairly expected to unravel every tissue of a body from which life may have been expelled by any one of a hundred causes,-such as by the softening of part of a nervous centre, by a stroke of lightning, by a snake bite, by exposure to a poisonous gas, by a blow over the stomach, by a bodkin thrust into some vital organ, from hydrophobia or idiopathic tetanus, by the effects of a few drops of prussic acid, or of a few grains of strychnia,—the detection of every one of which would become an undertaking of greater and greater difficulty with every hour that elapsed after the departure of vital heat. When the process of decomposition has fully commenced, the surgeon cannot fairly be expected to succeed in throwing any light upon the cause of death,-or even to undertake the examination,-unless he can be enabled to judge with precision in what direction his search must be pursued—as, for instance, where it is known that a blow has been inflicted over a certain vital part, or it is believed that a mineral poison has been swallowed. In the absence of the necessary information regarding the circumstances preceding death, the best surgeon is frequently liable

to deduce a partial, and therefore an erroneous opinion from his examination of the bodies even of the recently dead. Two or three probable instances will suffice in illustration. A person suffering from cholera has his end hastened by a (let us say homœopathic) dose of arsenic; or a plague-stricken wretch is strangled; or an unfortunate, in this country, is attacked and suffocated:—are the Surgeons to blame if, on discovering the ordinary vestiges of destructive intestinal disease, the deadly carbuncles, and that cerebral congestion which may so sufficiently represent the effects of heat apoplexy,* they form their decisions, and record their evidence upon these, overlooking entirely the few scattered grains of impalpable powder, the finger marks upon the swollen neck, and the evidences of asphyxia, wherein the truth lay hidden?

Although the Regulation guiding magistrates in sending bodies with sufficiently explanatory details to the medical officers for examination is, as we have seen, very frequently overlooked, it rules in a perfectly-clear and unequivocal manner that the civil surgeon is to be held as a party in the judicial inquiry; that no attempt is to be made to keep him in the dark; and that all possible aid and information are to be afforded him in his task of unravelling the medico-legal difficulties of the case. The Circular Order No. 152 of Novr. 24th 1843 directs that—

"In sending the bodies to the civil surgeon for examination, the magistrate shall furnish him with all available information as to the cause of death."

This rule, however, does not appear to be adhered to with

^{*} It is well known, that heat apoplexy (or, more properly speaking, death from extreme heat) may occur quite out of the influence of the sun's rays. In India many cases occur at night. As in nearly all cases involving a severe shock to the nervous system, the first effect of the destructive influence is to arrest the supply of blood to the cerebral system. With reaction, however, we have all the evidences of intense congestion of the brain.

strictness in the North-West Provinces. In a case of child murder, tried at Cawnpore so recently as 1852, the civil surgeon stated that the infant probably died from concussion of the brain, but that he did not make an examination of the head or brain. That, not having any idea of the circumstances under which the examination was required, and the infant being newly-born, he, not perceiving any appearance of a blow, satisfied himself with examining the bowels and viscera, where disease or appearance of poisoning would, most probably, be detected. He had become aware that this was omission on his part, which he assured the judge would not occur again. He desired, in future, to have an outline of the circumstances under which bodies for report might be sent to him, in order that he might have some guide to the organs most requiring scientific examination. "This," however, the Judge thought, "would interfere with a principle of criminal justice, and would be analogous to putting leading questions, the answers to which would not be evidence, nor would it be fair to the prisoner; for, though a severe sword cut might be reported on, the presence of a diseased lung or spleen might pass unnoticed, though the actual cause of death." In their remarks upon this case, the Superior Court decided that "the communication which had passed between the Sessions Judge and the Civil Surgeon was altogether irregular and objectionable."* As, however, the animadversion of the Court does not appear to have been particularly directed to the above opinion, and as there is reason to believe that a similar view of the question is entertained by other judicial officers, this point still appears to demand an authoritative decision.

It would, of course, be presumptuous to attempt to discuss the question here, except in its medical bearings. Still many able jurists, among whom those of France may be especially

^{*} Nizamut Adawlut Reports, N. W. P. December 21st, 1852.

mentioned, disapprove of that strict avoidance of leading questions which so strongly marks all judicial proceedings in England.*

The position of the medical witness in a criminal question is, however, altogether different from that of an ordinary witness to matters of fact. When consulted by the police in a case of assault, wounding, or poisoning, he is not, in the first place, a Witness; he is, like the police themselves, an active Agent in the inquiry. Can it be that each of the parties concerned in this inquiry is under obligation to pursue the search throughout, guided only by his own light, keeping all the others sedulously in the dark? When, later in the inquest, the evidence of the medical witness is called for, it is evident that, in nearly nine cases out of ten, he has to be questioned, not upon plain facts, but upon obscure points of opinion and judgment. He can have no motive for collusion; it is a Decision rather than an Evidence which the law demands of him; he is, in fact, the arbitrator of a most essential portion of the case: with him alone lies the determination of those leading portions of the inquiry which are set before him, -upon these he stands in judgment; and all attainable light must be thrown upon every point of difficulty which he may be called upon to weigh.

In short, medical jurists cannot be too conversant with the details of the judicial inquiries in which their opinions are called for; and all reserve in furnishing them with the information which they require involves an infraction of the law as established both in England and in India.

^{* &}quot;The Scottish lawyers regard with a sacred and scrupulous honor, every question so shaped by the counsel examining as to convey to a witness the least intimation of the nature of the answer which is desired of him. These scruples, though founded on an excellent principle, are sometimes carried to an absurd pitch of nicety, especially as it is generally easy for a lawyer, who has his wits about him, to elude the objection."—Sir W. Scott.

At the request of Mr. Ward, late Magistrate of Howrah, I, some months since, suggested the following Rules to be observed by Darogahs in sending dead bodies to the sudder station for examination. It must, however, be premised that, in this country, the approach and progress of decomposition can be only in some degree retarded, whatever means we may adopt. Still, it is within our power to preserve the remains against the attacks of insects and vermin, and to provide that the advance of putrefaction shall not be unnecessarily accelerated.

"I would recommend that supplies of strong acetic acid, or of the solution of the chloride of zinc be sent to each thannah in the station. The free application of either of these fluids over a body will tend to delay somewhat the progress of decomposition externally; and will be very effectual in protecting the corpse against the destructive attacks of insects and small animals. I find that the cost of either of these fluids will be three rupees per quart. Rather more than a pint of the acetic acid would be required for each body. The chloride of zinc would go considerably farther, but is somewhat objectionable, as it would soon destroy the cloths used for enveloping the bodies.

"I would, therefore, beg to recommend that, immediately upon the discovery or disinterment of a body, the Darogah, having carefully observed and made notes of its position, the state of its garments, the marks of injury, any appearances of blood, &c., on the ground, floor, walls, or furniture, &c., &c., should have it placed under a clean rattan-bottomed charpoy (one of which might be supplied for that purpose, at small expense, to each police station,) and covered with a clean sheet.

"Care should be taken not to remove any traces of blood or mud, which may be found on the body. Any cord, &c., on the neck or limbs, or any grass or weed grasped in the hands should be allowed to remain untouched, as should also be the case with any weapon left sticking in the body. Should delay be likely to attend the first investigation, the body should be despatched at once, with a memorandum to the magistrate of the cause of death assigned, as well as of that which is suspected by the police,—such as, 'Alleged to have been drowned; but supposed to

have been beaten with latthees.' The regular Sooruthal should follow as speedily as possible.

"When considerable delay is quite unavoidable, it will be necessary to envelope the corpse carefully in a sheet saturated with the acetic acid. Some of the acid should also be poured into the mouth, and a cloth soaked in it should be placed carefully over any wound that may be present.

"Where it is possible to send the body to the medical officer within twelve hours after death, it should merely be enveloped in a dry sheet and despatched at once.

"As the present mode of sending bodies enveloped in mats and slung on a bamboo is, in many respects, objectionable, I would recommend that a wooden shell, with a closely fitting cover, protected above and at the sides and ends with thick sheets of sola* and furnished with poles for the bearers, should be kept at every thannah. For each shell should be supplied two sheets of very strong cotton cloth or thin canvas, and a quantity of charcoal broken up into small pieces could always be kept in the shell.

"I would also recommend that, if possible, four dome bearers should be encouraged to live in the neighbourhood of every thannah for the speedy conveyance of bodies. Upon repairing to the spot at which a suspicious death had occurred, the Darogah could be accompanied by these men with the shell, charcoal, cloths, and a bottle of acid.

"Before placing the body in the shell, the charcoal should be emptied out upon one of the sheets spread on the floor. The other sheet should then be placed at the bottom of the shell, with its ends hanging out evenly over the edge. Upon this sheet, the body, enveloped in its winding sheet saturated with acetic acid, should be placed within the shell. The other sheet, with a portion of the charcoal still upon it, should then be placed evenly over the body with its ends also hanging over the edge of the shell. The shell should then be filled to the edge with charcoal and the lid fitted on.

^{*} The spongy wood of the *Æschynomene Paludosa*,—a great non-conductor of heat, from which "rice paper" is manufactured.

"By this arrangement, we should be enabled to lift off the whole of the charcoal in the upper sheet, finding the body unsoiled beneath it, The body could then be lifted from the shell, for inspection, by grasping the corners of the lower sheet.

"The charcoal needs not be used again, but it should be the duty of the domes to clean the shell, and to wash the sheets before taking them back to the thannah.

"If possible, the bodies should be brought from thannah to thannah, or along tracks where additional bearers may be obtained. The above plan, although it would be attended with some outlay at first, would not; in all probability, be more expensive, ultimately, than the use of bamboos and mats, which are never employed a second time.

"Should it be found impossible to abandon the present plan of conveying bodies, the corpse should be enveloped—1st, in the sheet saturated with acid, as already directed—2ndly, in a mat of close texture—3rdly, it should be placed on a coarse mat spread with a thick layer of charcoal, broken small. The coarse mat should then be closed over, the space between the mats being first closely packed with charcoal, and the whole carefully bound round with split rattans."

UNCERTAINTY OF GENERAL EVIDENCE IN INDIA.

Supposing all attainable information to have been furnished by the police, the medical jurist in this country has to contend with a cause of embarrassment which is almost unknown at home. In England, it may be taken as a general rule, that all information, contributed in aid of a medicolegal inquiry, contains nothing that can be regarded as wilful misrepresentation, unless emanating from the criminal or his direct abettors. There, all men combine, with earnest purpose and sharpened faculties, to reveal the hidden guilt. In India, however, the deceit inherent in the character of the lower class of natives surrounds all judicial investigations with an atmosphere of obscurity. Whenever the case has involved loss of life, the friends of the deceased are, not

unnaturally, prone to give, to say the least, an exaggerated coloring to their statements. Other witnesses, less personally concerned in the issue, either speak under intimidation or for a price, or do not hesitate to endeavour to gain credit by asserting more than they know.

The extortion of confession by intimidation, and even by torture, is a practice often attributed to the police of this Presidency, and occasionally brought home to them in extreme cases;* and, in certain instances, Darogahs and their subordinates have been under strong suspicion of fabricating cases, and of suborning witnesses.†

A single case will sufficiently illustrate the character of the uncertainties which may present themselves to the medical jurist in this country. In the cold season of 1850, I received a small fragment of recent bone with an official letter from the Magistrate of the district in which I was then stationed. The bone was evidently a portion of the shaft of the humerus or femur of a young child; it was nearly two inches long, and weighed about three drachms. It had formed less than half of the circumference of the shaft, and had evidently been broken out by a jackal, the dent of a small canine tooth being impressed distinctly on its edge. I was informed that a little native girl, about four years old, had been taken away from her home, by one Tofan Alee, who was some time afterwards seized by the police, in attempting to cross the river.

^{*} Decisions of the Nizamut Adawlut N. W. P., vol. iv. p. 54, "a tehseeldar and two chupprassees convicted of cruel torture" ("with a view apparently, of obtaining information regarding a robbery") and sentenced to imprisonment for four and two years respectively, January 21st 1854. See also N. A. Reports, vol. iv., p. 508, April 1854, &c.

[†] See Reports of Nizamut Adawlut, vol. iii., part 1 of 1853, p. 259; and part 2, p. 130. Report on the State of the Police in the Lower Provinces for 1845, p. 64;—for 1846, p. 35.

The child's silver ornaments were found upon him; he at once confessed that he had strangled the infant, and pointed out the spot where he had buried the body. Upon close search, however, nothing could be found there except the fragment of bone described and the ghoonsee, or waist-string, which the child had worn. A place near a tank was also pointed out by the prisoner, in which the child's jacket was found concealed. After confessing to the police, and repeating every circumstance of his crime before the Magistrate, the prisoner retracted his avowal: and, in the absence of any evidence beyond that afforded by the splinter of bone, (which might have been brought by dogs or jackals from a distance), it appeared questionable whether the prisoner might not have committed the not by any means unfrequent crime of stealing the child, and selling her, after having stripped her of her clothes and ornaments in the place indicated.

After examining the splinter of bone, I expressed my belief, that the body had been devoured by wild animals; but told the Darogah that diligent search must still be made for the skull, which would, doubtless, be discovered. I was convinced that small animals, like jackals, could do no more than gnaw the perfectly ossified skull of a child of that age, and roll it from place to place. The Darogah failing to make any further discovery, I accompanied the Magistrate to the scene of the alleged crime, a very distant solitary spot, on the bank of a narrow, but deep and rapid marsh stream, by which any fragments of the body might have been carried down towards the river. As, however, it appeared unlikely that the jackals would resign any portion of their prey, I still maintained confidently that the skull must be found, probably among the thickets of wild pine-apple with which the ground was covered. Shortly after this, the skull of a child was brought to me by the police; it was recent, cor-

responded with the age of the missing child, and had, evidently, been gnawed by small wild animals, the marks of whose teeth traversed the calvarium in every direction. Still, again, this prompt discovery of the skull, upon my reiterated assertion that it must be forthcoming, after the ground had been searched again and again for nearly a week by the whole posse comitatus, was somewhat startling; and the suspicion obtruded itself-have the police been so much impressed with the confidence of my assertion, that some burkundauze, failing to discover the head, and feeling himself unpleasantly responsible to the Darogah, has endeavoured to resolve the difficulty by borrowing a credible head from one of the many bodies daily floating down the adjacent river? The skull was shown to the child's father, who asserted that he could identify it by the shape of the front teeth; but still it was questionable whether, in his anxiety to convict the man who was known to have kidnapped his child, he would have hesitated to identify any skull that might have been produced.* When tried, the prisoner recalled his confession, and pleaded "not guilty." The sessions judge, however, sentenced him to death, and the judges of the superior court confirmed the decision, recording their opinion that "the corpus delicti being proved, non-recognition should not absolutely and invariably be ruled to bar capital punishment. Each case should be tried with reference to the circumstances, and to the facts established." The prisoner suffered the last penalty of the law. His case affords an illustration of those, doubtless generally unjust, still by no means useless questionings, which should scarcely be discouraged during a thorough sifting of these obscure cases in India.

^{*} This recognition of the skull appears not to have been admitted at the sessions court; as the judge's report says "there is no satisfactory recognition of the corpse."

MEDICAL EVIDENCE.

In ordinary cases of assault, the Civil Surgeon's written statement, in reply to the Magistrate's letter of inquiry, is received as evidence. The Regulation, however, directs that,—

In cases of murder, or wounding, endangering life, when the body or wound may have been inspected by the Civil Surgeon, the deposition of the Surgeon should be invariably taken on oath, whether before the Magistrate or the Sessions Judge.—Circular Order, No. 54, para. 7, 16th July 1830; Circular Order, No. 42, 1st May 1840.

Something farther is, however, necessary to render such depositions valid as evidence in the Sessions Courts.

In May 1853, a case of murder was tried at Mynpoorie, in which the Sessions Judge apprehended that, although the Civil Surgeon had left the station on leave for Europe before the trial,—that officer's depositions having been taken on oath, before the Magistrate in accordance with Circular No. 42, of 1st May 1840—he was at liberty to refer to those depositions as evidence which, under any legal view whatever, it would be impossible to ignore. He, however, abstained from placing the examination of the Civil Surgeon before the Magistrate on the record of his Court. It was ruled by the Superior Court that,—although the Circular Order quoted by the Sessions Judge directs that the examinations of Medical Officers in the Magistrates' Courts shall be taken on oath, in order to their being available on the trial,—in the event of the unavoidable absence of the officers making them, it is

^{*} In a case tried at Bareilly, in January 1854, the Court observed that the mere occupation of the Civil Surgeon on other duty, and the consequent non-attendance at the trial, by no means justified the procedure here adopted of placing his foujdaree deposition on the record of trial, after causing it to be attested by the subscribing witnesses; such a course is only allowed in the "nnavoidable absence," of the Surgeon, under Circular Order, dated 1st May 1840, (W. P.) as explained by Construction No. 1280.—Nizamut Adawlut Reports, N. W. P., 30th January 1854.

necessary that such examinations should be proved, on the trial, in the usual manner, in conformity to the injunction contained in the Circular Orders of the 16th July 1830; otherwise, they cannot be accepted as proof against the accused. This precaution not having been observed in the present instance, the deposition of the Medical Officer was held by the Court not to be, in its existing state, admissible as evidence against the prisoner.*

A similar ruling was adhered to by the Court in a case tried at Cawnpore in 1852, where the Sessions Judge had placed on the record of his Court an original letter from the Civil Surgeon, and other papers which, in their then form, were inadmissible as proof; and again, in a case tried at Bareilly in the same year, where the statement on oath of the Civil Surgeon, not having been duly attested and proved, was ignored by the higher Court.†

The Medical Officer's evidence must be taken in full and de novo in the Sessions Court. The Superior Court N. W. P. ruled, in 1854, in a case where the Sessions Judge, in examining the Civil Surgeon, had not called on him to repeat seriatim his previous deposition in the Magistrate's Court, but had allowed him to read that document, and had asked him if the replies therein recorded contained the facts of the case,—that this was not the proper mode of conducting an examination. The Civil Surgeon should, like any other witness, have been directed to state, de novo, all the circumstances, to the best of his recollection, referring to any notes he might have to refresh his memory.‡

Again-" The evidence of the Civil Surgeon should have

^{*} Nizamut Adawlut Reports, N. W. P., of 31st May 1853.

[†] Nizamut Adawlut Reports, N. W. P., of 23rd June and 29th November 1852.

[‡] Nizamut Adawlut Reports, 4th April 1854. Again, Ibid, 7th April 1854.

been taken in detail; a mere attestation on oath of a written report, made on inspecting the corpse, is not sufficient, and would imply a want of proper attention on the part of the Sessions Judge, to his duty of elucidating by questions the exact nature of the wounds causing death, and of the weapon with which they were apparently inflicted.*

In cases which have come under the immediate notice only of a native doctor or Sub-Assistant Surgeon, the Civil Surgeon may be called upon for an opinion upon the evidence of the subordinate Medical Officer.

At Moradabad, in 1854, the Sessions Judge was required by the Superior Court to obtain the evidence on trial of the Civil Assistant Surgeon as to the cause of death. They directed that the evidence of the Sub-Assistant Surgeon should be read over to the Civil Assistant Surgeon, and such other questions put to the former as the latter might suggest, with a view to elicit more fully the symptoms apparent on the post mortem examination; the opinion of the Civil Assistant Surgeon should then be taken on oath as to the cause of death to be inferred from the symptoms described; and the degree of confidence between mere suspicion and certainty with which the deponent's opinion on the subject might be formed, should be particularly noted.†

Identification of Articles submitted to the Medical Officer for Examination.—In commenting upon the record of a case tried at Bareilly, the Judges of the higher Court ruled that —"In taking the examination of the Civil Surgeon, the Additional Sessions Judge should have shown him the cap and dhotee, on which he deposed to having observed spots of blood, and have obtained identification of the same; the

^{*} Nizamut Adawlut Reports, N. W. P., 11th November 1854.

[†] Nizamut Adawlut Reports, N. W. P., 27th May 1854.

omission must be noticed, and the Additional Sessions Judge informed that the examination of the Civil Surgeon, in its present form, does not reach the prisoner."*

IDENTITY OF BODIES.

Several interesting questions regarding the identity of dead bodies are likely to come under the investigation of the medical jurist in this country. A very prevalent crime amongst the natives of Bengal, is that of causing a person to disappear, and of charging some obnoxious individual with his murder; a putrid corpse, readily procured from the river, and disfigured with wounds being, perhaps, brought forward as that of the lost individual.

Upon examination of this body, the medical officer can probably do little more than report that the remains are those of a male or female, young or old, upon which he observes certain wounds, regarding which he cannot venture any opinion as to whether they were inflicted before or after death. Here the safety of the accused is, of course, imperilled; unless, as has not unfrequently happened, his alleged victim be speedily produced in full life and vigour. The most recent case of this kind is, I believe, that recorded in the Nizamut Adawlut Reports, Part I. of 1853, p. 259, in which "certain of the prisoners were convicted on their own confessions of perjury, in having falsely deposed to the fact of a murder and burial of the corpse, in a trial, at the conclusion of which the

^{*} Nizamut Adawlut Reports, N. W. P., 30th October 1852, p, 1260.

In a trial at Furreedpore in 1850, the Sub-Assistant Surgeon gave conflicting testimony before the Magistrate and the Sessions Judge, as to the cause of death. This, of course, led to the acquittal of the parties. The Superintendent of Police attributed this to his want of knowledge in Medical Jurisprudence, and to his not having been accustomed to give evidence in public, so that he became confused.—Police Report, L. P. for 1851, p. 43.

alleged deceased made his appearance in court." "It would be impossible," writes the sessions judge in his report of this trial, "to imagine a case more completely satisfactory, as regards at least the guilt of Abdool Kurrem" [the unfortunate accused], "than this became when the Darogah's report was completed, and as in fact it remained, until the appearance of Pertaubnarain" [the murdered man] "brought to light its real character. The prosecutrix was the mother of the missing man; the principal witness was his wife, Shurasattee, and his cousin Kanaram, while the prisoner's own servants detailed at length the circumstances attending the burial of the body. There were no inconsistencies, and no contradictions in the evidence, which, from first to last, gave the hearers the impression, that a heinous crime had indeed at last been brought to light, in spite of a powerful combination to conceal it."

In this case, however, as well as in three similar instances of which I possess notes, no body was produced. It was stated, that the corpse of the murdered man had been dug up, and thrown into the sea for greater security.* In cases of this complexion, however, it would merely require a little more audacity in the criminals, to produce a body as that of the

^{*} Dr. Kenneth MacKinnon has favored me with the following notes, from memory, on a very remarkable case of this description. "When I was at Cawnpore, a case occurred strongly illustrative of the desirableness of producing the bodies of persons supposed to have been murdered. Two boys set out on a journey from Bundlekund; and, while bathing together, one, for the object of appropriating his property, threw the other into deep water, where he was supposed to have been drowned, as he disappeared for a long time. The supposed murderer returned to Cawnpore and, after a time, I think confessed his crime. At any rate, he was tried by Mr. Spiers, one of the most conscientious and cautious men that ever sat on the bench, and condemned to death. While the proceedings were before the Agra Sudder, the lad supposed to have been drowned returned to his home."

See an extraordinary case, apparently of this kind, N. A. R., N. W. P., Septr. 18th 1854, p. 381, and another in the Police Report, L. P., for 1844, p. 37.

murdered person, trusting to its disfigurement and to the medical officer's inexperience; and it appears that such instances have occurred. To carry out fully a deception of this kind, it would, however, be necessary that the body produced, should, in nearly all respects, correspond with that of the missing person; and to compass this would certainly be regarded as no safe or easy undertaking, where it was understood that the medical officer could distinguish, in any body that might be brought to him, not only the age, constitutional state and cause of death of the deceased, but also his caste and condition in life, and a great variety of other distinctive particulars. Strongly impressed with the necessity that medical men in India should possess this discriminative power, I have been at considerable pains to collect accurate information upon the subject.* Attention to the following rules will be sufficient to establish the religion of the deceased under all ordinary circumstances:

MALES.—The body of a Mussulmaun male, above the age of 11 years, always presents the marks of circumcision.

A (born) Mussulmaun never has the lobes of both ears pierced.

Every Hindu, above the age of 11 years, has had the lobes of both ears pierced for earrings.

Where a necklace of beads is worn, the wearer is a Hindu.

FEMALES.—Where a mark of tattooing is found between the eyes, the female may be known as a (born) *Hindu*.

^{*} I am indebted to Baboo Grish Chunder Ghose, Deputy Magistrate of Howrah, and to Baboo Peary Lall Banerjea, of Ooterparah, for a very large mass of interesting facts bearing upon this point. The details would however ocupy too much space in a practical work.

The Hindu female wears her saree single, that of the Mussulmaunee is always double.

When an iron karoo, or bracelet, is worn on the left wrist, the wearer is a *Hindu* woman, whose husband is living.

The *Hindu* women pierce the ears irregularly through the fossa innominata above, in one or two places; through the lobe also in one or two places; and, perhaps, at one spot through the concha.

When the openings are numerous, and are found extending in a line completely along the helix, and where the rings worn are *silver*, the female is certainly a *Mussulmaunee*.

In every case of suspicious death, the darogahs should be expected to give, in their Sooruthals, accurate descriptions of all marks of tattooing, scars, &c., on the bodies sent in, as well as of the clothes, ornaments and amulets worn. The apparent age should also be stated.

I am indebted to Dr. E. Goodeve for a very useful hint with regard to the importance of preserving the cut ends of the bones in cases where,—for example, as not unfrequently occurs,—a headless body or a detached limb is brought in for examination. Unless this precaution be taken, it may often be impossible to judge with certainty whether parts sent for examination subsequently belong to the same or to another body.

It will, frequently, happen that the medical officer's opinion will be required upon skeletons or detached bones. The smallness and delicate formation of the skeleton of the Bengalee may often lead to considerable doubt, regarding the age and sex of the deceased, unless the pelvis be produced.

An instructive case, involving an unusual amount of doubt as to the identity of certain human bones, was tried at

Meerut, in May and June 1852. One Kulloo, a native policeman, was generally known in his village to have a criminal intimacy with a married woman Mussumat Gowra. The age of this woman is stated to have been 28 years, she had a girl four or five years old born previous to her last marriage. On the 13th of March, the woman's husband being absent, Kulloo was seen by several neighbours leaving the village followed by the woman with her child in her arms. He was absent from his duties on that night; on returning the following day, he was questioned regarding his absence and the disappearance of the woman, whom he promised to bring back forthwith, and went away ostensibly for that purpose. He did not return; but, several days afterwards, he was apprehended selling ornaments, which were proved to be hers, in a distant bazar. He attempted this sale clandestinely; and, when discovered, offered Rupees 15 to two bunneeas, and afterwards a share to the police jemadar. Upon being examined by the joint magistrate, he accused other parties of the murder, (altogether falsifying the statements which he had made at the thannah,) and especially implicating one Dilsookh. On the 24th March, eleven days after the disappearance of the woman and child, the prisoner was sent with the jail darogah to point out the remains of the woman, which he said had been thrown by the murderers into a well. Nothing was found in the well. He then took the police to search the house of Dilsookh: some property was found, but this was afterwards ascertained to be Dilsookh's own. On the following day, he was again taken to the well, which was searched in vain by a diver. The prisoner now pointed in a direction in which he said he perceived a smell, and led the police to a raised spot about 100 paces from the well, where, among stalks of wheat which had evidently been trampled down by the feet of birds and wild animals, certain human bones were found-

viz. two pieces of a small skull, ten small ribs, two pieces of a larger skull, the lower jaw with the teeth, half the upper jaw, with the teeth, part of the nasal bone, and six other bones not described. The police stated that no smell was perceptible from the bones when close to them, they were dry, and bore the appearance of the remains of a person who had been dead ten or fifteen days; the weather was hot, the bones had been dismembered, as if torn to pieces by dogs or jackals. Near these were a ghagree and nougree, recognised as those worn by the child Luchmee, and a small child's chooree in three pieces, also recognised. He then said that he had forgotten the day before where the wearing-apparel of Gowra had been concealed in the house of Dilsookh, and took the police to an out-house where they were found in a mutka, where he had some days previously stated before the Joint Magistrate that they had been concealed." Upon the bones, being sent to the Civil Assistant Surgeon, however, this Officer certified as follows :- "I examined, about a week ago, sundry bones forming portions of the bodies of two children: one I should suppose to have been about eight years old, the other about as many months; not one of the bones I saw formed any portion of an adult skeleton." Upon this report, the Joint Magistrate, considering that it afforded conclusive proof that the bones were not those of the murdered woman, without examining the Civil Surgeon, or calling for his attendance, found the prisoner guilty of the theft only, and sentenced him to three years' imprisonment. The matter was, however, taken up by superior authority and re-investigated. The trial at the Sessions Court was held 14 months subsequently. The Civil Surgeon stated that he examined skeletons of two children, one belonging to a child eight years old; what these bones were, was not mentioned, no anatomical examination was made, nor record kept of them; they were simply stated to be bones assumed, from their size,

to be those of a child eight years old. The Judge remarked that Fonblanque shows that the size of bones varies so greatly in individuals that it forms no certain criterion of age; the bones of the female are said to differ from those of a male from their being generally smaller and more delicate, and from the muscular impressions and asperities being less distinctly marked; it, therefore, appeared to him by no means improbable that the bones of a small adult young woman should have been mistaken, at a hasty examination, for those of a boy eight years old. The Sooruthal, continued the Judge, recorded among the bones an entire upper jaw and half a lower jaw* with the teeth attached, but the Medical Officer did not remember to have seen any thing of the kind, nor did his unsatisfactory report, recorded at the time, allude to them, though these, it was held, would have afforded a much more certain criterion of the person's age. The evidence of the Civil Surgeon, regarding the smaller bones, was viewed as equally unsatisfactory; a small skull in two pieces ["two pieces of a small skull"?] was stated in the Sooruthal to have been found, and the sutures would have enabled an anatomist to state, with something approaching to certainty, whether it belonged to a child of eight months or four years; but the Civil Surgeon, without knowing whether or not there was a skull, and judging merely from the size of the [other] bones, of which the ribs are alone mentioned in the Sooruthal, states most decidedly that they belong to a child of eight months. The chemical composition of the bones is said by Fonblanque to vary, in relation to their phosphate of lime and gelatine, at different ages; but the difference in those proportions in an infant and an adult appears to be

^{*} In the printed report it is stated, the lower jaw and half the upper jaw but this discrepancy is immaterial.

only ascertainable with certainty by chemical analysis; but the Civil Surgeon states most decidedly that he could, from the mere appearance of the bones, determine whether they belonged to a child of eight months or four years: so slight, however, was his recollection of the bones, that he does not remember whether they were connected or dismembered. On these grounds, the Judge did not attach any weight to the Civil Surgeon's evidence, as refuting the assertion of the prisoner that the bones produced were those of Mussummat Gowra and her female child. This view of the case was upheld by the Judge of the Superior Court who desired that a copy of the Sessions Judge's remarks on the subject of his hasty and unsatisfactory report upon the bones sent to him should be communicated to the Medical Officer. The prisoner was convicted; but, following what appears to have been the more general practice of the Courts, in cases of this nature where the body is not forthcoming, or circumstances may prevent its recognition, the prisoner was sentenced to imprisonment in transportation with hard labour in irons for life.*

There can scarcely be a doubt that Photography will, before many years have elapsed, be employed throughout India as a means of identifying bodies, anticipating the disfigurement of rapid decay, and enabling the Magistrate and the Civil Surgeon to examine, in their offices, every detail of a scene of bloodshed, as it appeared when first disclosed to the police, in a place perhaps sixty miles from the sudder station, which no activity on the part of the police or themselves could enable them to visit in time. This process has already been employed, with advantage, by the police at

^{*} Nizamut Adawlut Reports, N. W. P., July 22nd 1852. See the case of identity proved in India by the appearance of a fractured rib.—Taylor's Medical Jurisprudence, Fifth Edition, page 342.

home, in the identification of old offenders; and there is, I am confident, no measure that would afford more aid to police inquiries in India, or impress more vividly, even upon the minds of the ignorant and superstitious common people, a conviction of the difficulty of eluding our vigilance and of our accuracy in the detection of crime. Although many uneducated natives are scarcely able to comprehend the meaning of ordinary pictures, we have yet to judge of the effect . which would be produced upon the conscience of a hardened savage, obstinate in the denial of guilt, by placing before him, in the stereoscope, the actual scene of his atrocitythe familiar walls, the charpoy, the ghastly faces—as they last appeared to his reeling vision;—the sight which has haunted his brain every hour since the act was done-while he believed to certainty, that its reality could never come before his eyes again.

Every Magistrate and Surgeon will perceive under how many circumstances Photography could be made available. It would be especially useful in showing the actual position of the body in cases of hanging, strangulation, &c. The experiment certainly deserves a portion of the time and consideration of Judicial and Medical Officers; and a few successful trials would recommend it to the attention of Government. Although the difficulties of rendering such a system general would, of course, be numerous, there is every reason to believe that the expectation of reward would encourage many young and intelligent darogahs to master the art of taking sun pictures, which is already easy, and which will, doubtless, be further simplified in the hands of the many who now give it their attention.

An accurate comparison of the Skulls of the various races inhabiting India is a great desideratum in Ethnology, and would prove a considerable aid to medico-legal inquiry. The small compact cranium of the Bengalee, "good if there

were but enough of it"—the spreading retreating forehead and projecting malar bones of the Chuckma, Mugh, Burman, and Chinese, each receding from the Caucasian and approaching the Mongolian type nearly in the above order; the nobly Caucasian heads of the educated Brahmin and the Rajpoot, and the high, ovoid, and essentially Jewish cranium of the Affghan; all present distinctive peculiarities which, thoroughly studied, would afford many valuable clues to identity.

DYING DECLARATIONS.

In cases of very severe wounding, &c., the letter sent to the Civil Surgeon with the injured person generally also conveys the magistrate's request that, should the case be likely to terminate fatally, he may receive timely information, to enable him to have the patient's deposition taken in writing. Here the rule is that,—

The Darogah or a proper officer is to question the person wounded, and to require of him, if he is able to speak, to name and describe on solemn affirmation the person by whom he has been wounded, the names of the persons present when the act was committed, and generally the circumstances under which the act was committed. Reg. XX. 1817, Sect. XIV., Cl. 4. Beaufort's Digest of the Criminal Law of the Presidency of Fort William, (See 1752, page 314.)

In the absence of any such official intimation from the magistrate, it is clearly incumbent upon the Surgeon to communicate with that officer whenever he may perceive that a case involving criminal charges is likely to terminate fatally. In the absence of the police, it is desirable that the Civil Surgeon, or indeed any trustworthy by-stander, should take down the statement of a dying man. There does not, however, appear to be any rule rendering such a course incumbent upon medical officers.

The lawgivers of this country have wisely decided, that, unless supported by collateral evidence, the dying declaration of a native cannot be received as conclusive.

In a trial for murder, it was held that the dying deposition of the deceased, taken by the police officers, should have been brought on the record of the trial; and that evidence to its accuracy should be taken.* The dying declaration of a murdered person (taken down in writing by a sezawul,) considered alone insufficient for conviction.†

In a case tried at Bundelkund in 1852, the Judge of the Superior Court held that the deceased, after receiving seventeen wounds (some of which were mortal and from the effects of which he died shortly after,) could scarcely have had sense or strength sufficient to make the statement attributed to him. The Judge was not disposed to place much more faith in the dying declaration of the deceased (supposing such really to have been made), than he would in a statement delivered by him when in the enjoyment of complete bodily health and in the full possession of his mental faculties. Natives of this country are not sensible of the same impressions as Europeans on the point of dissolution; and, in their dying moments, not unfrequently accuse any one whom they may only suspect of being the perpetrators of the attack on them. The accused was acquitted.‡

Under these circumstances, the medical witness in India is not likely to be closely questioned with regard to the point

^{*} Nizamut Adawlut Reports, vol. 5, p. 9.

[†] Nizamut Adawlut Reports, vol. 4. p. 31. Ibid, 402, 404.

[†] Nizamut Adawlut Reports, N. W. P., for 8th May 1852. See also report of a case tried on the 23rd of the following July, in which scarcely any weight was given to the dying statement of the deceased.

formerly so strongly insisted upon by English lawyers,* as to whether, at the time of making his declaration, the injured person was evidently convinced that he was about to die. While it may be questionable whether, even in the most enlightened mind, all hope of recovery can always be dispelled by the consciousness of immediately impending death; and whether, in the excitement, the agony and the failing consciousness which result from the infliction of a deadly injury, the judgment and the passions can be sufficiently calm for the delivery of a testimony which deserves to be received hereafter as absolutely and unimpeachably true, -especially when it may be doubted whether the wounded person is not utterly unprincipled and false by habit-it is fortunate that this ancient legal superstition has not been brought to bear upon a people who do not recognize veracity as a principle of morality, and who almost invariably answer as they believe that they are expected to answer; who meet inevitable death with an apathy which has been mistaken for stoicism, but whose cry of-"I am dying, I am dying,-Death, Death" !- is almost daily evoked by ordinary circumstances of misfortune or pain.

SFARCH FOR THE BODIES OF MISSING PERSONS.

In Bengal;—a country abounding in jungles and patches of waste land, in ploughed fields, dirt heaps, sandy tracts, dry water-courses, tanks, swamps, and muddy streams; and infested by multitudes of carrion-feeding animals, as well as by myriads of those insects which prey upon animal mat-

^{*} Dr. Taylor has shewn that it is no longer necessary that to name a declaration valid, the person making it must entertain "no hopes of recovery." At the late Special Commission in Ireland (Jany. 1848, Reg. v. Butler,) a declaration was admitted where the words were, that the deceased entertained "little or no hope" of recovery.—Medical Jurisprudence, Fifth Edition, p. 899.

ter, where, farther, human remains may be found thickly strewn on every river brink and upon the outskirts of every village; -the discovery and identification of the bodies of missing persons often becomes a task of no ordinary difficulty. Under these circumstances, error and fraud, doubtless, occur and many bodies remain undiscovered. Still it is remarkable in how very large a proportion of cases, such searches prove successful. Few police agents are so well fitted for these investigations as the burkundauze. With all his energies stimulated into activity for the time being, by the darogah, his immediate superior, the inquisitiveness, bustling importance, love of ransacking, and by no means inconsiderable cleverness and tact which are leading features in his character, come fully into play. Where, as is usually the case, a large number of these men are scattered over the country, with every nook and corner of which they are familiar, their search is rarely baffled. It has been frequently asserted that the native police employ promises, menaces and even torture in the detection of hidden crime; however this may be, we have sufficient facts before us to show that, by the exercise of a fair amount of tact and acquaintance with the habits of criminals, the desired result may generally be obtained, without recourse to any measures so unjustifiable.

Apart from the ordinary difficulties attendant upon such a search, and the means of concealment adopted by the criminal parties, the selfish timidity of the natives frequently delays and even counteracts the discovery of homicide. Experience certainly tends to show that the generality of natives, on witnessing a murderous attack, unhesitatingly prefer flight to rescue.*

^{*} This is the rule, but the reports contain a few highly honorable exceptions—here the courageous acts have generally been performed by Up-

The dread of a judicial inquiry very frequently induces the Zemindars and others in whose land the bodies of murdered persons are found to conceal the remains.*

country men. The concealment of crime by those who are unwilling to incur the trouble or risk of a police investigation is probably an almost daily occurrence. In a trial for murder at Mirzapore in 1853, three men deposed that, on a certain day, their attention was called to a well 25 cubits deep, from which the sound of a voice proceeded. Upon looking down, they saw a woman lying in the shallow water, who exclaimed that one Jokhoo Singh had wounded and thrown her down. A severed hand was lying on the side of the well, and blood was sprinkled about three or four cubits around the well. " On seeing the hand and blood, they were going to run off," when they met a fourth neighbour, with whom they returned to the place. The woman implored them to take her out ; but, not having a rope, the fourth man went to Ishree Singh karinda for one, and the other three went to gather grass for thatching. Upon the man's arrival at the nearest village, which was two miles off, several people were despatched with a rope to the well: two ghurries elapsed before they got there; they looked in and saw the woman lying on her back; on getting no reply, they believed that she was dead, and all returned home. Ishree Singh agreed with them, that it would be better to leave her where she was, in order that she might be taken out in the presence of the police.-Nizamut Adawlut Reports, N. W. P., 27th August 1853.

* In a case tried at Furruckabad in 1852, where there could scarcely be a doubt that a man had murdered his wife and had thrown her body into a well, but had afterwards disposed of it otherwise by the aid of accomplices, two brothers testified that they were ploughing together, when one of them observed what seemed to be a dead body in it, and called the other. From fear, one of them told no one what he had seen. The other said that, next day, he met the woman's husband with his accomplices, whom he asked where they had since removed the body to. They replied that, if he said a word, they would kill him. Witness, therefore, remained silent.—Nizamut Adawlut Reports, N. W. P., October 30th 1852.

In 1852, one Gungadeen was murdered by two of his servants and another person in the Government Bungalow of a village called Sohagee. The deceased's father received information from a brahmin of the place of his son's death, and of his body having been thrown into a well. Upon reaching the place, he found that the body had been discovered about 14 days previously; and, being in a state of extreme putridity, had been thrown outside the village; he found nothing but the skull and some bones; but, upon the skeleton, were

The Report on the State of the Police in the Lower Provinces for the first six months of 1842 contains reference to a case in which suspicion of some foul play fell on certain persons in consequence of their having, without any reason, filled up a well which they had just dug for the irrigation of their fields, and the police officers were sent with orders to dig out the well, which they reported as giving no cause for suspicion. The mohurir, however, having gone on the same day, to a village near, learnt that a woman who appeared to be travelling, had stopped for the night at the prisoners' cattle-shed, and that they had murdered her for the sake of her ornaments, and thrown the corpse into the well, which they had then filled up. He immediately proceeded to the spot, and had the well dug out to the bottom. The effluvia left no doubt as to a corpse having been deposited there, and a quantity of long hair was also found; but the body had been removed, and no trace of it could be discovered, nor could all the subsequent endeavours of the magistrate procure any clue to the identity of the woman.

There are even instances where the imbecility or venality of natives has led them to conceal the murder of their near kindred. In 1854 a wretch, whose nephew had been murdered for the sake of its ornaments, stated at the trial,—"I went and saw he was lying thrown down in the khet, the

portions of a necklace of beads, which he identified as having been worn by his son.—Nizamut Adawlut Reports, N. W. P., 12th February 1853.

In a case of murder tried at Bareilly in the same year, two gardeners swore that, early in the morning, on their way to their work in their fields, they saw the body of the deceased lying close to their field. There were fourteen sword cuts on it; from fear, they took up the body and threw it into the dâka jungle near at hand.—Ibid, February 15th 1853.

A Thug, who was tried at Meerut in 1852, in confessing various crimes, mentioned that, having strangled a man, he threw the body into a well; five or six days afterwards, he heard that the Zemindars had taken the body out of the well and burnt it.—Ibid, 11th June 1852.

ornaments he used to wear were not present on his person. He had been strangled with the stalks of the urhur, and the gold rings in his ears were also gone. Cashee, my nephew, was with me: we both took up the body and threw it in the river and came home in the evening and remained without sense (behosh). On Friday' (three days subsequently,) "Daveela putwaree came to the village, and I told him, and was lamenting, when he said, 'Go in the morning, to Bugool lohar, and you will get the jewels,'" &c.*

Again, in the present year, a man at Bareilly, whose child, four years and a half old, had also been strangled for its ornaments—"was in such a state of mind as to yield to the selfish suggestion of his neighbours to adopt, or to report to the police, the conclusion that a wolf had carried him off, there being known similar facts in most parts of the country of the daring attacks of those animals when pressed by hunger."

A case occurred, some years since, in Tirhoot, where a man was sentenced to 18 months' imprisonment for concealing his father's murder, which had been committed under circumstances of great atrocity by the servant of a rich zemindar. Here the money and influence of his powerful neighbour were, doubtless, operative.‡

In 1852, the native police of Kumaon discovered the body of a murdered person by an ingenious deception, which would almost appear to have been devised with a knowledge of the case of Eugene Aram. A man named Mungloo having been missing for some days, one Moosa, with whom Mungloo's wife was living in adultery, was suspected of making away with him. The body, however, could not be found, although a

^{*} Nizamut Adawlut Reports, N. W. P., 9th May 1854. † *Ibid*, 5th March 1855. † Mr. Dunbar's Police Report, L. P., 1849, p. 8.

reward of Rupees 200 was offered for its discovery. Nine months afterwards, the body was brought in. It then appeared that the local police had entrapped Moosa into the discovery of the corpse, by digging up and showing him another corpse, when he denied the identity of the body, and said that one Kitroo would point out the place of Mungloo's burial. Kitroo was then seized, and immediately took the police to a spot near his own house, and caused the body to be dug up from a considerable depth. At the same time Moosa, the accused, showed great anxiety to be recognized as the first pointer out of the grave; and, in fact, claimed the reward for its discovery. The corpse was immediately recognized by competent witnesses, as that of Mungloo. Kitroo at once accused Moosa and three others of the murder, naming himself as an eye-witness, and acknowledging his forced privity. Moosa confessed that he had killed the deceased. The trial, which developed several remarkable circumstances, resulted in the sentencing of Moosa to imprisonment for life in transportation.*

Here, as elsewhere, crime is not unfrequently discovered by Traces of Blood, by the Tracks of Footsteps, and by Marks left on the Ground over which a corpse has been dragged. Considerable ingenuity is occasionally displayed by criminals in the obliteration of blood-marks. In 1854, the Kotwal of cantonments at Furruckabad was sent to make inquiries regarding a person who was believed to have been made away with at a village called Mozadeenpore. Upon his arrival, he gave notice to the Chowkeedar and Zemindars of the village. The Chowkeedar named all the villagers but two; one of these persons, on being apprehended, took the Kotwal to a field, where some of the earth had been lately smoothed down, which he said was the spot of the murder, adding that

^{*} Nizamut Adawlut Reports, N. W. P., 12th June 1852, p. 537.

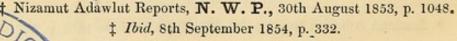
the Chowkeedar had told him to smooth the earth in order to conceal the marks of blood. The Chowkeedar had allowed the other murderer to abscond.*

In 1853, one of the accomplices in a murder at Kumaon confessed that, three days subsequently, one of the perpetrators "killed a calf at the site of the murder with his halee, in order to falsify the former blood-marks."

In the trial of a man who was sentenced for the murder of a girl for the sake of her ornaments, it was shown that the prisoner endeavoured, with some ingenuity, to make it appear that the child had been devoured by a wolf; and that, in the course of the original search, he made his gums bleed and spat blood to give a colour to his indication of the place where the child's torn apparel was found, and where he asserted that she had been killed by some wild animal. He afterwards pointed out the body in a hole where he had buried it.‡

In a trial at Midnapore in 1853, it appeared that a man, having been struck a fatal blow on the head, was carried to a nullah by three persons and thrown into the water. On the return of these men, they were apprehended, when they admitted that deceased had been murdered. In the Judge's Court two of the men pleaded not guilty and set up an alibi. In the Mofussil and before the Magistrate one of these men had confessed to having proceeded a part of the way only towards the nullah with the body and then returned; the sooruthal, however, stated that there were Footmarks of three persons on the banks of the nullah in which the body was found, and the witnesses swore that the clothes of

^{*} Nizamut Adawlut Reports, N. W. P., 16th May 1854, p. 542; also *Ibid*, 3rd January 1854, p. 9.





the three prisoners were wet when they returned home at night.*

The marks of Dragging some heavy body along the ground are frequently alluded to in the Reports as having assisted the police in the discovery of corpses. These are, of course, most likely to be found in cases where the murderer has been single handed; where there are several accomplices, the body is often fastened to a bamboo, or tied up in a cloth, and so carried to a distance.

In 1853 one Mooloo, a person in the habit of plucking corn and stealing from fields, went out to visit his field, and did not return. A search was instituted next morning; in the field of his neighbour Mohun, some human ordure, and the cap of the deceased, partly hidden in the ground, were discovered, the earth around was also trodden down, and some bajra stalks were lying about. Marks of dragging extended to a well in the field; drags were procured, and the body of Mooloo was extracted; a cloth was tied round the throat, and had evidently caused strangulation, and the hands were also bound with the same; the well had eight haths of water in it. Mohun was sentenced to seven years' imprisonment.†

In the same year, certain persons entered a house at night with intention to steal. A conflict ensued, in which one of thieves was wounded on the leg. The prosecutor recognized one of the thieves. Two Chowkeedars came almost immediately and lighted a torch. They observed that something bleeding had been dragged a certain distance; and, the next morning, they tracked footsteps from the spot where the body had been lifted up, to a village, in which Dabeea, one of the accused, lived. On entering his house, they saw spots of blood on his clothes and person;

^{*} Nizamut Adawlut Reports, vol. vi., Part 2, p. 645.

[†] Nizamut Adawlut Reports, N. W. P., 3rd February 1854, p. 116.

and, on asking for his brother Seeta, they were told that he was absent. Subsequently, the mother of Seeta pointed out where her son's body had been buried the previous night, in a cow-shed. Over the grave a buffaloe was tied. The body was exhumed, and a severe wound was found behind the knee. The prisoners confessed their crime, and were sentenced accordingly.*

What would, at first sight, appear to be a very trifling circumstance, has frequently been found to throw considerable light upon obscure cases of homicide in this country. Native women of the poorer classes generally adorn their arms with bracelets. The cheapest and commonest ornaments of this kind are made of shell lac and sand. When fixed on the arm, these Choorees are heated and joined in such a manner as to surround the limb in continuous circles. They appear to wear well, with care; but can scarcely fail to be broken during any violent struggle. I find several instances in which the discovery of broken Choorees assisted in the discovery of crime. In 1853, a woman, believed by her relatives to be unchaste, disappeared; a careful search was instituted in a field belonging to certain suspected parties; and there, about the middle of the field, were found portions of broken Choorees; the ground was here dug up, and the corpse of the missing woman disintered.+

Again, in the same year, a woman was murdered by a person with whom she had carried on an illicit connexion. Upon her disappearance, search was made, and on the bank of a nuddee were found a shoe, recognized as belonging to the prisoner, two metal ankle ornaments worn by females, and pieces of glass arm-rings, identified as belonging to the missing woman. Search was made for the prisoner, who

^{*} Nizamut Adawlut Reports, N. W. P., 30th March 1854, p. 346. † *Ibid*, 17th January 1853, p. 63.

was apprehended with blood on his clothes. Under his guidance, the body was found sunk in the bottom of the nuddee, frightfully gashed.*

A man was heard to exclaim in the night that one Gungajulee (his kept mistress) had wounded him and was making off. He had been wounded in the throat, and died almost immediately. His son, a very intelligent boy of nine, stated that he saw the woman struggling with and stabbing his father. Some pieces of broken bangle were found on the bed, which were proved to be her property. She admitted that these fragments belonged to her, but asserted that she was attracted by the outcry; and, going to see what was the matter, fell over the bedstead and so broke her bangle. Plausible as this statement might appear to be, the Court held that it was of no avail against the evidence upon which her crime was established. They therefore upheld the sentence of death.†

A young woman was seen at noon to throw a boy, aged ten years, into an unenclosed dry well 20 feet deep, by a man, who ran to the village and informed the boy's father of what had taken place.‡ The father went immediately to the spot, but the corpse was not taken out until the evening. Some fragments of kanch choories were picked up at the well, corresponding with those the accused was in the habit of wearing; and were found to be similar to those she wore at

^{*} Nizamut Adawlut Reports, N. W. P., 1st April 1853, p. 487.

[†] Nizamut Adawlut Reports, vol. vi., Part 2, p. 728. See also a case in which a man identified certain broken *choorees*, which were found with some blood and hair near a well, as those of his daughter, who had been made away with.—Nizamut Adawlut Reports, N. W. P., 30th October 1852, p. 1269.

[‡] His excuse for not rendering more efficient aid was that he could not pursue and overtake the murderess, as he had a boil on his foot and a load of fuel on his head, which, moreover, he did not throw down to be enabled to pursue her!

the time of her arrest. The Joint Magistrate, who investigated the case with extreme care, did not attach much weight to this last circumstance, as the fragments of glass bangle were not discovered until the following morning, and as it appeared that, on the evening before, the boy's mother (who lived next door to the deceased, was of the same caste, and might probably wear bangles of the same pattern,) went to the well accompanied by other women. She, it was held, might have broken one of her bangles in the excess of grief, or the ornament may have been lost by one of her companions. Sentence of death was, however, awarded.*

The materials available are scarcely sufficient to allow of a numerical comparison, and it is doubtful whether such statistics, if collected, could be rendered practically useful; it, however, appears that the most frequent modes of disposing of the bodies of murdered persons in this country are as follow:- By concealment in Jungles, in Standing Crops, in Wells, Rivers, Tanks, in Fallow Fields, in the Sand of Water-Courses, in Houses, and in Porcupine's Holes. The concealment of bodies in the dense recesses of Jungles where, in a very short time, birds of prey, jackals, dogs, and insects reduce them to skeletons, is, probably, the most frequent practice of those criminals who live at a distance from any deep and rapid river. I was assured, upon authority which I cannot doubt, that, very recently, upon clearing a certain jungle, which had long been regarded as a covert for suspicious persons-no less than seven skeletons and one recent body were discovered! Where the remains of a human body, not admitting of special identification, are discovered in a jungle, the circumstance, standing alone, can scarcely be regarded with much suspicion. Pilgrims, fukeers, and others, may die unnoticed in these remote spots; lunatics, sick, or intoxicated persons, may be lost in

^{*} Nizamut Adawlut Reports, N. W. P., September 1st 1853, p. 1068.

the jungles, and there be attacked and devoured by the smaller wild animals;* and it is to be feared that, when strangers arrive at villages in a dying state, they are not unfrequently thus exposed, even before life has departed.† Under a strict observance of the Hindu Law, the bodies of suicides, and of those who died a violent death, were cast into the jungles without any funeral rites. The law and the practice, however, appear to be alike unknown to those high caste natives of Bengal of whom I have made inquiry. It is generally considered that tigers, leopards and bears do not prey upon dead bodies. It may be questioned, however, whether they do not attack dying or intoxicated persons. Dogs and jackals are able to inflict but very little injury upon the larger bones of the skeleton. It is considered that tigers and leo-

^{*} Mr. Ward, the Missionary, in speaking of the Jackal, says—"So ravenous are these animals, that they frequently steal infants as they lie by the breast of the mother; and sick persons who lie friendless in the street, or by the side of the Ganges, are sometimes devoured alive by these animals in the night. I have heard of persons, in a state of intoxication, being thus devoured as they lay in the streets of Calcutta.—View of the History, Literature and Religion of the Hindus, Third Edition, vol. 2, p. 326.

[†] Cases of this kind sometimes come before the police authorities. In 1846, six persons were tried at Purneah on a charge of having made away with a sick traveller. This unfortunate, in passing through a village, became too ill to proceed, and lay down opposite a shop. The owner, seeing that he was very ill, and fearing that he and others would be exposed to much trouble and expense from the inquiries of the police, if he died there, had him conveyed to a tope of trees which was about a mile distant, and left him exposed to the rain during the night. In the morning he died, having mentioned what had occurred to other persons passing that way. Mr. Dampier remarks—he fears that this is a very common practice, at least he has heard it frequently mentioned, and the lives of many poor travellers and pilgrims are sacrificed to the fear of inconvenience to the villagers, should they be allowed to remain and perhaps die in their town. It is, from the nature of the case, almost impossible to procure sufficient evidence to secure the punishment of the parties.—Police Report L. P. for 1846, p. 21.

pards usually break the bones. In a case tried in 1845, the medical officer decided that the woman could not have been killed by one of these animals, as her skeleton was discovered entire. I have great doubts, however, upon this point. In the body of a buffaloe killed and partially devoured by a tiger, the abdominal parietes only had been eaten; the animal may, however, have been scared from its prey. It is considered that the tiger, after having seized any animal, does not proceed to devour it on the spot, but at once carries it to a close covert. There are certainly exceptions to this rule. It is probable that entire human adult bodies are never dragged to any considerable distance by dogs and jackals, which do not tug in concert,-each animal tearing for himself; as, however, the dismemberment proceeds, separate fragments are often carried to a considerable distance. In the outskirts of Calcutta, there is scarcely any ditch, a mile inland, which does not contain human remains, skulls especially, brought from the river to be mumbled at leisure.

In Northern Bengal and in the N. W. Provinces the numerous Wells scattered over the country are commonly made receptacles of the bodies of murdered persons. Forbes states that, during 1808 and 1809, no less than 67 bodies were taken out of wells in the single district of Etawah. They had probably been deposited there by Thugs. It sometimes happens that criminals adopt the unsafe expedient of filling up the wells in which the bodies of their victims have been deposited.*

^{*} See an instance already cited. Police Report L. P. for 1844. In 1852 a youth of 15 or 16, having been persuaded to rob his father by two persons with whom he decamped, was thrown into a well by them. They then cast heaps of earth down at him. The water was very deep, but he contrived to support himself on a projection; and, after about three hours, he managed to climb up the sides and got out.—Nizamut Adawlut Reports, N. W. P., 14th September 1852, p. 990.

Dr. Edward Goodeve informs me that, in some observations which he has made upon the comparative rapidity of animal decomposition in various media, he has found that, under ordinary circumstances, bodies submerged in wells up-country decompose more rapidly than they would do if exposed to the air. It appears probable, however, that this must depend much upon the depth and condition of the water. In a body immersed in a well plentifully supplied with spring water, the progress of decomposition would, doubtless, be considerably retarded; but, in shallow stagnant water, which had merely drained into the receptacle and had been evaporating for several months, the remains would, of course, decompose rapidly, as in a macerating tub.—Further remarks on the discovery of bodies in Wells, Tanks, and Rivers will be found in the chapter on Drowning.

The burial of corpses and of plundered property in the sands of DRY WATER-COURSES is a frequent practice among criminals in Bengal and the N. W. Provinces; the sand is easily dug out, and all traces of the burial are speedily obliterated. This was a common mode of disposing of the victims of Thuggee by strangulation.

Both in Bengal and in the N. W. Provinces, bodies are often buried in the MUD FLOORS OF HOUSES. As there is no solid foundation, the grave may be dug to any depth, (although it is generally shallow,) and the extra earth can be disposed of in raising the level of the floor which, when rubbed over with a mixture of water and cow-dung, presents no traces of disturbance. It is probable that, in most cases, this mode of sepulture is only intended to be temporary. It is frequently resorted to in cases of infanticide, and where children are decoyed into the houses of criminals and murdered for the sake of their ornaments.

In 1853, a woman was sentenced at Jounpoor for murdering her illegitimate child; she confessed that she had pressed the infant's neck and strangled him. She had placed the corpse in an earthen vessel which she had buried in a corner of her house.*

In 1852, a girl seven years old was decoyed into the house of one Bhickna, and murdered by him for her ornaments, worth only a few rupees. The criminal's son made disclosures which led to the discovery of the body buried at about four fingers depth below the floor. The neck bore marks of strangulation, both legs were cut off near the ankles, and were found apart from the trunk, and there were marks of the jaw having been stoven in by a brickbat.†

Still again, in Tirhoot, the body of a female child, aged 6 years, was found buried under the floor of the prisoner's house. He had murdered her for the sake of her ornaments, valued about three rupees.‡

Adult bodies are also sometimes disposed of in this manner. In 1853, a man was sentenced at Cawnpore as an accessory to the murder of his own sister. He confessed that the deceased's son and another relative had beaten her to death and had absconded with her property, and that he afterwards witnessed the partial burial of her body in one of the apartments of the building in which they all resided as a joint family. He had deceived the neighbours as to the cause of the unpleasant effluvium which proceeded from his house, by attributing it to the death of a snake in one of the drains. The body was found, several days after the murder,

Nizamut Adawlut Reports, N. W. P., 30th July 1853, p. 937.
 † *Ibid*, 29th October 1852, p. 1254.

[‡] Report of the Superintendent of Police, L. P., for the second six months of 1838, p. 14.

[§] Cases of atrocity parallel to this are, unhappily, not rare in India. A perfectly well ascertained instance occurred up-country some years since, in which a wretch, tempted by avarice, strangled his own grand-daughter for the sake of her gold ornaments, and buried her body in a corner of his house.

in the condition of a skeleton, imperfectly buried in a locked room, the key of which was in the prisoner's possession.*

In 1854, a boy was missing at Futtehpore; suspicion fell upon a woman of disreputable character named Mendeea, who had been in the habit of giving the child sweetmeats. Her house was searched, and there the body of the child was found, buried in the ground, with the throat cut and with other wounds. On the following day, search was made for the knife with which the crime was committed; when, upon taking a number of earthen pots out of the house and digging into the floor, the bone of a leg appeared, and then an entire skeleton. This, Mendeea confessed, was the body of a Brahminee widow, named Duryaee, who had disappeared nine months previously, and had been killed with a sword. Mendeea was sentenced to death†

Both in the North-Western Provinces and in Bengal, The Cooking Place is, not unfrequently, that chosen as the securest spot for the concealment of a body.

Last year, a woman in Bundlekund decoyed a girl four years old into her house and murdered her; and, after pretending to assist in the search for the child, locked her house and absconded. Upon being apprehended, she refused to deliver the key. The door was then forced by the police; and, in an interior room, which formed the prisoner's cooking place, and in a hollow close to her choolha, the child's body was found buried in the ground, but with her hand and foot protruding. Over the body was found a massive stone, three or four seers in weight, smeared with blood. The face and nose were somewhat flattened and defaced, one foot had disappeared, being cut off at the ankle joint. A cord was found tightly fastened round the neck, so as to

Nizamut Adawlut Reports, N. W. P., 11th June 1853, p. 765.
 † *Ibid*, 9th September 1854, p. 345.

cause strangulation. The ornaments, valued at rupees 13 or 14, were found on the person of the murderess. On being questioned regarding the motive, she used a word (ukus) which was interpreted as envy or jealousy. She was childless, and the word used expresses a feeling very common amongst the native women towards those who are more fortunate than themselves. She was condemned to death.*

Four brothers were found guilty, at Delhi, in 1852, of the murder of Peerdan, of the village of Bhinee Bhirroo, who, there was every reason to believe, had seduced their sister, and caused her to procure abortion. Having enticed him into their house to smoke, they strangled him, and buried him deeply under the aharah (fire-place) in their compound. Upon searching their house in vain, a pitchfork was struck into the ground over the aharah, from which a stench immediately issued. One of the prisoners, then in custody, was desired to point out where the body was; he said that the corpse would be found there, buried with his clothes and shoes on; on digging, the body was found in the state described.†

The following account of a similar search contains some useful particulars. Upon the disappearance of a young child, a burkundauze was deputed to the village of Sarunpore. He reported that, upon his arrival there, he assembled the four chowkeedars, four moquddums and Shady Khan tanet. They searched the jungle, and the wells, and some heaps of bhoosa. Having placed watches round the village, the next day they searched again till noon; but, finding no trace of the child, they made further inquiries, and desired the moquddums to search all through the village mohullas by turning over the heaps of manure and rubbish. On coming

^{*} Nizamut Adawlut Reports, N. W. P., 18th September 1854, p. 404. † *Ibid*, 19th August 1852, p. 830.

to the premises of Rambuksh, there was some appearance of the rubbish having been removed to a distance. He sent for four Chumars and, after digging three times in the dirt and manure heap, discovered the body of the child concealed underneath. The wife of Rambuksh accused her husband and another of having brought in the child smothered up in their clothes, and then of cutting his throat with Khoorpas, which would be found in the Choollees (earthen receptacles under the flooring of the house.) He searched, and perceived an odour, and that the earth had been moistened with blood. Scraping up the earth, a Khoorpa was found. The woman said that, on killing the child, they had, in the first instance, buried the body near the Choola (or cooking place,) but that Rambuksh had the following day taken up the body, at noon, and buried it in the rubbish heap. The child's ornaments were found buried in the Choollees, or earthen receptacles, underneath the palehnda, or place for water-vessels.*

The bodies of murdered persons are occasionally found concealed in the houses of individuals wholly innocent of all participation in the crime.

A very remarkable case of this kind was tried at Bundel-kund, a few years since. A Bunnea having missed his child, about six years of age, was informed that one Chitooa, a man of notoriously bad character, had decoyed the boy away by a promise to get him a young bulbul. Chitooa denied all

^{*} Nizamut Adawlut Reports, N. W. P., 8th September 1853, p. 1127. See also a very remarkable case in which the body of a child, murdered for the sake of its ornaments, was buried in a recently-made tengrah, or earthen mound used for placing cooking utensils on. The attention of the police was called to the spot by observing that ants were travelling in and out of a hole in the newly-raised heap.—Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 228.

[†] See an instance of this kind in which a wretch, having strangled his own nephew, placed the body in an out-house belonging to a neighbour; and, upon the first inquiry, discovered it to the child's father,—his brother, and to the Police.—Nizamut Adawlut Reports, N. W. P., 17th February 1854, p. 204.

knowledge of the child. His and other houses were searched, but in vain, until they came to the house of one Thakoor. Finding the door locked, suspicion was excited, but they patiently awaited the man's return. On being required to do so, he immediately opened the door. The house was very dark within, and they were obliged to light a Chiragh to enable them to search it. They found one part of the earthen floor of the inner room soft to the touch, as though it had been recently dug up, and then beaten down again. They discovered, at the depth of four or five fingers, the corpse of the child, with the head nearly cut off, but with all its ornaments on. Upon repairing to Chittooa's house, under a large heap of kundahs, was found the ghurasa, with which the murder was committed, covered with fresh blood; this was recognised by two lohars as having been made by them for the prisoner. Chittooa said that he and Doorja, an accomplice, called the child, when Doorja, having opened the lock of Thakoor's house with a stick, took the boy in, and, having gagged his mouth with a cloth, cut his throat with the ghurasa. The padlock was produced in Court. It was the commonest description of native lock, and was easily opened before the Judge with a small piece of bamboo. Chittooa was sentenced to death.*

Many instances will be found in the Criminal Records of the N. W. Provinces (where wheat is plentiful) in which dead bodies have been concealed in dwellings and out-houses under Heaps of Bran or Chaff, (Bhoosa.)†

^{*} Nizamut Adawlut Reports, N. W. P., 2nd October 1852, p. 1121.

[†] Nizamut Adawlut Reports, N. W. P., 20th July 1853, p. 880, 20th March 1854, p. 324; 12th May 1854, p. 514; 2nd September 1854, p. 310; 23rd October of same year, p. 602; 3rd March 1855, p. 297. It is worthy of notice that, in all of these six cases, the bodies were those of children murdered for the sake of their ornaments; and that in all but one, (in which it does not appear that the body was actually buried in the chaff,) death had been caused by strangulation.

In that part of the country also, the Holes of Porcupines afford ready places of concealment for the corpses of murdered persons.*

"Wheresoever the body is, there will the eagles be gathered together"—is a fact, which has daily illustration in India, and which has often been turned to good account in searches for the remains of missing individuals.† I have long thought that the common pariah dog of the country, and, very possibly the vulture also, could be trained for the discovery of missing bodies. The dog would, probably, be found tolerably manageable, but could rarely be useful in cases where the corpse lay at a considerable distance. The keener sense and wider visual range of the vulture would tell far more advantageously; and, although this bird appears to be absolutely untameable, small supplies of food will generally induce it to resort to a particular locality where its movements can nearly always be under observation.‡ Indeed a tree resorted to by

^{*} For instances of this mode of concealment, see Nizamut Adawlut Reports N. W. P., 30th September 1852, p. 1095, a boy aged 12. Ibid, 27th January 1853, p. 112, body of a man. Ibid, 6th May 1854, p. 485, body of an adult female. Also 10th October of same year, p. 512, of a boy aged 14 years.

[†] Case in which attention was called to a murdered body by the noise of Crows hovering over it. Nizamut Adawlut Reports, N. W. P., 30th January 1852. Crows and Vultures, *Ibid*, 17th September of the same year. Jackals and Vultures, *Ibid*, 29th April 1853, p. 618; Vultures, *Ibid*, 3rd June of the same year, p. 743; Kites and Vultures, *Ibid*, 30th August of the same year, Nizamut Adawlut Reports, vol. ii., p. 1, of 1852, p. 685, by the howling of a Jackal, *Ibid*, vol. vi. of 1853, p. 660. A remarkable instance in which the friends of a murdered child, searching for his body with torches at night, were directed to the spot where it lay by the noise of Jackals quarrelling and snarling over it, *Ibid*, vol. vii., of 1853, p. 72. Vultures flying over a tank by which a body lay. Corpse of a murdered woman discovered by Jackals and Dogs tearing away the earth with which it was covered. Police Reports, L. P., 1840, p. 5.

[‡] The best-kept burial grounds in India are resorted to by Adjutant Birds and Vultures. Here there are no open graves to satisfy their rapacity, nei-

vultures, will be found in the neighbourhood of every station; and a look out for the direction in which the birds left or returned thither, might often assist a search. The subject certainly deserves the attention of Surgeons and Magistrates in the Mofussil.

POISONS.

The abundance in which a large variety of deadly plants spring up in the hot and moist atmosphere of Bengal, and the unrestricted freedom with which nearly all the most potent kinds of mineral and vegetable poisons can be purchased in every Indian bazaar, added to the familiarity with the action of narcotics which has arisen from their daily habits of opium-eating and hemp-smoking, sufficiently account for the prevalence of the crime of secret poisoning among a timid people, who, except when wrought up to a state of frantic excitement, always prefer treachery to violence in the execution of their crimes.

It cannot be doubted that, under the Mussulmaun dynasty, assassination by poison became, if not the most prevalent, undoubtedly one of the most prominent of court atrocities. As the closing act of a great political contest, or as a means of removing a stubborn minister, or an intriguing kinsman, the Datoorah, with its power of gradually drowning the astutest intellect in a state of drivelling fatuity; and the Arsenic, certain to destroy existence in a night with symptoms which the most learned hukeems could not distinguish from those of cholera (even then one of the most prevalent diseases of India),—wrought as effectually, and, as

ther can the small fragments burrowed for by jackals, tempt creatures of such large size and rapid digestion. They, doubtless, batten upon the rats and other vermin, which infest those places.

the assassins doubtless consoled themselves, far less noisily and unseemly, than the wheel at the Grêve and the axe on Tower Hill.

According to Strabo, the custom of burning Indian widows was introduced as a check to the women's practice of poisoning their husbands. Captain Hamilton, who traded in India between 1688 and 1723, reports this legend, apparently from oral tradition ;- "In Canara there are several customs peculiar to itself, and many of them are spread abroad to remote countries. Here it was that the custom of wives burning on the same pile with their deceased husbands had its beginning. It is reported that, before the Brahmins invented this law, poison was so well known and practised, that the least quarrel that happened between a married couple, cost the husband his life, and this law put a great stop to it, and now custom so far prevails that, if any faint-hearted lady has not courage enough to accompany her spouse to the other world, she is forthwith shaved and degraded, and obliged to serve all her husband's family, in all kinds of drudgery."

It would appear, from the remarks on poisons in the Shastras, that this crime was by no means unfrequent among the Hindus at an early period. We read, in Wise's translation, that—"It is necessary for the practitioner to have a knowledge of the symptoms of the different poisons, and their antidotes; as the enemies of the Raja, bad women, and ungrateful servants sometimes mix poison with food. On this account, the cook should be of a good family, virtuous, faithful, and not covetous, not subject to anger, pride, or laziness. He should also be cleanly, and skilful in his business. The practitioners should have like qualities, with an intimate knowledge of poisons; and should examine the food to be eaten by a Raja in the cooking room. This should be large, airy, light, and surrounded with faithful servants, and no one should be allowed to enter, unless he is first examined. In the Mitàk-

shara Shastra there are copious directions regarding the manner of detecting a person who gives poison;—he does not answer questions, or they are evasive answers; he speaks nonsense, rubs the great toe along the ground, and shivers; his face is discolored; he rubs the roots of the hair with his fingers; and he tries by every means to leave the house. The food which is suspected should be first given to certain animals and, if they die, it is to be avoided."*

As rarely fails to happen, when crime of any kind is the lesson taught, the common people of this country were in no way behind their masters in the practice of empoisonment; and it is probable that various modes of assassination by drugs, first made known by the hukeems of Aleppo and Bagdad, and freely employed by Shah Jehan and Arungzebe, are still practised in the jungle villages of Hindustan and Bengal.

A complete and accurate list of all the vegetable poisons obtainable in Indian bazaars, especially of those which are known to have been employed in the destruction of human life, together with full details of the operation of those the effects of which upon the system are least known, is still a great desideratum.

Impressed with this fact, Dr. Mouat, in 1843, addressed the Government of India, reporting that the greater number of cases of poisoning which he was called upon to examine, in his capacity of Chemical Examiner to Government, were those in which vegetable substances were used, from its having become generally known, among native hukeems and venders of drugs, that mineral poisons can invariably be discovered, even when existing in extremely minute quantities; but that most vegetable matters cannot be distinguished by

^{*} Tavernier, in describing his visit to Gwalior, the great state prison of the Mahomedan sovereigns, says—"When Arungzebe sends any great lord to this place, at the end of nine or ten days he orders him to be poisoned; and this he does, that the people may not exclaim against him for a bloody prince."

any processes of analysis known to, or practised by European Chemists. With a view, if possible, to prevent this, and to put a stop to the large amount of crime which can thus be committed with impunity throughout the country, he suggested that he might be furnished with the means of carrying out an extended series of experimental inquiries on the subject. For this purpose, he recommended that a circular letter should be addressed to the various Magistrates in this Presidency, requesting them to procure from the bazaars, native druggists, and other sources from which such substances are likely to be obtained in their several districts, samples of the various vegetable poisons known to be usually resorted to for criminal purposes, with their names, the modes in which they are prepared and administered, the properties ascribed to them by the natives, and, in fact, every information which could be elicited on the subject, and which would be likely to serve hereafter as a guide to the judicial and chemical investigation of such cases. observed that the substances should, if possible, be procured in such quantities as to enable the examiner to perform a series of trials, so as to modify them in the many ways that would be necessary, in endeavouring to arrive at any determinate result in a comparatively untrodden field of observation.* The Government, considering that the Magistrates were not the proper authorities to be called upon for the information sought by Dr. Mouat, requested that the Medical Board would consult the Civil Surgeons at the different stations, whether samples of the various vegetable poisons known to be usually employed for criminal purposes could be procured by them for Dr. Mouat's examination: requesting them, at the same time, to furnish such information as might be useful to Dr. Mouat in his proposed

^{*} Letter No. 57, of May 18th 1853.

experiments. A circular to that effect was accordingly issued by the Board, which appears, by the filed reports, to have been responded to by only twelve Medical Officers,* who sent in the names of about thirty-six vegetable substances, stated to be used as poisons and procurable in their stations. These articles have been embodied in the "List of Vegetable and Mineral Poisons procurable in the Bazaars of India."—Appendix A.

Many of the vegetable substances described, -as the Datoorah, Gunjah, Aconite, Kurrearee, Gunch, Lall Chitra, Kuchila (Nux Vomica) with its Viscum, Kakmari (Coculus Indicus), and Kurrubee (Oleander) are poisons, and are employed by the natives as such. Others, as the Mishmee Bish, &c., &c., are doubtful, both with regard to their botanical characters and to most of the circumstances under which they are employed, and deserve a very careful investigation. A third set, among which are the Isamel, or Esser Mhool (Aristolochia Indica) and probably several others, are to be considered as powerfully medicinal rather than poisonous. + Several of the reports bear strong evidence of the great unwillingness and suspicion which are nearly always displayed by the natives when called upon to afford aid in the elucidation of questions of this kind. Still, the result of the inquiry was sufficiently encouraging to render its repetition highly advisable.

Great as is the obscurity which envelopes the history of many of the poisonous substances used in India, the present inquiry leads me to feel convinced that the number of poisons, which are used freely by the natives of this presi-

^{*} Messrs, Dickens, of Balasore; Morton, Banda; Cumberland, Pooree; Macnab, Ghazeepore; Pitt, Backergunge; Shaw, Agra; J. McRae, Muttra; Lightfoot, Bolundshuhur; Barber; Griffith, Jubbulpore; Greig, Seetapore; J. Macrae, Monghyr.

[†] The Aristolochia was, however, ranked by the ancients among the weak poisons.

dency, is very limited indeed. The chief of these are comprised in the following table :-

I. The Preparations of Arsenic,	alex-silvin millersechmensen						
Aconite,	deserter councilies from Romes						
Nux Vomica,	For Assassination and Suicide.						
Opium,							
Lall Chitra,							
Oleander,	j						
	With a view to producing Intoxication,						
II. Datoorah,	Insensibility or Fatuity, but not per-						
Gunjah,	haps with intent to kill, although death						
best out simuch haistannik,	frequently results from their use.						
III. Lall Chitra,	For Abortion.						
Charles and the second of the	id much and the continues beaut						
Arsenic	n the Bish Given as Medicines in						
Snake Poison, &c.,	In the Bish Given as Medicines in poisonous doses.						

Doubtless, further experience will call for additions to this list and especially to the 3rd and 4th classes; but it must be repeated that the number of poisons commonly employed with criminal intent in Bengal and the North-West Provinces probably does not much exceed that given in the 1st and 2nd classes of the above list.

A few notes on the employment of these poisons in India may usefully supply the deficiencies in the English standard works on Medical Jurisprudence.

ARSENICAL POISONING.

Arsenious Acid, and the Yellow and Red Sulphurets of Arsenic, are imported into this Presidency in remarkably large quantities. I have ascertained that the principal supplies of White Arsenic are brought to Calcutta, from the Gulf, in Arab ships. Some also is brought from Europe. The present bazar value of Arsenious Acid is about twenty-five rupees per maund (of eighty pounds.) The Yellow Arsenic comes

from Oude: that of a superior quality brings from eighty rupees to ninety rupees per maund. Another cheaper and coarser description of the Yellow Sulphuret is imported in greater quantities from Rangoon, where its value is about thirty rupees per maund; this latter appears to pass largely into the interior of the country. Red Arsenic also comes from the territories of Oude; and it is found native in China. Its present value is from thirty rupees to forty rupees per maund, according to its quality. The trade seems to be almost entirely in the hands of natives. The importation of White Arsenic has considerably diminished during the last five years; but it appears, by an official statement, that the total quantity of this drug imported through the Custom House of Calcutta during the five years 1850-51-1854-55 inclusive, was upwards of 786 maunds*.

Arsenic.—Arsenious Acid; White Oxide of Arsenic.—Sumool-Khar, H. Sanchya, S. (Fleming) Phenáshmabhasma, S. (Wise), Suffed Súmbhul, Ind. and Cash. (Honigberger)—May be bought freely at a very low price in nearly all Indian bazaars. Dr. Honigberger says that, in former times, and probably at the present day, any one could purchase Arsenic at Lahore from the druggists, on simply stating that he was in the habit of eating it,† or, that he wanted it for the destruction of rats. It was mentioned in the public prints, a year or two ago, that this ancient and almost universal pretext for buying the strongest of all poisons, and most useless

^{*} The importation of White Arsenic, at a duty of 10 per Cent., is authorized by Section III., Regulation XV., 1825.

[†] From this it would appear that the practice of Arsenic Eating, described by Dr. Von Tschudi as very common among the peasants in some districts of Lower Austria, in Styria, and in the mountainous regions bordering on Hungary, with a view to increase their good looks and embonpoint, and with the somewhat antagonistic expectation of becoming "long-winded" in toiling up their mountain paths, also prevails in Northern India.

of all chemical substances, likewise prevails in Bombay. This is also the common plea upon which criminals purchase the drug from the only too facile Bunneahs, Up-country. The wife of a man who had died by poison, declared that she had administered to her husband a powder, given her by her paramour, to cure him of impotency! The Bunneah from whom the Arsenic was bought, stated that the male prisoner had purchased two pice-worth of Arsenic (about one and a half masha weight) to kill rats.* A prisoner, at Seharunpore, asserted, in his foujdaree confession, that he had purchased Arsenic for the purpose of destroying rats, and that his wife had taken it by mistake. It was proved, however, that he had purchased Arsenic, Mercury and Sulphur, with the object, as he stated, of curing itch.+ In 1854, one Bijyee, Brahmin, of Bareilly, confessed that, his widowed sister having been seduced and thrown upon him for support while pregnant, he determined to kill her. Telling her that he would take her back to her late husband's relatives, he, while on the road, poisoned her with Arsenic, with which he had provided himself on pretence of poisoning rats.;

Again, at Tipperah, upwards of 700 miles from the scene of the above tragedy, we find a prisoner giving his mistress a fatal dose of poison, with a view, as he said, of procuring abortion, although he must have been well aware of its effects, as he had previously used it to kill rats.

Strange, that so weak a lie should be traceable as having passed current in all Europe, as a cloak for homicide, since the fourteenth century; || and that it should be equally valid throughout all India at the present moment!

^{*} Nizamut Adawlut Reports, N. W. P., 8th March 1852, p. 1607.

† Ibid, 9th April 1853, p. 522.

‡ Ibid, 13th October 1854, p. 551.

§ Police Report, L. P., for 1848, p. 37.

|| Treatise on Removable and Mitigable Causes of Death, p. 176.

The records of the Chemical Examiner's Office, during the periods already referred to, contain reports of the discovery of White Arsenic either in food, &c., known to have been given with a felonious intention, or in the stomachs, &c., of persons dying under suspicious circumstances, in twenty-three instances. In some few of these cases, the quantity detected amounted to a mere trace: but, in many, it was noticed as being sufficient to destroy eight or ten persons. Dr. Kenneth MacKinnon informs me that, in a large proportion of cases of poisoning by White Arsenic, Up-country, the drug is administered in enormous quantities. In some of these cases, he has known vomiting occur so rapidly, and with such great activity, as to free the stomach before the poison could enter the circulation.

In one case, a woman confessed that she had administered three doses of White Arsenic to her son-in-law. The man appears to have been ill three or four days and received native medical treatment.*

In another case, where a small quantity of Arsenic was discovered in the stomach, the individual survived four days.†

In the generality of cases of poisoning by Arsenic the criminals state that their victims died of Cholera.‡ The circumstances under which the poison was administered, are frequently left altogether unexplained; in many cases, however, it was evidently given with intent to kill or disable; and I find three instances in which it was employed with a view to procure abortion. White Arsenic is given by the native practitioners in the "Bish Baree," and in some other preparations. As most of the cases of poisoning

^{*} Nizamut Adawlut Reports, **N. W. P.,** 6th February 1852, p. 105. † *Ibid*, 2nd September 1852, p. 960.

[‡] See Nizamut Adawlut Reports, N. W. P., 9th April 1853, p. 522. *Ibid*,
31st May 1854, p. 596. &c.

by White Arsenic reported in the Chemical Examiner's Records do not present any peculiar features which distinguish them from similar instances occurring in Europe, I shall only cite one of them, of very recent date, as an example of the utterly reckless manner in which the Thugs and other robbers of this country, -whose criminal practices, will presently be referred to,-employ poisons with a view to disable their victims. In January 1854, two travellers were attacked, at eight o'clock in the evening, with vomiting and purging, soon after having taken food in the neighbourhood of Allahabad. They died about day-break next morning. Upon examination, the Medical Officer found a bright redness in the stomachs, and upper part of the small intestines of both, leading to the opinion that a poison had been administered, although no irritant was detectable by the naked eye. The stomachs, with their contents, were forwarded for analysis, together with a powder found on the person of the suspected party (one Bhowaneedeen-doubtless a Thug poisoner by profession,) described by him as cough medicine; and some of the flour with which their bread was made. Dr. Macnamara discovered considerable quantities of Arsenic in both stomachs; this poison was also detected in the powder and in the flour.* The powder containing the Arsenic was described as being of a Black colour. In a case also,—where a young woman, at the instigation of her paramour, administered Arsenic (as was afterwards proved on post mortem examination) to her husband's parents,—the prisoner declared that the poison was a black powder. † In this case it was proved that the Arsenic, when purchased, was white-the man

^{*} Two interesting cases of poisoning by Arsenic in Bombay are recorded by Mr. Heddle, in the 1st volume of the *Bombay Medical and Physical* Transactions.

[†] Nizamut Adawlut Reports, N. W. P., 18th January 1854, p. 49. Again Ibid, 8th March 1852, p. 160.

who bought it also spoke of it as white, but the woman who asserted that he gave it to her to administer to her husband, for the cure of his impotence, always described it as black. It is, however, probable that, in these cases, the colour of the poison is disguised, perhaps with ground spices, before it is administered. In this trial, the Judge questioned a native druggist, who stated that a preparation made from Arsenic, by a slow and expensive process of refinement, is sometimes given as medicine for impotency; this substance he called "Kooshtah," and said that it is white. He added that ignorant persons might, by subjecting Arsenic to the process of burning, make it black, and administer it for medicine, without any of its deadly properties being refined out of it.*

Yellow Sulphuret of Arsenic.—Orpiment,—Hartal, H; Haritala, S. (Fleming.) This is probably the preparation of Arsenic most frequently employed as an internal medicine, as a pigment, and as a depilatory in India. In this Presidency, very large quantities of Orpiment are consumed in the manufacture of shell lac, chiefly at Mirzapore, Beerbhoom, Bancoorah and Calcutta. According to Dr. Percival Lord, the natives inhabiting the borders of the Indus sometimes employ the Zurd Sunkiah, or Yellow Sulphuret,† in small

^{*} According to Baboo Issurchunder Gangooly, Arsenic, as well as several other powerful drugs used in native medicine, is made to undergo certain preliminary processes, called "Sodhana," by which it is supposed that their medicinal qualities are enhanced, and their deleterious ones modified or rendered mild in the required degree. Two plans are practised near Midnapore. In the first, the Arsenic is pounded and macerated in cow's urine for 36 hours. In the other, it is introduced into a portion of the green trunk of the munsasij. (euphorbia ligularia) and, being covered with the bark of the same plant, the whole is exposed to a good fire until the external parts of the wood are completely charred. The Arsenic is then fit for use. This may possibly explain the black appearance of the Arsenic.

[†] Mr. Campbell, C. S. of Azimghur, has shown that the natives of that country describe as "Yellow Arsenic" a variety of the White Arsenic which has a yellowish tinge, but which is, of course, quite different from Orpiment.

doses (they said half a ruttee,—three quarters of a grain) for obstinate cases of intermittent fever. A similar practice prevails among the Bengalee doctors, and is sometimes followed by calamitous results. I understand that a case occurred some years since, in which a respectable native, enraged with a kobiraj who had administered a fatal dose of Arsenic to his child, seized a weapon and struck the unfortunate practitioner dead. The Chemical Examiners' Records contain eight instances in which this poison was discovered, either in very suspicious compositions, or in the stomachs of persons dying with symptoms of irritant poisoning.

The following case is abridged from Dr. O'Shaughnessy's printed report:—

On the 21st October 1840, Dr. O'Shaughnessy received the remains of a rice pudding, on the copper plate in which it had been cooked. It was stated that this pudding had been served, the evening before, at Major H-n's table; that Mrs. H., her European servant, and metranee had eaten of it; that Major H. had tasted it; and that all had been immediately taken ill. A bitter taste was observed by the parties, and the pudding was said to be discolored. Upon analysis, it was found that it was the Sulphuret of Arsenic which had been used, and that impregnation of the pudding with copper was not the cause of the illness of the sufferers. Dr. O'Shaughnessy was inclined to believe that the substance introduced was one of the compound native poisons of which Orpiment is an ingredient, and not the pure arsenical poison alone. The bitterness of taste, the proportionately small quantity of Arsenic present, and the symptoms of giddiness and intoxication experienced in two of the cases, were his chief reasons for entertaining this opinion.

This report also records a case of murder by (yellow?) Arsenic, and detection of the poison in the remains of two

individuals after ten months' interment without coffins.—A most interesting and instructive detail.*

RED SULPHURET OF ARSENIC—Realgar,—Mansil, H. Manah Sila, S. (Fleming).—This was detected in a suspicious powder sent for examination from Hooghly in March 1841. It is sold in all the bazaars. I am informed that it is also used by the Hukeems and Kobirajira. I have found it among a Bunneah's stock forwarded by the Police. It appears to be employed for the removal of superfluous hair, &c.†

CATTLE POISONING.

The Chemical Examiners' Records contain much interesting correspondence relative to the very prevalent crime of Poisoning Horses, Cattle and Elephants. The animals are generally destroyed by the administration of balls, one of the principal and commoner constituents of which appears to be the root of the Aconitum Ferox, which is, doubtless, also the substance most in use among the hill tribes for poisoning spears and arrows. The following details will afford sufficient illustration of this subject.

In September, 1852, the Sub-Assistant Commissary General, in charge of the Government Elephants at Dacca, forwarded a portion of the contents of the stomach of an Elephant which had died with symptoms of irritant poisoning together with a portion of Meetha Bish (Aconitum Ferox)—the poison supposed to have been administered. Mr. Siddons failed to procure even a trace of Aconitine from the contents of the animal's stomach. He, however, testified to the poi-

^{*} Bengal Dispensatory, pp. 721-28-29.

[†] For descriptions of several preparations of Arsenic used medicinally by the Byeds, Kobirajira and Hukeems of Bengal, See papers by Baboo I. C. Gangooly,—Bengal Hurkaru, Medical Column for Feb. 7, and Dec. 11 and 18, 1852.

sonous character of the root sent, and gave it as his opinion that about three ounces of root, as fresh as that sent, would be sufficient to destroy the life of a half-grown Elephant. It is, however, very difficult to prejudge with accuracy the effects of any vegetable poison upon one of the lower animals. A somewhat similar, but very questionable case was investigated in the following August, without any satisfactory result. In the preceding May, the Magistrate of the 24-pergunnahs forwarded a ball which a person had been charged with giving (?) to an Elephant with intent to poison it. This was found to be of the size of a small orange. In its interior were found imbedded, without any attempt at intermixture, a small piece of fresh Aconite root, weighing about 20 grains, and a portion of Sulphuret of Mercury, nearly a drachm in weight. In August of the same year, the Joint Magistrate of Pubna was informed that the chumars of a certain village had been for some months in the habit of killing cattle in the neighbourhood for the sake of their skins, by thrusting into the rectum certain poisonous balls. Some of the prisoners confessed and produced several balls, two of which were sent to the Chemical Examiner. They also produced a pointed stick, at the end of which the ball, it was understood, was fixed, and so thrust into the body. When the stick was withdrawn, the ball remained; the consequences were that the belly swelled, in some cases a small quantity of blood was passed, and the animal died in about 12 hours in great pain. The balls were found to be perforated with an aperture for the pointed stick, and contained a resinous matter, kept in form by being mixed with a large quantity of hair rolled up somewhat like a silk-worm's cocoon with one end cut off. The nature of the resinous matter could not be decided by analysis. In 1851, four chumars of Sarun were sentenced by the Nizamut for poisoning cattle with intent to steal their hides. There could not be a doubt that the cows had been killed by inflicting a punctured wound

into which poison ('mahoor') was inserted [Returns for 1851 p. 1102.] Balls said to be extensively used for poisoning cattle in Jessore were sent for examination in November, 1853. Their poisonous ingredients could not be detected.

When at Lahore, Dr. Honigberger received from the English cantonment, for analysation, a vegetable compound which had been discovered in the form of a ball in the artillery department, where it had, probably, been deposited for the purpose of destroying the cattle. He ascertained the presence of Aconite root in that mass. The coarse pieces were white, having the texture and pungency of the root.

Mr. H. Alexander has obliged me with the following interesting note. "The principal crime committed in the district of Beerbhoom is poisoning cattle for the sake of their hides. This crime is committed by the Hill-men, who invariably confess. The manner in which it is effected is These men lurk amongst a large herd of cattle; and, when they observe one that looks sickly, they puncture the hide near the hip joint, with iron needles which have been soaked in some vegetable poison, their arrows are poisoned in a similar manner. The animal lingers for about two or more days, and seldom leaves the spot where it once lies down. Several of these Hill-men have been brought to me, with the instruments and poison upon them. If I remember right, I sent some of the poison to Dr. W. B. O'Shaughnessy, to be analyzed, but I forget the result." [It was, doubtless, a preparation of Aconite root.] "The skins are sold to the Chumars."

A surprisingly extensive system of cattle poisoning was discovered, late in 1854, by Mr. G. Campbell, the Magistrate of Azimghur. The following perfectly trustworthy account is from the *Friend of India*. "A child was detected administering poison to a cow. Inquiries were made as to his motive, and his replies furnished a clue, which was vigi-

lantly followed, and at last revealed the existence of a widelyorganized conspiracy. A few men, perhaps not more than two, had adroitly availed themselves of the village organization, and turned it into a source of vast pecuniary profit. Every village in the North-West numbers among its officers a Chumar. These men, of the very lowest caste, perform all offices too repulsive for the more respectable inhabitants. As a reward, they obtain the skins of all dead animals. They have, therefore, a direct interest in such deaths; and a leather dealer, aware of this fact, resolved to induce them to increase the number by artificial means. In concert with a native merchant, he procured vast quantities of Arsenic, which was distributed by agents sworn to secresy, to other subordinates. From their hands, it reached the Chumars, who administered it to the cattle, usually in the shape of a ball of flour. The cattle died, and the skins were sold by the Chumar to the poison-distributor at two-thirds of the ordinary price. The agent, in his turn, obtained a commission on the skins, and the Bunneah an exorbitant price for his Arsenic, while the leather dealer was contented to find skins plentiful and cheap. With such inducements, the practice rapidly increased. Whole classes became initiated into the use of a fearful agent of destruction, and the wealth of the cultivators was swept away, without either detection or remedy."

In the course of this inquiry, Mr. Campbell found that the wholesale Arsenic merchants principally resided in the city of Patna and got their supplies direct from Calcutta. These men all held that the traffic in Arsenic was not prohibited by law, and acknowledged that they carried it on actively, not knowing that the Arsenic was used for illegal purposes. They all stated that this traffic had enormously increased within the previous two or three years, and especially within the last year, and that the drug had, of late,

been much reduced in price. They knew of no legitimate use to which it was ever applied, except in the composition of medicines, and to mix with the white-wash of English gentlemens' houses, to keep off insects. The Patna merchants, their books, and the White Arsenic found in their shops, were brought before Mr. Campbell. One man admitted that he had received from Calcutta, during the last year, no less than one hundred maunds, or nearly four tons of the poison, of which his books shewed the sale of upwards of eightyeight maunds, and upwards of eleven maunds were seized in his shop. In the shops of seven dealers in Patna, the total quantity of White Arsenic seized amounted to upwards of twenty maunds. It would seem that Arsenic had been accumulating in Calcutta for some years previous to the discovery of this system, as the quantity imported had diminished greatly during the preceding five years,-viz., in 1850-51, 422 maunds and upwards passed the Custom House: in the following year the quantity was reduced to 83 maunds; in 1852-53, it rose to 260; and in the two succeeding years, it fell to 6 and 13 maunds respectively. At the same time, it was shown that, during the nine years ending 1848-49, the average exports of hides and skins of sorts to Great Britain was 14 lacs of pieces. In 1853, the exports to that quarter of hides alone amounted to 231 lacs of pieces. The aggregate of exports, during 1853, of hides to Great Britain, North America and France (the three principal destinations) amounted to 3,209,483 pieces.

It certainly appears to be a matter of great importance that the Importation, or at least the Sale of Arsenic in India should be regulated by a stringent legislative enactment.

The Hindus, in ancient times, appear to have been prepared against the villainies of Cattle Poisoners. It is ordained, in the Institutes of Menu, that, when cattle die, the herdsman should carry to his master their ears, their hides, their tails, the skin below their navels, their tendons, and the liquor exuding from their foreheads (?) He was also directed to point out their limbs. (viii., 234.)

Aconite. — Aconitum Ferox ; — Bish, Bikh, Meetha Teelia,* Meetha Zuher, Ati Singeea Bish, Bishnak, (O'Shaughnessy). -The Dakra, or Nepaul poison, is also considered by this authority to be the root of the Aconite; a portion of Dakra, sent me by Dr. Chuckerbutty, is evidently Aconite root. The tubers, which are used in several formulæ by the native practitioners, and also with a view to destroy life, are two or three, fasciculate, fusiform, two to four inches long, blackish externally, pale inside. They are brittle, break with a resinous fracture, and are readily reduced to a coarse powder; in this state, they are destitute of smell, slightly bitter to the taste, the tongue being benumbed wherever touched on. The roots are sold in every bazaar in India, and may be purchased in large quantities for about 10 annas the seer. A preparation of the root is much used in all the hill districts of India to poison arrows for the destruction of wild beasts. It has been used on several occasions to poison wells and tanks. In medicine, the Bish is chiefly employed by the natives in the treatment of Leprosy, Fever, Cholera, and Rheumatism.† According to

^{*} In Nizamut Adawlut Report, N. W. P., for 26th October 1854, p. 618, will be found a case of poisoning in which Meetha Teelia is stated to have been used, Dhatoora, however appears to have been the poison employed "Methel" is one of the names of Dhatoora. Aconite-root appears to be best known, near Calcutta, as Kath-Bish. In Behar as Dakra; In the neighbourhood of Dacca as Meetha Bish; and in the North-west Provinces as Meetha Teelia.

[†] O'Shaughnessy. It appears, from the Dacca Dispensary Report, April and September, 1854, that Sub-Asst. Surgeon, Omeshchunder Dutt, has tried the Aconite root (called by the natives of that place *Meetha Bish*,) in Chronic Rheumatism and Neuralgia, seemingly with some success. The doses are not mentioned.

Dr. Honigberger, the natives report that, in its natural state, the root is white, and that, when immersed in the urine of cows, it becomes black;* as it is met with in the bazaars, it is lustrous when broken.

This root, named emphatically Bish—Poison, but having an almost infinite variety of designations, is evidently the best known and the most frequently employed of all the stronger vegetable poisons in India. The following interesting cases of supposed poisoning by Aconite have been selected from the reports of the Chemical Examiners:

In October 1840, the Coroner of Calcutta ordered the examination of a liquid obtained from the stomach of one of three persons who had suffered from severe and peculiar symptoms, soon after their morning meal; one died in eleven hours, the others recovered. Analysis gave no indication of the presence of any poisonous material. But, from the following circumstances, Dr. O'Shaughnessy felt himself warranted in giving it as his opinion, in evidence, that the deceased had been poisoned, and that the poison given was, in all probability, the Bish,—the root of the Aconitum Ferox. All these persons suffered almost immediately after taking food. The symptoms, in all, were burning in the throat, numbness of the extremities, transient loss of sight, and giddiness. To this succeeded collapse, sinking of the pulse, and, in one case, death in eleven hours. The food eaten was a prawn curry. Cholera was not epidemic at the time. Whilst the symptoms were different from those of all ordinary diseases, they coincided closely with those which the Doctor had witnessed as the effects of Aconite, when given medicinally to man, or as a poison to animals. This Aconite,

^{*} According to Baboo Issurchunder Gangooly the "Sodhana" process for Bucknag or Butsnabh (Aconite) is maceration in the juice of amrool, or three-leaved sorrel.

moreover, was one of the best known of the native poisons, and procurable in every bazaar.

In April 1841, the Magistrate of Behar reported that three men, on their way from Bengal to the North-Western Provinces, were joined on the road by a fourth individual, who accompanied them about two stages, and took an opportunity of mixing poison of some description with some suttoo and goor (parched grain and treacle), which he gave them to eat. One of the men became insensible almost immediately, and died in about four hours. The other two, who had taken less, became also after a short interval, insensible; but recovered under treatment during the night, about 12 hours after taking the poison. The man who died lay down almost immediately after taking the poison, and never again betrayed any symptoms of animation beyond slight respiration. The others described their sensations as those of great heat and burning internally, accompanied with the most violent contortion of their limbs, and a feeling as if they were struggling with an exceedingly heavy load upon their shoulders. On examining the body of the deceased traveller, Mr. Dickson found a considerable decree of general inflammation of the intestines, the stomach contained a quantity of undigested suttoo, its lining membrane was in a very highly inflamed state. There was also some bloody fluid effused into the cavity of the abdomen. Having preserved the contents of the stomach, he, next day, gave a small portion to a chicken, which had the effect of making it apparently very uneasy during the day, and it died the next morning, about 20 hours after eating the suttoo. Dr. O'Shaughnessy analysed the contents of the stomach, which contained no metallic poison. Owing to their putrefaction and state of admixture, no vegetable poison could be detected. He, however, inferred, from the symptoms described, that the

Dakra, or root of the Aconitum Ferox, together with the seeds of the Stramonium were the poisons employed.

A very demonstrative case of poisoning by Aconite was tried in Zillah Behar in 1820. A man who had embezzled a sum of money gave himself up as a slave to the defrauded party; he, however, (as he afterwards confessed) mixed Dakra with his master's food. After having eaten some of the food, the unfortunate man remarked that it had a bitter taste. Having finished eating, he lay down, but soon complained of being unwell, and sent for one of the Police, on whose arrival he said that he suspected his servant had poisoned him; vomiting medicines were administered by a native doctor, but without effect, for he died in a few hours; and a cat, which had eaten some of the flesh left by the deceased, died also before the next morning. The judge of circuit, in convicting the prisoner, remarked that the Dakra, which is brought from the Nepaul Hills, is well known to the natives in general to be a most deadly poison, whether taken into the stomach or introduced into the circulation by a wound, and is commonly used to poison arrows for the destruction of wild beasts.*

In 1854, one Anundchunder Roy, having incurred the censure of his family by his dissipated and extravagant mode of life, conceived the idea of murdering them all. For this purpose, he purchased about an ounce of Aconite root. He was seen pounding some of the root on a brick, and was proved to have deposited the powder in a utensil, containing a vegetable broth, at his brother's house. The brother and three women partook of the broth. The man ate first, and probably got the largest share both of it and the poison. He was taken ill almost immediately, complaining of a burning sensation in his throat and stomach, vomited once, and

^{*} Macnaghten's Reports, vol. ii., p. 19.

expired during the night. The three women were seized with the like symptoms, and soon fell into a state of insensibility, but recovered after a lapse of several hours, the quantity of poisonous matter swallowed by them having proved insufficient to destroy life. The prisoner at first ascribed these events to Cholera. Having been upbraided and, as he asserted, beaten by Dwarkanath Roy and others, friends of the deceased, he laid a criminal information against those persons, charging them with having beaten the man to death. A child, the deceased's son, however, stated that he had seen the prisoner enter the kitchen, and put something into the cooking vessel. Mr. F. P. Strong, the Civil Surgeon, examined the body, and stated that he was "unable to account for the death on any supposition other than that the deceased had swallowed some vegetable poison, as for instance Aconite." The prisoner was sentenced to death.*

One Musst. Kanchania, of Tirhoot, carried on an intercourse with her brother-in-law, one Benee. A witness, who had originally been a defendant in the case, deposed that Benee and another, Mohun, took him to a bazaar, where Benee purchased from a Bunneah two pice-worth, or two small pieces, of some poison steeped in oil, which, on being cut, presented a white appearance; and, on the Bunneah's asking Benee for what purpose he required the poison, the latter replied that he had a painful swelling in his body, to which he wished to apply it. Further, that he and Mohun went to

^{*} Nizamut Adawlut Reports, vol. iv., 1854, p. 560. See notes of cases of poisoning by Dakra, in Sweetmeat, at Monghyr and Behar. Reports of State of Police, Lower Provinces, for 1846, p. 14 and 1848, p. 15. Also an instance, at Bijnore, in which particles of the *Meetha Teelia* (or *Aconitum Ferox*) were found in a portion of the dholl reported to have been given to certain parties, who were rendered insensible after eating, when one, the principal, was robbed of her jewels; the effects, however, were only temporary insensibility, and they recovered without remedies being administered to them.—Nizamut Adawlut Reports, N. W. P., 27th November 1854, p. 766.

Musst. Kanchania, when Mohun in his, (witness's,) presence, handed her the poison, telling her that Benee had desired him to tell her to give it to her husband, and that, when he died, he (Benee) would marry her. After a lapse of four days, he heard that the woman's husband and mother-in law had died. Four of the neighbours deposed that they saw the two deceased persons senseless and tossing about. Several others deposed that the woman, after having attempted to escape, confessed before them that she had administered the poison in some beans. The Civil Surgeon, Dr. A. Simpson, deposed that he found the body of the man considerably decomposed and without any marks of violence. The post mortem appearances were such as are visible in cases of death from asphyxia from narcotics. The stomach contained a few ounces of a brown watery fluid without alimentary matter; and, on microscopic examination of a portion of the contents, a resinous substance, resembling opium, in small quantities was observed. But, from microscopic examination alone, he could not depose positively that such was the substance. All the organs of the body were healthy, and he could discover no other cause of death. The body of the woman was decomposed to a greater degree than that of the young man. The appearances were similar, and the organs were quite healthy. The stomach contained a considerable quantity of half-digested food, but he could discover nothing deleterious on microscopic examination. There was no evidence of death from natural causes. He also examined the specimens of Dakra sent in by the Joint Magistrate, but their microscopic character so much resembled that of many farinaceous substances containing starch, such as wheat, dholl, rice, &c., that, had it been present, he could not have distinguished it from the starch grains of some of those substances of alimentary matter. The prisoner, at first, confessed that she had administered a piece of white poison, like

wood; but, as is usual nearly throughout India, denied every thing on trial. She was sentenced-eapitally.*

The following case, from one of the Reports of the Superintendent of Police, Lower Provinces,† deserves investigation. There had been a dispute in the Bhaugulpore district, about a tauree tree, and a punchayet was held to settle it. When all was concluded, one of the parties said, who is for drink? and the rest proceeded to his house to have some tauree. Poison was mixed with this, and the defendants, three in number, came provided with antidotes known to the Hillmen, which they took: of the others, three died, and the remaining three, having procured antidotes, recovered. The antidotes were the roots and barks of trees, and the poison administered was said to be "Dakra." If that was really the case, Mr. Dampier adds, the knowledge of the existence of such antidotes would be a matter of much medical interest. Unfortunately, however, no additional facts have since been, adduced.

The poison called *Jhur* (root) described by Mr. Brett when serving with the Bhaugulpore Hill Rangers,‡ as commonly employed by the Hill-men to effect suicide, and in preparing the points of their arrows when hunting the wild boar, is evidently Aconite.

In the case related by Mr. Brett, a sipahi had taken a drachm 12 hours previously. He was sufficiently sensible to explain what had occurred. He suffered excruciating agony, and a sensation of burning heat in the stomach, and within his body in every direction, he complained also of pain in the

^{*} Nizamut Adawlut Reports, vol. iv., 1854, p. 8.

^{† 1844,} p. 19.

[‡] Transactions of the Medical and Physical Society of Calcutta, vol. iv., p. 424.

head: pupils contracted,* pulse quick and small, countenance depicting alarm and horror. The stomach-pump and emetics failed to give relief, and he expired in about an hour and a half;—extreme collapse of the features, dilatation of the pupils, coldness of the extremities, and feebleness of pulse having supervened an hour previously.

Mr. Brett introduced about half a drachm of *Jhur* into an incision, an inch long, over the glutæus maximus of a dog, and, in a few minutes, the same quantity was placed in an old wound. Nothing apparently occurred during the first hour and a half; after which the animal was seized with violent spasmodic action of the stomach, ejecting nearly its entire contents. It appeared to suffer great agony in its abdominal viscera, twisting its body in every direction, and foaming at the mouth; pupils *contracted*, pulse quick and small; expired after a collapse of 15 minutes. The liver was found highly inflamed (?), as was also the Cardiac half of the internal membrane of the stomach, and the peritoneum covering the liver, stomach, and large and small omenta.

Under the name of Kalkoote, Baboo Issurchunder Gangooly, at present Sub-Assistant Surgeon of Howrah, describes a root having a black bark covering a white substance within. These roots, he observes, are indigenous to the mountainous tracts of Tirhoot, and are much employed by the native hunters in poisoning the points of their arrows, a few of which were placed at the Baboo's disposal by a former Magistrate of Midnapore for the purpose of ascertaining the effects upon inferior animals. From the terrible character of the spasms, pervading the whole body, which preceded the death of a couple of dogs experimented upon, he had

^{*} In this respect, the action of the poison differed from that of Aconite, which produces wide dilatation of the pupils, with more or less loss of sight. It will be seen, however, that the pupils here were observed to be dilated before death.

no doubt that the Kalkoote belongs to the family which produces the strychnine. It appears probable, however, that this poison is the Aconite. Baboo Issurchunder Gangooly also holds that the Aconite forms the basis of the Bish Baree.

Dr. Mouat published, in 1845,* the cases of two privates of H. M. 55th Regiment, at Chinhae, who suffered (in one of the cases fatally) from strongly marked symptoms of Aconite poisoning after swallowing a spirit called samshoo, supplied to them at a Chinese drinking-shop.

For full accounts of the Symptoms and Post-Mortem Appearances in cases of poisoning with Aconite, and for the mode of separating Aconitine,—See Taylor on Poisons and O'Shaughnessy's Bengal Dispensatory—See also Appendix B.—For curious information regarding Aconite—See Wallich, Plant. Asiat. Rar., vol. 1, p. 35, and Wight, Illustrations of Ind. Botany.

THUGGEE BY POISON.

While the whole system of organization of the bands of Phansigars who, a few years since, overran India, has been thoroughly laid bare; and while an equally clear light is now being thrown upon the practice of Dacoity in Bengal, very little appears to have been done towards revealing and placing a check upon the mysterious operations of those gangs of Poisoners by Profession who still infest every main road, and lurk in the purlieus of every large town throughout the country.

The subject is one that especially calls for the closest judicial investigation. I have been able to collect but little definite information regarding it, beyond a few scattered remarks in the Reports of the Superintendent of Police, Lower Provinces, and some cases in the Reports of the two

^{*} India Journal of Medical and Physical Science, N. S.

Courts of Nizamut Adawlut; still, the facts which these embody sufficiently prove that a system of Thuggee by Poison has spread itself over every portion of the Bengal Presidency. It appears certain that the crime is equally prevalent throughout Bombay and Madras.

The following table, compiled from Mr. Dampier's Reports, will give some idea of the comparative prevalence of this crime in the several districts of the Lower Provinces, during a period of nine years. It affords no guide, however, to the actual prevalence of the crime, as it is considered probable that very many instances escape discovery; indeed Mr. Dampier has more than once insisted upon the fact, that this is a crime in which the detection of the culprits is but seldom made.* Further, it would appear that this table merely comprises the discovered instances of the lesser offence of Theft by Drugging, the cases in which death by poison was occasioned being omitted.

^{*} Report for 1846, p. 5, and for 1850 p. 1.

Cases of Theft by the Administration of Drugs—Lower Provinces.—

Magazzia au	1843	1844	1845	1846	1847	1848	1849	1850	1851	Total
										_
Shahabad,	1	2	5	5	3	1	4	2	4	27
Sarun,	1	1		2	1					5
Champarun,										
Tirhoot,										
Patna,	1		2	1	1					5
Behar,	1			3	4		10	5	1	24
Monghyr,										
Bhaugulpore,										
Purneah,	1									1
Dinagepore,							2			2
Maldah,				1						1
Rajeshaye,										
Pubnah,								1		1
Rungpore,								1		1
Bograh,										
Mymensing,										
Sylhet,										
Tipperah,										•••••
Noacolly,							CONTRACTOR OF) Not		
Chittagong,						GIRT .		Rep	orted.	
Dacca,						5			11.2	5
Furreedpore,			10000 F				No.			1.27
Backergunge,						September 1				•••••
Jessore,	A Shanning									
Nuddeah,	1			1						
35 3 3 3	*									2
				1		3		1		******
	Section 1			1		100			1	6
Bancoorah,							3		4	7
Burdwan,	1			2	2		2		1	8
Midnapore,	1						3			4
Hooghly,				2	3			1	1	7
Howrah,	1	1					2		1	5
24-Pergunnahs,	1			1				1	6	
Baraset,										9
- Participal	100					100				1000
A comine	To Allen	16.31			100000	-	Sec	niine	140 1	
	10	4	7	19	14	9	26	12	19	120

The first step in the investigation of this direful practice should be the discovery of the precise Classes to which the Professional Poisoners of India belong. Several of the deadliest poisons are so easily procurable, and are so well known in every part of the country, that it is not surprising that they should be employed by any unprincipled native in the furtherance of his criminal designs. Still, with due caution, no instance of drugging or poisoning, by any ordinary criminal, ought to be mistaken for an example of systematic Thuggee.

The individuals who may be expected to have the largest concern with poisons, and to be best acquainted with them, are the Druggists, the Bunneahs, (who, although dealing in other articles, have, in many instances, collections of drugs by them,) and the Native Doctors. It is only too evident that the native dealers part with their poisonous wares with the most reckless indifference. It is well known that, a few years since, many Thugs assumed the characters of shopkeepers, as a means of facilitating their iniquitious designs; and I have, myself, met with one case, at Chittagong, in which a Bunneah was under very strong suspicion of having been concerned in drugging two travellers. Still I have not been able to meet with any instance in the criminal records, in which a Drug-seller or a Bunneah was tried as a principal in any case of poisoning; nor can I discover any fact which would lead to the belief that the Byeds, Kobrajira or Hukeems of this Presidency afford the aid of their knowledge to criminal purposes. There is, in nearly every village throughout the country, a hag of low caste and evil repute, half dai half dain, suspected as a witch, professedly a midwife; equally ' ready, at all times, to practise as a doctoress, a sorceress, or a bawd; and carrying on a systematic trade in the procuration of abortion by the use of the most deadly poisons It is the belief of persons well acquainted with the habits of the

natives that these women are professional poisoners. Except, however, as regards the particular erime above mentioned, it is by no means certain that the suspicion rests upon valid grounds.*

^{*} It appeared, in a trial at Bareilly in 1854, that a female having a daughter 20 years of age, who was blind, and therefore remained unmarried, went to consult a woman, named Musst. Goolshun, who pretended to work miraculous cures by aid of familiar spirits. They made a large offering of valuable property to the sorceress who, however, dismissed them with their gifts, saving, this must not be done in presence of others; but, if you come alone with trinkets and cash, your business will be done; the spirits will put on your trinkets, and will dance and be glad, and your eyes will recover sight. The women collected Rupees 200 worth of trinkets, and Rupees 86 cash; and, going to the house of the sorceress, were never seen again alive. The shoe of one of them was found, next morning, on the bank of the nuddee, distant from the prisoner's house four or five hundred paces; and, upon search being made, their bodies were found in the nuddee; their mouths stuffed with cloth, as if they had been gagged before they were thrown into the water. Three days subsequently, information was given that the deceased persons had gone to the woman's house. The place was then searched, and a ghoongroo (toe ring.) which was recognised by the father of the murdered girl as belonging to one of his children, was found concealed among bhoosa in a corner; and, in a recess of the inside wall, was found a piece of white arsenic. Upon being apprehended, the woman gave up Rupees 17 and a pair of gold ear-rings which were identified as having been borrowed by the deceased. Upon a second search, money and jewels were found concealed; the latter, however, were not claimed. A cracked rupee found upon the prisoner was identified as having been lent to the deceased. The sorceress and her husband were found guilty of murder and sentenced to death by the Sessions Judge. This sentence, however, was annulled by the Superior Court.—Nizamut Adawlut Reports. N. W. P., 2nd January 1854, p. 3. It may be worthy of remark that, nearly at the very time at which this crime was perpetrated in a remote part of India, a similar fraud was being transacted in Devonshire. The following is from Notes and Queries for October 21, 1854:- "Some gipsies having encamped in the neighbourhood of Northland, one of the female members of the tribe ascertained from the wife of a farm labourer, that she had a daughter in the last stage of consumption. The gipsey represented that the child had been 'bewitched,' and that she could rule the spell which would effect a cure for two sovereigns. The mother cheerfully paid the money ;

Again, there is a class of thieves, notorious budmashes, who eke out their other atrocities by occasional recourse to drugging or poisoning. It appears to be very difficult to ascertain whether these men practise their villanies alone and quite independently of others, or whether they are detached members of the Thug Association. Mr. Henry Alexander, of the Civil Service, has shown me a collection of drugs (chiefly mineral and poisonous) which were taken, some years since, from a suspicious character of this kind at Beerbhoom. Among them were considerable quantities of white and yellow arsenic, and a slag of copper ore coated with verdigris.

In conversations which I have had with natives upon the subject, and especially with Baboo Joykissen Mookerjea, of Ooturparah, an enlightened native gentleman of rank, thoroughly conversant with all matters relating to his own people, I learn that they do not believe in any extensive confederacy among the Road Poisoners of Bengal, considering them to be merely budmashes, each of whom is willing to enter into any nefarious plan in association with others, or to practise any villainy independently and on his own account;—to aid in a dacoity, to serve as a lattial in a zemindaree quarrel, to assist in a strangling or some other act of secret butchery, or to lurk upon the road with poison ready for the first unwary traveller. In the following cases, we

but, the next day, the wily gipsey returned it, and said it was not sufficient, but 20l. more in gold would do it. The cottager's wife, in her native simplicity, went and borrowed 10l. from a neighbour; and, with another 10 sovereigns she had in the house saved from her husband's earnings, added the 20l. to the 2l. already in the gipsey's hands. As soon as the money was paid, the affrighted woman was bound over to secresy by the gipsey, who mumbled out a few disjointed texts of scripture and left, with the promise that the child would be cured on the following Friday, when an angel would appear and return the money. Since that time, however, it is needless to add, neither gipsey nor money has turned up."

gain some insight into the practices of men of this class, both in the North-West and in Bengal.

Petumberdoss, alias Dhowkul, was tried at Allyghur for the theft of Mohuna, a boy aged eight or nine years, for the purpose of selling him. The boy was seen following the prisoner and crying.* Upon his apprehension, the man confessed before the tehseeldar that he had stolen the child from his parents, this the boy also asserted. Before the judge, Petumberdoss declared that the boy accompanied him voluntarily, as he was ill-used by his step-mother. In his confessions before the magistrate and at the thannah he admitted having committed, at antecedent periods, several other atrocious crimes, for some of which he had undergone imprisonment; but, for others, including several cases of robbery by the administration of dhatoora, it would appear that he had not been apprehended or punished. It could not be proved, however, that he had actually committed those crimes. Sentence to five years' hard labour in irons.+

One Purkhit Mytee was tried, at Midnapore, in 1853 and sentenced to imprisonment for life in transportation, for having administered the seeds of the *dhatoora* to three travellers on their way from Calcutta to Cuttack. The prisoner accosted them and, saying that he was of their own caste, offered to share the expenses of the road. Putting up at a shop, the prisoner offered to cook rice for the party. After eating a portion, one of the party found some seeds sticking to his teeth; and, on taking them out, and examining them by the light, it was agreed by all three that they

^{*} There are reasons for believing that intoxicating drugs are employed by child-stealers in this Presidency. It will presently be seen that they are commonly had recourse to by these criminals in Bombay, and a case, noticed in Dr. Esdaile's "Mesmerism in India," broaches the question whether Animal Magnetism may not sometimes be resorted to for the purpose.

[†] Nizamut Adawlut Reports, N. W. P., 7th January 1853, p. 35.

were the seeds of the dhatoora plant. The prisoner, however, observed, that it was nothing but the seeds of the dhunia, and encouraged them to finish their meal, although he declined eating any himself, saying that warm rice disagreed with him. Two of the people became insensible immediately after; the other, suspecting that the rice was poisoned, had refrained from eating any, and gave the alarm. The intoxicated persons remained two days and a half before they recovered from the effects of the poison. On the prisoner's person was found a scrip or purse containing several pockets, in one of which were seventeen seeds of the dhatoora plant; and, in the remains of the food, the darogah discovered some seeds of the same plant. The prisoner had been in jail no less than four different times. viz., 1837, theft, one year; April 1839, one year in default of security; May 1844, accused of administering drugs, charge not proved, one year's imprisonment in default of security. February 1850, arrested on charge of poisoning travellers, not proved; in default of security, three years' imprisonment. February 1853, released; was again arrested, on a charge of administering drugs to travellers, but made his escape from custody of a burkundauze, 23rd March 1853.**

There appears to be, in the North-West Provinces, a class of miscreants who drug their victims by employing young persons—upon whose credulity or spirit of mischief, they find no difficulty in acting—as catspaws in effecting the crime. In 1852, one Goolma, a lad not more than 13 years of age, was tried at Bundelkund for administering some drug mixed up with *goor* to a child younger than himself, almost in the presence of its father. Upon his child becoming excited and intoxicated, the father went to Goolma and taxed him with the fact, which he acknowledged, saying that he

^{*} Nizamut Adawlut Reports, vol. vi. of 1853, p. 721.

afflicted with fits, and his expecting to get a goat from her. The prisoner confessed, both at the thannah and before the Deputy Magistrate, that he had given two and half seeds of dhatoora to the boy at the instigation of Putchowree, the boy's uncle, who wished to play a joke upon the mother. There was no proof of this Putchowree having instigated the act; but there appears to be strong reason for believing that the crime was devised by some wretch who had designs upon the child's ornaments, or who wished to revenge himself upon its parents.*

Two years later, a lad named Kalloo, 16 years of age, was tried at Moradabad for drugging a man. He confessed, at the thannah, and before the Magistrate, that one Ilahya had given him some dhatoora, and had desired him to administer it to the man, as it would make him intoxicated, and the sight would be amusing—a promise of one or two annas appears to have sealed the contract. The prisoner asked the man to dine with him, and mixed the powder in some sugar which was eaten, and rendered the victim insensible. The robbery, however, was prevented; Kalloo was sentenced to four years' imprisonment.†

In the following month Nujeeb, a lad about 15 years old, small and boyish in appearance, was tried for administering poison mixed with food, and stealing property while the owner was in a state of insensibility. At the same time, the above-mentioned Ilahya was charged with instigating the lad to administer the poison with intent to rob. It appeared doubtful what poison was administered. Nujeeb pleaded that the other prisoner called it *dhatoora*, but a portion of *dhall* sent to the Civil Assistant Surgeon of Moradabad, was

^{*} Nizamut Adawlut Reports, N. W. P., 14th April 1852, p. 304.

[†] Ibid, 26th October 1854, p. 618.

found to contain particles of Meetha teelia (or Aconitum Ferox). The dhall, however, was not duly identified as a portion of that partaken of, and the symptoms of intoxication and the insensibility produced were but transient. Ilahya was sentenced to five, and Nujeeb to three years' imprisonment.* The name of Ilahya will be alluded to presently in another case of hocusing—page 115.

In 1854 a party of thieves, at Monghyr, entered the house of a Mohajun, living in the main bazar, and plundered the place: having first, through the instrumentality of Etwaree, his servant, a lad of 15 or 16, nephew to one of the burglars, drugged the man and his wife with some strong narcotic, (a yellow powder), in their usual evening draught of boiled milk.†

It has been very clearly shown by Mr. Dampier, in his Police Reports, that there is a class of robbers whose occupation lies in Administering Drugs to Women of the Town, and then robbing them of all their ornaments, brass-plates, &c., in which these women generally invest all they gain. The parties, usually two or three combined together, find out what prostitute possesses a good portion of ornaments, and then visit her, one as master, and the other as his servant. After some acquaintance, a drinking bout is proposed, to which these women never object: as she becomes intoxicated, the drug is administered with the liquor; and, whilst she is insensible, all her property is carried off. Sometimes, the parties make sure of their victims by strangling, or otherwise making away with them, whilst in a state of insensibility. Mr. Dampier seems to consider that this practice has only become prevalent of late years. ‡

^{*} Nizamut Adawlut Reports, N. W. P., 27th November 1854, p. 766.

[†] Nizamut Adawlut Reports of 1854, p. 730.

[†] Police Reports, L. P., 1849, p. 71, and 1851, p. 59.

This crime appears to be nearly as common in the North-West, as in the Lower Provinces.

A few illustrative examples will suffice.

One Ramessur Bholah was tried at Beerbhoom in 1855, for theft. The prosecutrix, a prostitute, stated that, on the night of the occurrence, she was seated at the door of her house, when the prisoner came and asked for water. After some conversation, he offered her some sweetmeats, and proposed to remain with her during the night, promising to give her eight annas. She ate some of the sweetmeats, as did also the prisoner. About twenty-five minutes afterwards, she felt giddy, and became senseless. Next day, at about 3 P. M., she recovered; and, at the thannah, she saw the prisoner, and also the ornaments which had been taken from her person during her insensibility. A yellow powder was found upon the prisoner; this and the remains of the sweetmeats, on being examined by the medical officer and the Chemical Examiner, were declared [?] not to contain any deleterious or poisonous ingredients [detectible on Chemical Analysis?] The Sessions Judge convicted the man of theft, but threw out the charge of administering some deleterious or intoxicating drug, believing that the woman was merely intoxicated by liquor. The prisoner was sentenced to imprisonment for one year, with labour and irons.* It would appear, from the police reports, that cases of this simple description are of frequent occurrence in Calcutta.

Again, in 1852, a prostitute at Meerut declared, that one Joogul came to her house at night, conducted by a second prisoner, Pertab. The former agreed to pass the night with her. He paid her eight annas in advance and, going away, returned presently with sweetmeats, part of which he gave her. Shortly after eating them, she began to vomit, and being

^{*} Nizamut Adawlut Reports, vol. v. of 1855, p. 367.

alarmed, went to the door, where she found a chowkeedar, to whom she imparted her impression that Joogul had given her something to cause intoxication. She closed the door, and afterwards became insensible, remaining so for two days. The chowkeedar kept watch on the outside; and, in the morning, sent for the police, when Joogul was seized in the house, and Pearee was found insensible. The man was searched, and on him were found several suspicious articles, including a rope, supposed to be used for strangling, and a box containing pills of different colours. Joogul attempted to throw the criminality upon Pertab, who related that Joogul mixed the ground seeds of dhatoora with the sweetmeats. It was proved that Joogul was a notoriously bad character: and, at the Sessions Court, both prisoners made a full confession of their having agreed that Joogul, being a stranger, should give the woman sweetmeats, in which dhatoora had been mixed, in order that they might rob the house while she was insensible. The Superior Court held that the charge was fully proved against the prisoner Joogul, and that the charge of "aiding and abetting" in the offence, was clearly established against the prisoner Pertab. In consideration of the facts that consequences endangering life did not ensue from the dhatoora administered, and that the intention appeared to have been to cause insensibility, and not death, the Court mitigated the penalty prescribed by law, under the authority conveyed in Clause 4, Section VIII., Regulation XVII. of 1817, and sentenced both the prisoners to seven years' imprisonment, with labour in irons.*

A prostitute of Meerut, named Uchpal, was employed with some other persons to attend, as dancers, at the wedding of a palkee bearer's nephew; before setting out, she employed one

^{*} Nizamut Adawlut Reports, N. W. P., for 17th April 1852, p. 328.

Khoda Buksh, as cook, at one rupee. On reaching their destination, they got ottah and dhall from the bride's family, which food the cook brought and prepared. The woman and six other persons ate of this separately. It tasted bitter, and the prisoner said some neem berries had fallen into it, so the woman continued to eat. Afterwards, her head grew giddy, and he then brought her a hooka: she then became insensible; whilst she was in that state, the cook took her gold ear-rings from her, and other property from the others, and went away. She recovered her senses in ten or eleven hours. The man was apprehended by the Thuggee Superintendent, before whom he admitted that he had given dhatoora. Sentence, fourteen years' imprisonment in banishment.*

In many cases, however, the criminals are not satisfied with "hocussing" their victims, but murder them, while in a state of insensibility. Thus,—

Two instances occurred near Calcutta, in 1849. In one, the culprits drugged a prostitute with whom they were drinking, and then completed their work by strangling her. The result was that three persons were sentenced to imprisonment in transportation for life. In the other case, the woman was first intoxicated and then robbed of her ornaments and stabbed. She died in consequence.†

In the following year, the case of a woman of this class was reported; she was found in her house, in the town of Bancoorah, strangled and denuded of all her ornaments. There was no appearance of any struggle, and not the

^{*} Nizamut Adawlut Reports, 8th July 1853, p. 834. See also a case in which one Juggobundoo Bose was convicted of having drugged two prostitutes of Dacca in their own house, and of then robbing them of property valued at upwards of two hundred rupees.—Nizamut Adawlut Reports, vol. iv. of 1854, p. 304.

[†] Police Report, L. P. for 1850, p. 62.

slightest noise was heard by the neighbours, who lived within four feet of her dwelling. The Superintendent of Police offered a reward for the discovery of the murderer, but without success.* A rather mysterious case of this kind occurred at Benares in 1854. Two men, Gunput and Boochnoo, were tried for the wilful murder of two women of indifferent character, and for robbing them of their ornaments and clothes. The women, mother and daughter, who were described as next thing to common prostitutes, were found, one morning, lying dead in their house. The Civil Surgeon, on examining their bodies, could scarcely form an opinion as to the manner in which they met with their deaths; for, though there were some suspicious-looking marks on the neck of one of the women, still these marks did not extend to the cellular tissue below. From the general placidity of the features exhibited by both bodies, and other circumstances, he came to the conclusion that "Burking" must have been practised on these females. "He was led to this conclusion from the livid placidity shown by the features of the deceased." He was of opinion that they could not possibly have died of intoxication; that their stomachs contained, in the one some digested food, smelling of bazaar liquor; in the other some dhall and meat. The evidence regarding the parties to the crime involved some uncertainties. There could be no doubt, however, that at least two men were in the house on the night of the murder, one of whom was the elder woman's nephew. The clothes which were stolen were found in his possession; the women's silver ornaments were found in the house of the other man. It was proved that these two men purchased liquor in the early part of the night on which the women were murdered. It appears that the prisoners made confessions, both to the police and

^{*} Nizamut Adawlut Reports for 1851, p. 59.

before the Deputy Magistrate, in considerable detail, relating with minuteness the incidents accompanying the violent death of the two females by "smothering" after first intoxicating them. The printed report does not contain the full particulars of these confessions; it is mentioned, however, that, at the thannah, one of the prisoners asserted, that the women had been throttled by pressing a stick across their throats (a very common practice). This statement he retracted in the magistrate's court, where both prisoners asserted that they had suffocated the women by compression with the hand. With reference, apparently, to the first mode of destruction alluded to, the medical officer decided that the account given by the prisoners must be false; as, had death been inflicted in this manner, (by throttling with a stick) the features would have been distorted, [?] and marks would have been left on the cellular tissue. The Judge of the Superior Court held that, on the other hand, the post mortem appearances seemed to be quite consistent with the fact of homicidal suffocation by compression with the hand. Dr. Taylor observes, respecting the evidences of death by suffocation, that there rarely exist appearances indicative of violence, or other than natural extinction of life, unless circumstances arouse suspicion, and direct the inquiry to such a result. Unless such a result be clearly referrible to the accident, it would not, he remarks, be attempted on healthy adult persons, unless they were in a state of intoxication, and thereby rendered defenceless. Most persons, unless thus rendered powerless, would be able to offer so much resistance as would leave on their bodies indubitable evidence of murderous violence. The incidents of the present case, it was held, exhibit a close correspondence to the above statement. The women must have been able to offer a vigorous resistance, if they had not been overpowered by spirits. Indeed one of the prisoners particularly mentioned

that "they died easy, being senseless from intoxication."

Death was awarded.*

Thuggee of Travellers by Poison.—A thorough and successful investigation of this atrocity would certainly prove an undertaking of national importance in India. At present, we have only to deal with scattered facts. These, however, sufficiently demonstrate:—

- 1. That the crime (which appears to have become more prevalent since the check given to Thuggee by Strangulation) is common throughout the three Presidencies of India.
- 2. That it is pursued systematically, as a trade, not being merely the device of a stray criminal here and there; and that, in great probability, those who practise it, are Thugs in the commonly received acceptation of that term.

The Table at the head of this chapter will show how generally this crime is practised in the Lower Provinces. It must not, however, be supposed that certain instances of its commission do not occur in the districts against which numbers are not found. In Chittagong, for example, the crime is, within my own knowledge, by no means very uncommon; although, hitherto, cases may not have been fully detected and brought to trial. It appears, from the reports of Captain C. Hervey, the Assistant General Superintendent for the suppression of Dacoity, that, in Bombay, poisoning is a regular profession, the victims being generally children. In an interesting account of dhatoora poisoning published by Dr. Giraud in the Transactions of the Medical and Physical Society of Bombay for 1849, it is remarked that "viewing the most prevalent motive to dhatoora poisoning, it would seem as if some regularly organized band of thieves had, within the previous year, invaded that island." From 1837 and 1838,

^{*} Nizamut Adawlut Reports, N. W. P., 4th December 1854, p. 797.

when a few cases of poisoning, supposed to be from dhatoora, were noticed by Drs. Bell and McLellan in the several reports of the Native General Hospital,—up to 1848, only from 6 to 10 such cases had been annually recorded; but, during 1849, fifty-one cases had come under hospital treatment! Dr. Giraud also alludes to the practice of drugging children with sweetmeats, containing the powdered seeds, that their ornaments may be more easily removed.

Colonel Sleeman wrote, in 1844, that the impunity with which this crime is everywhere perpetrated, and its consequent increase in every part of India, were among the greatest evils with which the country was, at that time, afflicted. These poisoners were then as numerous over the Bombay and Madras Presidencies as over that of Bengal. There was no road free from them; and he believed that, throughout India, there must be many hundreds who gained their subsistence by that trade alone.*

In the investigation of the sources of this crime, it is of the first importance to bear in mind that old writers describe the use of Poison as an essential part of the Thug system. "Deleterious drugs," says Forbes, "are stated to be used only by novices in the business, the more experienced Thugs trusting rather to the certain effects of the knife or cord than to the doubtful operation of poison." Still, it is conceivable that, observing the attention of the police employed in their suppression to be mainly directed to the practice of Strangling, the Thugs should have, in a great measure, abandoned the use of the roomal, and have devoted all their craft to the easier and safer practice of Drugging.

At the same time, it does not appear that any absolutely demonstrative evidence has been adduced identifying either

^{*} Rambles and Recollections of an Indian Official, vol. i., p. 114.

the Meetawallas of Bengal or the Up-country Dhatooreeas with the true Thugs.

Mr. Dampier, whose judgment in the matter is unimpeachable, alludes, in his Reports for the 1st and 2nd half years of 1840, to circumstances which, at about that time, brought to light the existence of a system of administering poisonous drugs to travellers which, "since the suppression of Thuggee had increased along the lines of general communication and in other parts of the country." He, however, appears to have considered that this practice was not carried on by Thugs. Five years later, we find this practice systematically practised by the Meetawallas (the designation given by Mr. Dampier to this class of robbers.) In 1854 two persons were reported as having been drugged to death in Behar by a party of professional poisoners on the great road. No traces could be found of the offenders, and the survivors of the party drugged could not give a clear description of them. The Superintendent remarked upon the extraordinary fact that, although travellers were fully warned of the acts of these men, and notices to that effect were put up at the Serais and Chuttees, they constantly fell victims to the robbers*. Again, in his report of the following year, upon the state of crime in the district of Shahabad-(a portion of the country fearfully notorious in the history of the old Thuggee system; and, as the table will show, still the most rife of all the districts in Bengal in cases of Thuggee by poison)-Mr. Dampier mentions that all the thefts by administering drugs occurred to travellers passing along the road who, in spite of the continued precautions put up in all the Chuttees and given to them by the Deputy Magistrates and Police Officers on the Trunk Road to prevent strangers from joining their parties,† continued to drink and

^{*} Report for 1845, p. 13.

[†] Similar warnings to Sepoys going, on leave, to their homes have appeared, from time to time, in General Orders.

receive tobacco and dry food from the hands of such persons, thus affording them opportunities of acquiring their confidence and administering drugs at a place favorable for the escape of the poisoners, who were constantly on the watch for their victims. In two of the cases which occurred that year, death ensued; in two, no trace of the meetawallas could be discovered; and, in the last, one party was convicted. He considered that the reason for more offences of this kind occurring in the Shahabad and the Behar districts, is that the victims have generally come near the end of their journey, and would separate from the poisoners if they delayed administering the poison; and also that there are greater opportunities of escape through bye-roads into other jurisdictions, whilst the person drugged is in a state of insensibility. Again, in 1849, we find Mr. Dampier reporting the continued prevalence of this crime on the Grand Trunk and other roads; and, while annexing a statement showing the number of persons arrested, punished, and acquitted upon charges of the kind,* remarking that, unfortunately, the chances of detection are but few. The poison, generally the seeds of the dhatoora, is to be found on the road side; and, reduced to powder, is nearly tasteless, when mixed with tobacco or food; while, if the victims do recover, they are for so long a time in a state of stupefaction, and unable to give any account of the transaction, that there is every opportunity afforded for the escape of the criminals. In commenting upon his statement showing the charges of poisoning which came before the Assistant General Superintendent

^{*} The statements of cases of professional poisoners before the Assistant Superintendent for the suppression of Thuggee for the Patua Division of this and the following year, show that 37 persons were apprehended during that period, upon charges of this kind—8 were found guilty and sentenced, 4 were noted as having been transferred to other jurisdictions, or as under trial, and the remainder were acquitted.

for the suppression of Thuggee at Patna in 1850, Mr. Dampier again insists that this document does not give the slightest idea of the prevalence of the crime, particularly along the Grand Trunk Road, where the want of caution on the part of travellers, and the easy avoidance of detection on that of the criminals, render its occurrence frequent; added to which, from Bukhtiarnugger or Munglepore, in Bancoorah, to Sasseram in Shahabad, there was then not a single officer posted along that line of road, and the police arrangements throughout for the protection of travellers were very deficient.

Mr. Dampier considered that a combination existed along the lines of road frequented by travellers, pilgrims, &c., for robbery by this atrocious method; and that the dawk bearers, petty muddees at the halting places, bhuteearas, and common thieves, were in it.*

Colonel Sleeman describes the professional road poisoners, or *Dhatooreeas*, as commonly employing the *dhatoora* which they sometimes give in the hookah to be smoked, and at others in food. Their intention, he considers, is almost always to destroy life, as "dead men tell no tales;" but the poisoned people sometimes recover, and lead to the detection of the poisoners. The cases in which they recovered were rare (when Colonel Sleeman wrote); and, of those who recovered and traced the criminals, very few would ever undertake to prosecute them through the Magistrates, and the sessions courts. These people put on all manner of disguises to suit their purpose: and, as they prey chiefly upon the poorer sort of travellers, they require to destroy the greater number of lives to make up their incomes.†

^{*} Beaufort's Digest of the Criminal Law-para. 3117.

[†] This author details the case of a poor old Fukeer (mendicant,) and his young son, who were beset, drugged, and plundered by a family of these miscreants for the sake of a blanket—their only property. The child died, the father recovered after three days' intoxication and stupor.

A party of two or three poisoners have very often succeeded in destroying another of eight or ten travellers with whom they have journeyed for some days, by pretending to give them a feast on the celebration of the anniversary of some family event. Sometimes an old woman or man will manage the thing alone, by gaining the confidence of travellers, and getting near the cooking pots while they go aside; or when employed to bring the flour for the meal from the bazaar. The poison is put into the flour as opportunity offers. People of all castes and callings take to this trade, some casually, others for life, and others derive it from their parents or teachers; and the habit of cooking, eating, and sleeping on the side of the road, and the custom of smoking with strangers of seemingly the same caste, greatly facilitate their designs. The small parties are, this authority believes, unconnected with each other, and two parties never unite in the same expedition. The members of one party may be sometimes convicted and punished, but their detection is accidental; for the system, he considers, which has enabled as to put down the Thug associations cannot be applied, with any fair prospect of success, to the suppression of these pests of society, seeing that the Thugs went on their adventures in large gangs; and two or more gangs were commonly united in the course of an expedition in the perpetration of many murders. Every man shared in the booty according to the rank he held in the gang, or the part he took in the murders; and the rank of every man, and the part he took generally, or in any particular murder, were for the most part well known to all. From these gangs when arrested, the authorities elicited the first clue to the evidence required for their conviction. This thorough unravelment of the whole organization by the confession of a few parties implicated, or by what is called the approver system, is not to be expected when, as in the case of the poisoners, the gangs are small and wholly distinct from each other.

The following are abstracts of the principal cases of Drugging on the Highway, which have appeared in the Reports of the N. W. and Lower Provinces since the beginning of 1852. It will be seen that the always available poison,—the Dhatoora Seeds, was believed to have been used in all the cases of this class—and that, in two instances only, was it considered probable that other poisons (Nux Vomica and Gunjah) were added to the seeds.

It is to be borne in mind that, although it has evidently become much more frequent of late years than it was during the unrestrained prevalence of Thuggee by Strangulation, this crime is by no means of recent origin. A very marked instance, which occurred in 1809, is reported by Macnaghten* and will be cited in full under the head of Poisoning by Dhatoora (p. 129.) It appears, however, that the first law instituted for controlling this crime, was promulgated so late as the year 1817.

In 1852 two men—Bhowany† and Bhola, his nephew, were tried at Meerut, on the accusation of a man who deposed that, when on his way to Lucknow, he met Bhowany at Umballah, who said he would travel in company with him. On their way, Bhowany took him

^{*} Vol. i., p. 216. In 1812 one Joolsee Tewaree drugged four fakeers in Shahabad. They all became insensible and one died, *Ibid* p. 209. In 1820 Kulwa, disguised as a Chuprassie, joined two brothers travelling by Bandah. He offered them some sweetmeat called Peeran (a kind of consecrated food); each received about two pice weight. The thief forbade them to spit any out. The stuff had an unpleasant taste. In a short time both fell down senseless. Joolsee made off with their effects. One of the brothers speedily died; the other recovered his senses on the following day. It appeared, at the trial, that the accused was an infamous character, who had travelled about plundering by administering poisonous drugs to all whom he could entice into taking them. *Ibid*, vol. ii., p. 51.

[†] Bhowany was a very favorite name among the organized Thugs.—See Index to names in Col. Sleeman's "Thug Gangs of Upper and Central India." See also the case of one Bhowaneedeen, convicted of an atrocity of the kind, at p. 73 of this manual.

to a bunneah's shop and purchased some ottah and dhall; after cooking it, deponent went, at Bhowany's request, for some water; returning, he ate the food and became insensible. Bhola, who had lately joined them, was present. Bhowany placed the man within a hut, they then robbed him, and pretended to the police that their party consisted only of two. The police found the prosecutor insensible and concealed in a corner of the hut. A bag of dhatoora seed was found on Bhowany, some of this had been ground to powder, also some Churus—concrete juice of the Cannabis Indica. The prisoners mutually accused each other.—Sentence, fourteen years' imprisonment.*

The following case singularly closely resembles, in its main features, one already cited, (at p. 100.) The prisoners' names were the same, and both cases occurred near Meerut, but they were quite distinct.

A prostitute, named Durbarun, who gained her livelihood by singing, was proceeding from Meerut to Allyghur accompanied by her mother and six other persons. They were met on the way by one Khodabuxsh, who appears to have had some acquaintance with the party at Meerut. He said that he was in want of service, and was engaged by the woman as cook to the party. On arriving at Coel, they put up at a Serai, and the prisoner was given food to cook. This was eaten at about nine in the evening. At midnight, the chowkeedar of the Serai observed some of the party rolling about the ground; he went up, and found them all more or less affected by some intoxicating drug. The prisoner lay among them feigning sleep, and some gold and silver ornaments belonging to the prostitute were found on his person. Four of the men who were most intoxicated were sent to the Dispensary; and, by judicious treatment, recovered in three days. The three women, and the rest of the party, who had eaten less, recovered after having been given some medicine to make them vomit. The prisoner confessed before the magistrate that he procured the dhatoora from a neighbouring garden, which he pointed out, on pretence of requiring it for a sick bullock. The Civil Surgeon deposed that the four meerasees were brought to him in a state of muttering delirium, and he detailed the symptoms as peculiarly the effects of an overdose of dhatoora.

^{*} Nizamut Adawlut Reports, N. W. P., June 19th 1852, p. 568.

stated that this drug is poisonous, or merely intoxicating, in proportion to the quantity taken, in relation to the strength and constitution of the patient; and that, as the patients brought to him were all strong men, he thinks it probable that the effects would have gone off, without proving fatal, even if prompt measures had not been taken. There was reason to believe that this was not the first instance in which the prisoner had been guilty of the same offence.—Imprisonment for fourteen years.*

Two travellers were putting up at the new Serai at Mirzapore, when one Ramtuhul also came there and made acquaintance with them. One of the men, having been preparing his food, asked Rumtuhul, who was close by, to look after it while he went to fetch water at the well.

During his short absence the other took the opportunity of putting some dhatoora into the dhall, which rendered one of the travellers insensible

I learn that a band of Road Poisoners was detected at Meerut about 1845. The Chiefs were a Bheestie and the Kansamah of the Station Mess.

^{*} Nizamut Adawlut Reports, N. W. P., November 26th 1852, p. 1389. The practice of hiring themselves out as Cooks is an old and rather frequent one among the Dhatooreeas. A case, which occurred in the beginning of this century, will be found in Macnaghten's Reports of the Nizamut Adawlut, vol. i., p. 368. A woman had been employed by the complainant as a household servant. Her first act appears to have been to prepare the evening meal for the family. Of this her master partook. He was alarmed, on rising from his repast, to observe every individual in his house in a state of stupefaction; and, at the same time, became aware, from the dryness of his mouth and a giddiness with which he was seized, that he had swallowed some deleterious substance. Although scarcely conscious of what he did, he found means to call to his assistance two persons who resided near, by whose aid the proper remedies were administered to the whole family; -before this, however, the prisoner escaped with a pair of silver foot-ornaments and a necklace. In another instance, this prisoner was proved to have prepared cakes for four sepoys who, shortly after eating, became so violently intoxicated, as to be utterly unconscious of what they said or did. Three other persons also partook of the same food with similar results. The prisoner, taking advantage of the confusion thus created, decamped with several articles. She alleged, in her defence, that the state of her health made a constant use of the dhatoora seeds necessary; she, consequently, carried a quantity about her, and that it was probable some might have fallen into the food without her knowledge.

a few hours afterwards, the other became so during the night. The prisoner confessed, at the kotwalee and in the foujdaree, that he had put some dhatoora in the dhall, and made no defence on trial. Imprisoment for life in transportation.*

In the previous January, a man and his son, while journeying towards the Punjab, halted at a mosque in Paneeput. One Ullayar Khan fell into conversation with them: and at last, offered them something to eat. The father went into the city to purchase food. On his return, he found bread moistened with sherbut, which his son told him had been brought by the person who promised them food. They partook of this, and, shortly afterwards, began to feel stupefied, in which state the prisoner came to them, and removed them to another mosque, where they became totally insensible. On recovery of their senses, after three or four days, they found that they had been robbed of their money. The native doctor deposed that the men were under his treatment for three or four days, suffering from the effects of violent stupefaction, induced, as he supposed from the symptoms, by dhatoora. The prisoner was a known bad character. Sentence, fourteen years' imprisonment.†

In April 1853 the thannadar of Bohsha (Jounpoor) sent in two men, Sheogholam and Sheochurn, with a small quantity of dhatoora tied up in a piece of cloth, together with other articles belonging to them. He reported that, in the preceding months of October and December, two cases of administering poisonous drugs or dhatoora to three persons named had occurred at Mouzah Lukneepoor, and in another spot; both places being near the high road leading to Allahabad. A strict search had been instituted, but without success, until the two prisoners were seized. Their conversation and behaviour exciting the suspicion of a police jemadar; he searched a bundle, their joint property, and found in it a patlee of dhatoora. One of the prisoners escaped, but was re-captured. They both confessed that they had brought the dhatoora with them to mix either in the water or food prepared by travellers, whenever a fitting opportunity offered. This, they said, was their business.

^{*} Nizamut Adawlut Reports, N. W. P., March 23rd 1854, p. 306. † *Ibid*, January 6th 1854, p. 592.

They denied being implicated in the former cases alluded to above, but their appearance corresponded with the description given by the sufferers of the persons who had given them intoxicating drugs in their food. The dhatoora was sent to the Civil Surgeon for examination. One Koosial stated that he was a grass-cut in the service of an officer, and was returning to his home in zillah Azimghur, having with him Rs. 29 in cash, &c. The prisoners and another man, who called himself a sepoy, joined him at Futtehpoor. After travelling together some days, one of the prisoners bought some ottah. They prepared bread, some of which was given to him: after eating it, he became insensible, when the three men plundered him and made off. A woman recollected to have seen the prisoners and the grass-cutter together. The judge of the Superior Court considered that there were the strongest grounds for believing that the prisoners were poisoners by profession, and belonged to a class who infest the high roads for the purpose of entrapping unwary travellers. He observed, from a proceeding from the Magistrate of Azimgurh appended to the record, and from police reports of the Jounpoor district, also filed in the case, that no less than four cases of poisoning with theft took place in the high roads, in the same vicinity, within the period of three months previous to the capture of the prisoners, in which eight persons were drugged and robbed; and which, in one of the instances, ended fatally. He, therefore, confirmed the sentence of imprisonment for life in transportation passed on the prisoners.*

In January of the same year Kureemoollah, bhutteearah, was tried on the following charge. Three men, who were in the habit of coming to the cattle mart of Chundowsee with cattle for sale, deposed that they were there on a certain date. Early in the morning, they left their quarters in the Serai which belonged to the defendant and went to the market. On their return, the prisoner said to them, some calamity will occur to-night; give me what money you have about you, and I will lock it up. They replied, what! is not this place under the British rule? and refused to give up the money. They then called for dinner. At this time a violent storm arose, which uprooted large trees and did a great deal of damage throughout the country. During the storm, the

^{*} Nizamut Adawlut Reports, N. W. P., July 25th 1853, p. 910.

prisoner called them to dinner. They commenced eating dhall and chuppattees which he had cooked. One of them observed that the dhall was very bitter. The prisoner insisted twice that he had merely put too much salt into it. Immediately after eating the dhall, the three men became insensible in the prisoner's house. The young son of one of them took a mouthful of the dhall which caused him to vomit-and he ate no more. Seeing his father and the others insensible, he ran out, although the prisoner tried to prevent him, and called a chowkeedar posted hard by. The police found the three men insensible, but the prisoner was well and in his senses: they went off to the thannah, and, on their return, found the prisoner feigning insensibility. He and the others were carried to the thannah on charpoys. Shoobratee Muqbool and Hussun Jurrahs were called to prescribe for all four. They did so, and made the three travellers swallow some peera and milk, forcing it down their throats, and tickled their throats with a feather, which caused them to vomit. The prisoner drank the peera and milk himself, whence it was evident that he was sensible, and the feather was not put down his throat. He was quite well the next morning, whereas the three men did not recover until the third day. The Civil Surgeon detected dhatoora in the dhall, and the prisoner admitted its presence in the food. The prisoner was sentenced to seven years' imprisonment.*

It is worthy of remark that the prisoner stated in his defence that one Ilahya (Illaheea) came to his house several times during the storm; and that, perhaps, he threw something into it. At the trial he recalled his hints against Ilahya, and endeavoured to criminate others. This was probably the Ilahya who was convicted at that place two years later as a systematic poisoner—See page 98.

In the following case, it would appear that the robber administered the *dhatoora* so freely to his victim as to cause death. It is not certain, however, that other unfair means were not resorted to, while the unfortunate man lay insensible at the poisoner's mercy.

^{*} Nizamut Adawlut Reports, N. W. P., January 12th 1853, p. 50.

When on trial at Bundelkund in 1853, one Kashee confessed that he gave a portion of chutnee in which dhatoora seeds had been inserted, to five persons, but pleaded not guilty to the murder of Bunsroop, one of the five. It appeared from the united testimony of the four survivors that they, with the deceased, formed a travelling party, and were joined by the prisoner. On cooking their dinner, the prisoner, to improve its flavour, offered them some chutnee, which they accepted and mixed with their dish-of this all the travellers partook, and became intoxicated and temporarily frantic. While in this state, two of them were robbed. After the effects of the intoxication had gone off, Bunsroop was missing, and his body was discovered on the third day in a neighbouring nullah. The prisoner was seen in company with the travellers. Evidence of their intoxicated condition was adduced—the stolen property was found in the possession of the prisoner, and with it a large quantity of chutnee, which was also produced in Court. The poisonous and deleterious nature of the chutnee was proved by the evidence of Dr. Ransford and two native druggists, who deposed that the seeds contained therein were those of the dhatoora. The druggists asserted that the administration of fifteen or twenty seeds would be fatal to life. Dr. Ransford alleged that the death of Bunsroop was to be ascribed to the administration of dhatoora, or stramonium, as the indications of congestion in the lungs, head, and brain were such as would be caused by that poison. The prisoner was sentenced to death.*

In the following cases, there appeared to be reason for believing that *mixed poisons* were administered by the robbers to their victims.

Thana and Kishnoo, of Moradabad (a district singularly rife in cases of this description), were tried in 1852, upon the accusation of one Dya, who deposed that he and his brother Munsookh went to Kant to sell wheat. While disposing of the grain at a disadvantage, Thana came to them, telling them that, if they would accompany him to his village, he would take their wheat off their hands. They agreed; while on the way, they are some parched wheat. Thana said that he would give them sugar to eat with it. He took some out of a bundle con-

^{*} Nizamut Adawlut Reports, N. W. P., February 22nd 1853, p. 262.

taining about one and a half seer, and gave them each about six chittacks of it. They ate the whole of the sugar with their wheat! and had not got 200 yards when they became insensible. Dya's belly began to burn, and his throat became dry; he did not completely recover his senses until the second morning, when he had vomited. Munsookh died the next day at twelve o'clock. Their property had disappeared. Some of the stolen articles were subsequently found in the house of Kishnoo, Thana's father; Thana had disappeared, but was afterwards seized. A bundle of sugar was found in the house. Thana, who was a notorious budmash, confessed before the thannadar that he gave the men sugar and then plundered them. Many witnesses deposed that both prisoners, father and son, were bad characters; "they administered poison to travellers and then plundered them;" but, the elder being a chowkeedar, no one interfered with them. Thana withdrew his confession in the Sessions Court, and said that the police had extorted it by beating him with a kora. Dr. Stiven deposed that the sugar sent to him for examination in this case, contained the powder of the seeds of dhatoora and nux vomica, and that the statement given by Dya was highly probable, viz., that he and his brother had been poisoned by eating each about twelve ounces of such sugar. The younger prisoner was sentenced to imprisonment in banishment for life. elder was acquitted.*

One Khoman was tried, at Cawnpore in 1854, upon three charges of poisoning and robbery. In the first of these cases, it was shown that a conversation was overheard by one Nidha between the prisoner and his mother, in which the latter accused her son of spending the money which he obtained by robbery and violence in debauchery. Nidha, having heard of the death of three hackery men by poison, made inquiries as to the description of the person who had hired the hackeries, this agreeing with that of the prisoner, he gave information to the police. On being apprehended, the prisoner admitted his concernment in the crime, but implicated others as accomplices. A young intelligent boy, named Chowdhree, was with the murdered men. He stated that the deceased's hackeries were hired by the prisoner, who said that he wished

^{*} Nizamut Adawlut Reports, N. W. P., August 21st 1852, p. 853.

to have some sugar conveyed towards the Jumna. Setting out, they halted, at night-fall, at a small village, and the prisoner prepared a sherbut by pounding up bhang (Indian hemp), &c., and attah, which he gave to the three men and also to the witness; the latter took a very small quantity and escaped, but the other three fell into a state of insensibility, from which they never awoke. The magistrate, after investigating other charges against the prisoner, arrived at the conclusion that the "prisoner was a professional murderer and robber by administering poison." He was identified, while in jail, by the victims of two other cases who, at once, pointed him out from a crowd of the prisoners, and whose previous description of the person who had robbed them exactly coincided with that of the prisoner. The plan resorted to in all the cases being, as in this, to hire the hackeries of men who, having just completed a contract, would probably have the profits derived from it on their persons. Proof was absent as to the nature of the poison used. The bodies of the deceased men were in too advanced a stage of decomposition to admit of examination. The contents of a bottle sent to the Chemical Examiner were not ascertained by analysis to be poisoned, "though the known difficulty in detecting vegetable poisons is acknowledged," and the presence of dhatoora (the most usual poison in such cases) is not readily detectible, even when the examination of the contents of the stomach is immediate. Hemp (bhang) is, however, itself a strong poison, and the administration of an inordinate dose, intentionally, in the prosecution of a felonious purpose, would be quite sufficient to justify a conviction for murder. In the present case, the mixture composed by the prisoner was, by his own statement, shown to have contained three parts of hemp, which, in addition to the powder or the infusion [?] of dhatoora would abundantly account for the destruction of human life which followed." After a careful trial of each of the three cases, all of which were clearly proved, the prisoner was sentenced to death.*

^{*} Nizamut Adawlut Reports, N. W. P., October 3rd 1854, p. 479. A very iniquitous case, involving the murder of a hackery driver by a systematic road poisoner, was tried at Benares in July and October 1853. It appeared that a very young country-born girl, named Victoria Adelaide Hassey, eloped

Under the head of Arsenical Poisoning, the details of a case have been given (p. 73) in which a road poisoner deliberately administered a fatal dose of Arsenious Acid to his victims. It would appear that this crime is of by no means very rare occurrence in the North-West Provinces. In his observations upon a case of Arsenical poisoning tried at Bareilly, Mr. G. D. Raikes, the additional sessions judge, mentioned that, in several cases of poisoning which had come to his knowledge in another district, the poison had been disguised as a sweetmeat of tempting quality; and being offered as a refreshment to a way-faring man on the road, had frequently caused death to the unsuspicious partaker of it.*

from her mother's house in company with one Henry Halpin, Chumroo, and a lad named Kandhaee. On the arrival of the party, by boat, at Bhagulpore, a quarrel arose between the girl and Halpin, who deposed that she herself mixed dhatoora and cooked the food with which he was drugged as well as the boatmen, [?] so that they did not recover their senses for two or three days. The girl then decamped with the native Chumroo, and came to Monghyr, accompanied by one Shubrattee. Here they engaged a hackery, whose driver's name was said to be Sookhun. On their way to Dinapore, they are alleged to have drugged this driver, and to have made away with him, and to have sold the hackery and bullocks at Arrah (Shahabad.) Hence, they hired another hackery and bullocks, driven by one Jugroop. On nearing Sydpore, Chumroo and Shubrattee enticed the unfortunate driver into a nullah-desiring some boys whom they had met to drive the hackery on with the woman. The body of the driver was found in this nullah with three frightful hacks upon the head and neck. The murderers overtook the hackery at midnight, bringing with them the ring and other property of their victim. They were apprehended at Benares endeavouring to dispose of the cart and bullocks. Chumroo afterwards made his escape. The wretched girl said in her defence that the men had threatened to kill her, that they gave her poison, and that, . since she left her mother's house, she had not been in her proper senses. It was, however, clearly proved that she claimed the hackery and bullocks as her own, and offered them for sale for Rs. 30, and also that she said the murdered man's earrings were hers, and asked a woman to sell them. She was sentenced to imprisonment for life with labour, Shubrattee to death. Nizamut Adawlut Reports, N. W. P., 28th July 1853, p. 1240.

^{*} Nizamut Adawlut Reports, N. W. P., September 2nd 1852, p. 960.

In 1853 one Sheo Bux waylaid two poor travellers on the paradeground at Cawnpore and, having induced them to partake of some suttoo and goor, after eating which they became insensible, robbed them of their little property. When found, one of the men was in articulo, the other was relieved by an emetic. A search was made in the prisoner's house, and a considerable quantity of poisonous minerals was found, consisting of White Arsenic, and also Hartal, or Orpiment. He accounted for the possession of these deadly poisons by saying that he practised chemical experiments, and that he had learnt the art of making silver from them, and was enabled to produce four annas worth of silver per diem. This wretch had been a Hindu, a Mahomedan, and it was said, for some time, an avowed convert to Christianity, leading a vagabond life, with no fixed means of subsistence. The native doctor who examined the body was satisfied that it contained Arsenic. superior Court, however, observing that this opinion did not appear to have been derived from any analysis, or from the symptoms exhibited by the deceased, and holding that the single fact of the finding Arsenic in the prisoner's house did not amount to proof of guilt, as "the natives not unfrequently keep Arsenic by them for other purposes," ordered the prisoner's release.*

Of late, these cases have, for the most part, been brought under the investigation of the Assistant General Superintendents for the suppression of Thuggee, and much valuable information upon the subject might, doubtless, be collected from the records of those officers at Dacca and Patna and elsewhere. It would appear that the Approver system, employed with such valuable results in the detection of professional stranglers and dacoits, has been adopted in some of these cases.† It may be worthy of reconsideration whether a judicious modification of that system may not afford the best prospect of furnishing the judicial authorities with an insight into the true nature of this daily extending crime.

^{*} Nizamut Adawlut Reports, N. W. P., August 27th 1853, p. 1036.

† See Report on the State of the Police, L. P., for 1849, p. 83.

Datura.—Dhatoora.—" Datura Fastuosa;—(Kala Dhatoora): and Alba (Sàda) Dhatoora,—(O'Shaughnessy) are very common over the peninsula of India, and are also called Jowz Mazil or Methel (Royle.)"

The author of the "Bengal Dispensatory" remarks that,for the purpose of facilitating theft, and other criminal designs, the seeds are very commonly given in Bengal, with sweetmeats, to stupify merely, but not with the intention of killing [?]; intoxication or delirium is seldom produced, the individual sinks into profound lethargy, resembling coma, with dilated pupils, but natural respiration. These symptoms have been known to continue even for two days, and still recovery take place; cold affusion and strong stimulant emetics constitute the most effectual treatment; the vision often continues obscured long after the general recovery takes place. If given while the stomach is empty, a much smaller dose may induce all the preceding symptoms, and prove fatal. This is well-known to the Indian poisoners, who suit the time of administration according to the purpose they mean to serve.* Popular superstition among the Hindus represents their deity Siva as constantly under the intoxicating effects of Dhatoora and Gunjah. This drug was ranked among the weak poisons (Apabisha) in the Shastras: its use, for nefarious purposes, is of very long standing in India.+

* O'Shaughnessy.

[†] Dr. John Fryer, who visited India between the years 1672 and 1681, (reign of Aurungzebe), gives the following description of the manner in which state criminals were then treated: "Upon an offence, they are sent by the king's order, and committed to a place called the Post (from the punishment inflicted), when the master of the Post is acquainted with the heinousness of the crime; which being understood, he heightens by a drink, which at first they refuse, made of Bung (the juice of the intoxicating sort of Hemp), and being mingled with Datry (the deadliest sort of Solarium or Nightshade) named Post. After a week's taking, they crave more than ever

The Dhatoora is found growing luxuriantly beside nearly every peasant's hut in the country. The goats feed upon it; and it is doubtless often tended for worse purposes.

According to Mr. James Taylor, the people of Dacca employ an itoxicating substance, called Bhauker, in the

they nauseated. Ad illorum vicem gui degustato Sardonum graminum succo feruntur in morte ridere; making them foolishly mad. Then, they are brought into the inner lodging of the house, in which folding doors open upon delicious gardens, where apes and cats, dogs and monkeys are their attendants, with whom they maintain their dialogues, exercising over them their humour of an assassin, usurper, miser, or what their Genius led them to whilst themselves. After this manner are they imprisoned during the king's pleasure, or he orders their cure, to restore them to their senses again; which otherwise, after their spirits are tired by a restless appetite of doing, and in the mean time have not a suitable recruit, they linger by a lasting leanness into the shades, which alive they represented."

Post is not, however, the Datura, but, the Papaver Somniferum. Bernier's account of the practice is, doubtless, more correct than Fryer's. "This Poust," he writes, "is nothing else but poppy expressed and infused a night in water. And it is that potion which those that are kept at Gwalior are commonly made to drink. I mean those princes, whose heads they think it fit not to cut off. This is the first thing that is brought to them in the morning, and they have nothing given them to eat till they have drank a great cupful of it; they would rather let them starve. This emaciates them exceedingly, and maketh them die insensibly, they losing little by little their understanding, and growing torpid and senseless. And by this very means it is said that Sipeher Shekoh, Moorad Buksh, and Sooleeman Shekoh were despatched."

Fryer describes the friends of Hindu widows as giving them the "Datry," as a preparation for burning—"When half mad, she throws herself into the fire." Tavernier also says, in speaking of the preparation for the Sati, "many of our Europeans are of opinion that to take away the fear of death, which naturally terrifies humanity, the priests do give her a certain beverage to stupefy and disorder the senses, which takes from her all apprehension of her preparations for death." Captain Hamilton also states, that some of the victims took "somnific medicines," and stood by the pile until they fell on it while asleep.

Mr. Ives, Admiral Watson's surgeon, who visited India in 1754, says that

"If the Indian women have possession of any secret poison, it is the seed
of this plant."

distillation of Arrack. This Bhauker is compounded of rice, opium, Dhatoora, and a number of other poisonous ingredients; it is imported from Tipperah, and sells at the rate of 1000 balls (each weighed about 10 annas) for $2\frac{1}{2}$ or 3 rupees. This is also frequently added to the Keitah (a fermented liquor) principally used by the Mussulmauns, but the low Hindus also indulge in this drugged compound during the feast of the Huli.*

In the highly valuable paper already cited, Dr. Giraud observes, that the intoxicating properties of the indigenous species of the genus Datura have been known amongst Eastern nations from time immemorial. The botanical name of the genus has been adopted from the Sanscrit Dhatoora. They have also long been employed in China, (where the Dhatoora Ferox is used,) and in the islands of the Indian Archipelago, to facilitate the commission of theft and other crimes. In Bombay, the cases of poisoning by the species of Datura are so frequent, that the natives usually recognise them by their characteristic symptoms. According to this authority, the motives which prompt the administration of the poison are extremely various. Frequently, a shopkeeper is brought under the influence of the drug, that his articles of merchandise may be the more readily made off with: very often, a fortunate fakeer is made to vield up the contributions of the pious while thus intoxicated. Jealousy frequently appears to seek revenge in the use of dhatoora. During the preceding year, eight persons, a man. his wife, two children and some friends, were brought to the Jamsetjee Jeejeebhoy Hospital, all suffering from the effects of dhatoora, which it was supposed they took in a meal prepared by the man's other wife. In Dr. Giraud's own house, three horse-keepers were at one time drugged with dhatoora;

^{*} Topography and Statistics of Dacca, p 280;

which it was believed had been thrown into their meals by a fourth,—a man of different caste, and, at the time, on bad terms with the others. The fantastic antics that are exhibited under its action, sometimes tempt to the use of it as a practical joke—as in a case where a dog-boy gathered the seeds of Datura alba in a garden, and threw them into a cook's rice. Dr. Giraud is informed that the poison is, not unfrequently, had recourse to as a means of fortelling events-a person, while under its influence, being supposed to be possessed of faculties resembling those of the Pythian Priestess of old, or of the modern professors of clairvoyance. Notwithstanding the recent prevalence of dhatoorapoisoning in Bombay, Dr. Giraud remarks that it has been only on the presumptive evidence of its characteristic symptoms that its action has been inferred. The poison is administered so stealthily, and the natives are so backward in aiding the cause of justice, that he has found it next to impossible to obtain positive evidence of the administration of the poison, or to trace it to the culprit; although, from their familiarity with its nature, and with the modes of its administration, it is, he thinks, evident that many of the lower orders of the people, are acquainted with the adepts who employ it.

He finds that the Seeds are usually administered. They are powdered and thrown into rice, bajree, and other grains; or mixed up with cakes and sweetmeats. Sometimes, however, an infusion or a decoction of the Leaves is prepared, and introduced into the vessels in which food is being cooked. In this Presidency also the Seeds are usually administered in powder, they can rarely be detected whole, as in the cases noticed at pp. 95 and 116, and in the following instances. In September 1853, the magistrate of the 24-pergunnahs forwarded for examination a substance which was stated to have been picked out of some cooked dhall, the suspicions of the

person eating it having been aroused by a bitter taste. After eating one handful of the *dhall*, in which the substance was found, this person vomited; and, within another half hour, became insensible from the same cause. Dr. Mouat replied that the substance in question consisted chiefly of the seeds of the *dhatoora*, which had evidently been boiled.

A few months since, one Mussamat Dhun Koour, being weary of leading a single life, had recourse to a barber useful in such exigencies, who procured her recommendation to a man named Kooraee, who after an interview, approved of her appearance, and it was agreed that they should live together. It fell to her lot to prepare the meals for the family. On the fourth day, the man, his brother and mother, were discovered in a state of insensibility after eating their dinner. The female was missing, but upon being apprehended, confessed that, having taken offence, she had deliberately mixed some of the seed of the dhatoora in the food, but declared that she only wished to stupify them, to enable her to make her escape. The Civil Surgeon found a large quantity of the dhatoora seed mixed with the food which he examined "but could not say that the quantity was sufficient to cause death to persons freely partaking of the same." She was sentenced to fourteen years' imprisonment with labour.*

I am indebted to Dr. H. Cleghorn, of the Madras Medical Service, for the following interesting notes of a case of poisoning with the *Leaves* of the *dhatoora*.†

"A child aged 2 was brought in its last agonies, the fragments of 3 or 4 leaves were found in the stomach. This case is interesting, in as far as the poison was traced to its source,

^{*} Nizamut Adawlut Reports, N. W. P., August 1854, p. 182.

[†] See also a case in which the *leaves* appear to have been used, and which will be found cited at length in the Chapter on Insanity.—Nizamut Adawlut Reports, N. W. P., 22nd April 1854, p. 441.

and I believe that, in all previously recorded cases, death resulted from eating the fruit or seeds.

"The mother of the child was reaping in a raggy field, when it was discovered that her two children were eating the leaves of dhatoora, a leaf was found convulsively grasped in the hands of one of them. When I was afterwards taken to the spot, the plant was found to be the black dhatoora (dhatoora fastuosa), which is esteemed a more virulent poison than the white flowered species (dhatoora alba.). The elder child quickly recovered, as the Sulphate of Zinc which was given acted immediately; with the younger one, narcotism was so great that vomiting could not be produced."

Dr. Giraud notices it, as a remarkable circumstance, that, although administered under such different circumstances, and with such varied motives, dhatoora should so seldom prove fatal in Bombay, that not a single case in which the effects of dhatoora could be directly traced has terminated in death; and that, of 51 cases which were treated in the Jamsetjee Jeejeebhoy Hospital during the preceding year, only four presented very alarming symptoms. He considers it difficult to determine whether these comparatively mild results arise from a careful proportioning of the poison, or whether our Indian indigenous species of Datura are possessed of less virulent properties than those of the Datura stramonium, of the fatal effects of which instances are not wanting.

In this Presidency, however, as will be gathered from cases already cited, the victims of dhatoora poisoning do not always escape so certainly. The following instances in which death resulted from the practice also deserve notice.

In August 1854, a woman was sentenced to death for having, upon her own confession, mixed a stupifying drug with the *attah* which it was her duty to cook for her family. This was done at the instigation of her paramour. The

result was, that a very aged man was taken ill with symptoms resembling those of *dhatoora* poisoning, and that three children died, after having been similarly attacked. Dr. Murray's inquiries led him to believe that the children died from taking *dhatoora* or some similar poison.*

In 1852, one Mussumat Jussodee, living with a widower. in the Hurda district, as his mistress, destroyed her step-son, a healthy youth of 15 or 16, by mixing the dhatoora seeds in his food, telling the man that his son had gone to his aunt's in another village. Six days afterwards, the man happening to go into a tobacco garden to the rear of his premises, his attention was drawn to a spot which a jackal was scratching up, and he perceived a human leg. Further investigation led to the exhumation of the corpse of his son, quite naked, much decomposed, but identifiable, the lower extremities only having been eaten by animals. The woman confessed her crime and was apprehended. She acknowledged repeatedly, even in the Judge's court, that she gave the boy ten pods or heads of dhatoora seed in food, to kill him, as he was always quarrelling, and that he died in consequence. She adhered to this statement with great consistency. Eleven days after death, however, a post mortem examination of the body was made by the Medical Officer at Hoshungabad (70 or 80 miles off). He gave it as his opinion that rupture of the stomach was the probable cause of death, adding that the organ was empty, showing no trace of digested food, nor any indication of the presence of dhatoora seed. (The woman said that she pounded the seed on a large stone and then mixed it in one of two large rotees, which she baked for supper). The Judge suggested that the state of the stomach might not improbably be dependant upon a natural post mortem condition. The Medical Officer

^{*} Nizamut Adawlut Reports, N. W. P., August 1854, p. 288.

observed that the decomposition of the body had proceeded to such a degree that he was unable to pronounce an opinion as to the cause of rupture of the stomach; indeed, under the condition in which the body was, he should have been doubtful as to the existence of the lesion of the stomach prior to the extinction of life, had not grumous blood been found contiguous to it. The Judge again inquiredwas it strange that digested food should, in the course of eleven days, have been absorbed, in the process of corruption, so as to be no longer traceable? [It might, unquestionably, be very difficult to distinguish its presence.] The Judge then commented upon the seeming opposition between what the medical officer described as the first effect of poisoning by dhatoora, viz., a condition of active maniacal excitement, and the woman's statement that, after his poisoned meal, her victim lay down to sleep, and she sat up watching him to see the effect of the poison; that he did not stir, but passed from sleep to death; and that, when about a puhur of night remained, she found he was dead. In the morning, she dug his grave. The Judge considered that, if the woman really did administer the quantity stated, it appeared to have been enough to kill ten men. As far as he could learn from the natives, any such dose would have thrown the person taking it into a stupor, followed by speedy death. It appears not improbable that the murderess may have inflicted violence upon her victim after he became insensible, or the rupture of the stomach may, possibly, have resulted from trampling the body down in a shallow grave, perhaps while life still lingered. The case should be referred to as an example of the care and discrimination in weighing every detail of evidence generally displayed by Judges in this country.*

^{*} Nizamut Adawlut Reports, N. W. P., January 22nd 1852, p. 45.

It was proved on a trial at Agra, in the same year, that one Mussumat Rookma, having been superseded in certain village rights by a person named Thukoory, employed Cheetah, a youth living at a distance and having no concern in the matter, to mix pounded dhatoora with bhang (decoction of Indian hemp), which he gave to the unfortunate man, who drank it in the presence of three witnesses. Thukoory managed to reach the house of another witness, trembling and ill, and said that Cheetah and the woman had mixed poison in the bhang which they had given him. He soon after died. At the trial, the lad denied that he knew that what the woman gave him to mix was poison. The woman made no defence. They had made full confession of the crime at the thannah, as is usual. Cheetah was sentenced to death; the woman, as an accessory before the fact, to imprisoment for life with labour.*

In 1809, there occurred a fatal case of poisoning with dhatoora, which involved several important particulars. A woman, named Musst. Sookhao, while on her way from Benares, fell in with a very feeble man, nearly 80 years old, regarding whom she appears to have had previous knowledge. By his request, she gave him some flour of gram and barley mixed, which she had with her; they then walked about a koss (two miles), when the deceased was suddenly taken ill, and told some people on the spot that he had taken some of the prisoner's suttoo, and was unwell, desiring them to secure her. He immediately after became senseless, rolling himself on the ground, tossing his legs in convulsive motions, and foam issuing at the mouth. The man died five days afterwards. Two respectable Brahmins, whom the prisoner and the deceased met, when the latter was first seized with illness, also deposed that the prisoner then admitted that

^{*} Nizamut Adawlut Reports, N. W. P., 24th, June 1852, p. 580.

she had given the man dhatoora in the flour. She also appears to have confessed to the Police, that she had given the deceased one chedam's weight (less than a grain) of dhatoora among the flour; that she had seen the deceased's son give him rupees 9 (which were found on the deceased) on parting, and that she had brought the dhatoora on purpose to give to the deceased. Before the Magistrate, and on trial, she positively denied that she had given the deceased dhatoora or any other poisonous drug; but acknowledged that she had upon her a small quantity of that vegetable, alleging that it was used by herself as a cure for certain disorders. She further stated that the Police had extorted her confession by maltreatment; some flour, and about two chedams of pounded stuff, described by the prisoner as containing dhatoora and different kinds of spices, and used by her medicinally, were found on her person. The latter being mixed with some fresh flour was given to a dog, and the former to another; but neither of the dogs were at all affected. The native doctor stated that the deceased, having recovered his senses previously to his death, had told him that the prisoner had given him dhatoora among the flour. The Judge of Circuit, being informed that one Syud Sulamut Alee was a man skilled in the art of medicine, directed the following queries to be proposed to him: -First, -Whether dhatoora would cause death; and, if so, what quantity was required to produce that effect? Secondly,-Whether, if such quantity were mixed with \frac{1}{2} or \frac{1}{4} of a seer (a pound or half a pound) of flour, a person eating it would be sensible of the smell or taste? Thirdly,-In what time death would ensue from a quantity sufficient to produce fatal effects? Sulamut Alee replied, that there was one kind of dhatoora of which $4\frac{1}{2}$ mashas $(63\frac{3}{4})$ grains) would cause death in a man of middling strength; but that none of the kinds produced in that part of the

country caused death; that, in small quantities, it was a useful remedy for several diseases; but that, if more than two ruttees $(2\frac{14}{16} \text{ grs.})$ were taken, it would produce intoxication, insensibility, or madness; and that these effects usually lasted three days. The surgeon, attached to the station, also expressed his opinion that dhatoora would not produce death. There was read in evidence an extract from the records of a former trial, from which it appeared that 12 chedams of dhatoora, mixed in the juice of sugar (cane), had been given by some robbers to four travellers; and that, from the action of the draught, these travellers had been deprived of their senses for three days, after which the effects had subsided. The law officers of the Court of Circuit declared the fact of the prisoner's having administered dhatoora to the deceased established; but that it was uncertain whether his death had been occasioned thereby; that, there being no prescribed penalty, under the Mahomedan law, for the offence of which she was convicted, she was punishable at the discretion of the ruling power. The judge of circuit declared his opinion that the prisoner gave the dhatoora (which he held to be a narcotic, not a poison,) to the deceased as a soporific, for the purpose of robbing him, without any intention of producing his death, [it will, however, be noticed, that the point regarding the quantity of the poison administered only rested on the prisoner's statement]; but that his death might have been occasioned by the effects of the dose on a person of his advanced years. The law officers of the Nizamut Adawlut declared in their futwa, that the dhatoora was a deleterious drug, and might, in the case of an infirm person, occasion 'death; that the prisoner was convicted of having administered such drug to the deceased, to the effects of which alone his death could be attributed; and that, the offence of the prisoner not coming within the five-fold definition of culpable homicide, as laid down in the Mahomedan

law, she was liable to discretionary punishment by accobut. The Court of Nizamut Adawlut, having no doubt of the prisoner's guilt in having occasioned the death of the deceased by an unlawful act committed in the prosecution of an intended theft, sentenced her, under the above futwa, to imprisonment for life.*

In 1823, a man was convicted and sentenced to 10 years' imprisonment for having prepared dhatoora for the purpose of administering it to his rival. He, however, with some appearance of veracity, disclaimed an intention of killing, and maintained that dhatoora was not mortal.

Death resulted in several of the other cases of drugging for criminal purposes in India published in the records of the Courts. It certainly was not proved that dhatoora was the poison employed in several of those instances; but any medical man who peruses their details will decide that this was, doubtless, the drug administered in nearly all.

The above cases must go far to explode the erroneous and dangerous opinion that dhatoora is to be considered as a narcotic and intoxicating drug; but not as a poison calculated, under ordinary circumstances, to destroy life—a belief which, forty years ago, was evidently prevalent both among Europeans and natives; and which is, doubtless, still held by the native public, and their Hukeems and Kobirajira.

It is, at the same time, necessary to observe that, while there are many cases of fatal poisoning by the Indian species of dhatoora on record, and while the facts before us can scarcely leave a doubt that strong adults have perished from large doses of the plant, I have not, as yet, succeeded in finding any unimpeachably proven case in which death was caused by this poison, here, in a healthy young adult. Children and aged persons have commonly been the sufferers, and the

^{*} Macnaghten's Reports, vol. i., p. 216.

cases in which healthy men and women have died after being thus drugged, are open to the suspicion either of the dhatoora having been mixed with other or stronger poisons, or of other unfair means having been resorted to by the robbers after their victims became insensible. However, it is scarcely necessary to add that a poison which, when given in rather moderate doses, kills children and aged persons, will, if sufficiently largely administered, destroy persons of the strongest constitution.

Our highest authority in toxicology maintains that the "Datura Stramonium has decidedly the characters of a narcotico-irritant poison. All parts of the plant are poisonous."* He finds that, in Europe, (where the Datura certainly has not more virulent properties than it has in India,) "several fatal cases are reported, one of which terminated in six hours." Among the fatal cases cited by Dr. Taylor are those—(1.) Of a child aged two years, who swallowed 16 grains of the seeds and died in twenty-four hours, having been maniacally delirious, the symptoms resembling those of hydrophobia. (2.) Of a medical man's child, also two years old, who swallowed about 100 seeds of Stramonium weighing 16 grains: the usual symptoms were manifested in an hour; and, although 20 seeds had been ejected by vomiting and 80 by purging, the child died in twenty-four hours. (3.) A woman swallowed a decoction of the bruised seeds (about 120;) she very soon became delirious, threw her arms about, and spoke incoherently: she died in seven hours. (4.) Three females swallowed an infusion of Stramonium leavesall suffered most severely; stimulants were administered ' with success in two cases—the other proved fatal.

It must certainly be admitted that, although the dhatoora is employed for criminal purposes in the most reckless man-

^{*} Dr. Taylor's Treatise on Poisons, p. 783.

ner—it may, possibly, be true that it is not given with a decided intention to kill, and that there may still exist a popular opinion that its effects are not deadly, but merely intoxicating. The fact of its having been numbered among the "weak poisons" or active drugs in the Shastra, may explain the prevalence of this idea. This may, perhaps, still be considered to weigh in favor of prisoners convicted of the great and exceedingly prevalent crime in question. Still the evidence of medical witnesses, in such trials, cannot be otherwise than to the effect that dhatoora is a drug which is as certainly and as rapidly fatal in its effects as Opium; and that it is scarcely to be believed that any culprit can have long practised its administration, in a reckless manner, without discovering its destructive properties.

The clear decision of this question is a matter of the greatest moment, since the law draws a marked difference between the crime of administering poisonous drugs to persons, with a view to robbing them when in a state of insensibility, and that of administering drugs and substances of a merely intoxicating character, and not of a nature to endanger life, for the same purpose.* Upon this subject, Mr. Dampier recorded the following judicious remarks in commenting upon the practice of the meetawallahs.† "The drugs administered are all stupifying; if the dose is large enough, it causes death; if small, stupefaction-not, in my opinion, intoxication. The meetawallah mixes the drug by chance, and leaves his victim to recover or die as the chance may be; and I think a heavier punishment than six or seven years' imprisonment shall always be given to this class of offenders; I would never give less than imprisonment for life, as such men should (like the thugs) not be allowed

^{*} Beaufort's Digest, para. 3118. † Police Report for first six months of 1841, para. 123.

again to be at large, to the injury of the community. That death does not ensue in every case—is not the fault of the meetawallahs administering the drug in food or water; it arises from the merest chances,—whether the stomach of the receiver is full or empty, the victim robust or weak, or the quantity of mixed food swallowed before the effect of the drug appears; and it is, I think, a mistake to charge this class of miscreants with administering intoxicating drugs when the parties recover, when they are always poisonous drugs dependent for their fatal effect on the quantity which the victim may swallow, or other circumstances,—not on any designed will of the administerer."

All subsequent experience has shown that every species of Datura is a Poison, in the strongest sense of the term; and it now seems to be generally so regarded by judicial officers in this country. Although, for the most part, reckless of consequences, it would certainly appear that some of the dhatooreeas and meetawallahs have acquired considerable skill in apportioning their doses. It is probable that the possession of such dexterity, as it must always be an evidence of long practice and numerous experiments, will not be regarded as mitigatory in the eye of the law.

There exists, among Missionaries in this country, a very strong conviction that dhatoora is frequently administered by their relatives to natives who evince an inclination to embrace Christianity. I have been authorised to quote the following passage from a note lately written by an eminent and experienced Missionary, now residing in Calcutta, in reply to queries on this subject: "I always understood, that the drug administered in the cases referred to, was the dhatoora, in small doses. The symptoms have been heavy, dull eyes, with a prostration of mind, rendering the victim an idiot, and looking very much like one, with a listless heavy countenance, indicating that the brain has, somehow or

other, been affected. I believe the victim can be for months in that listless, heavy, dreamy state; but, gradually, under a proper treatment and a change of scenery, I always heard recovery was possible. There is no mistaking the symptoms of the poison, as it transforms the victim in a short time into a totally different being from what he was in his normal state.*

I have only met with one very recent case of poisoning with dhatoora,—that of a rather elderly sepoy, who was found in his bed by the native doctor apparently in a state of collapse. When I was called to him, he appeared greatly depressed, with fixedly dilated pupils, cold surface and a remarkably slow and feeble pulse. He recovered in a few hours, and then confessed that he had been drugging himself with dhatoora.†

^{*} This very important subject will be recurred to in the Chapter on In-SANITY.

[†] Two cases, in which there was reason to believe that dhatoora had been given to travellers, have also occurred within my notice. In the first of these, two persons halted at a village, in the Chittagong district, where they obtained some food. After dining, they started together. One of them was afterwards found in a state of idiotcy, and many days elapsed before he was able to give any account of himself. He then stated that he had become insensible soon after leaving the village, and that he knew nothing of his companion's fate. A skeleton, supposed to be that of the missing traveller, was found in the jungle, and sent in for examination. I believe, however, that the crime was not distinctly brought home to any person. In the other case, a man who had been a native doctor was seized with symptoms of insanity after having partaken of a feast to which he was invited when on his way to Arrakan. This man was under my treatment for two or three days, during which he was apparently suffering from a very unusual kind of celebral irritation; he was exceedingly voluble and excited, speaking with a singular stutter, which evidently depended on a certain degree of local paralysis. His eyes were staring and blood-shot; but there were no evidences of inflammatory action in the system. He was quite rational, and declared his conviction that he had been drugged with dhatoora.

In some cases where the *dhatoora* is given, insensibility occurs almost immediately; this probably happens when the poison is administered in solution, or in very fine powder. In a case tried in July 1852, the prosecutor declared that, while a person was handing him a *lota* of water, the prisoner snatched it away, on pretence of freeing the water from dirt or straws, and then gave it to him. After drinking only two mouthfuls, and complaining of the bitter taste, he fell down insensible within forty yards of the spot where he had drank, and did not recover his senses until the third day after. When the seeds are given, the symptoms continue as long as any of them remain in the intestinal canal; and, probably, in many cases, much longer.

There appear to be three sets or stages of symptoms observed in cases of poisoning with datura—

1st. Headache, dryness of the throat and fauces, faintness, difficulty in walking, languor, and impairment of vision, the pupils being greatly dilated.* When the dose is considerable, insensibility rapidly supervenes.

2nd. Maniacal delirium, flushed face, eyes glistening and in constant motion, the pupils being exceedingly dilated. There is no fever, but intense thirst, and violent perspiration from incessant motion, the pulse remaining very slow. All the symptoms are noticed as having a very remarkable resemblance to those occasioned by belladonna.†

3rd. Those accompanying the fatuous condition already described.

There appears to be no drug known in the present day which represents, in its effects, so close an approach to the

^{*} Cases by Messrs. Gould and Thurston, in which four persons partook of tea containing three table-spoonfuls of stramonium seeds.—Medical Times and Gazette, vol. iv., 1852, p. 197.

[†] Case by Dr. Schlesier, as quoted by Dr. Taylor.

system of Slow Poisoning believed by many to have been practised in the Middle Ages as does the dhatoora.*

Dr. Giraud's observations on the Symptoms and Treatment of poisoning by the Indian species of the plant being the fullest and best in our literature, I have cited them at length.—Appendix C.

[For further descriptions of the Symptoms resulting from poisoning by Stramonium and for instructions on the recognition of Daturine, see Taylor's "Treatise on Poisons" p. p. 783, 86.]

The use and medicinal and toxicological effects of Canna-Bis Indica,—[vern. Churrus and Momeea (the concrete juice) Bang, Subjee, Sidhee, (the larger leaves and capsules with the stalks), Gunjah (the dried plant from which the resin has not been removed), Majoon (a confection from Bang,)],—have been so very fully described by Dr. O'Shaughnessy, in his Memoir presented to the Medical and Physical Society of Calcutta in 1839, and in his Bengal Dispensatory, as well as in Dr. Taylor's Treatise on Poisons, that it is unnecessary to

^{*} Colonel Hough mentions, in his "Proceedings in Military Law," that the natives of India have a mode of administering a substance which may be given insidiously, in small quantities, so as to cause death in a given period, and in a manner which shall not cause the appearances on the body as in the case of poison. This, he adds, it would be unwise to publish,

It is now generally believed that the poisoners of the Middle Ages were never in possession of any chemical agent, the operation of which could be suspended and then manifest itself in the system after an indefinite interval, (Taylor on Poisons, p. 38). The truth of the matter probably was that they could so accurately apportion their doses of some irritant (probably mercurial) poison as to cause their victims to be attacked with Chronic Dysentery,—then the most prevailing disease among all classes of persons, from the highest to the lowest, throughout Europe. It is very remarkable in how many instances it is left as a matter of historic doubt, whether persons of note died from the effects of Poison or of Dysentery. The cases of Geme or Zisimus, brother to Sultan Bajazet, (a supposed victim of the Borgias, anno 1494); Walter Devereux, Earl of Essex, and Dudley Earl of Leicester, (Queen Elizabeth's favorite,)—may be instanced among others.

repeat them here, although they will have to be referred to in the chapter on INSANITY. It is probable that death may, not unfrequently, result from over-doses of Gunjah, but I am not aware that any instance of the kind has been recorded.

In the foregoing chapter cases are detailed (at pp. 118, 123 and 129) in which dhatoora was given in what appears to have been the common fluid preparation of Hemp—Bang; and it would seem that the mixture is a very deadly one. It is not evident, however, that the criminals intended to do more than administer the stronger poison in an intoxicating drink much used by the Up-country people, the effects of which might, possibly, be expected to conceal those of the dhatoora.

The crime of murdering persons while intoxicated by Hemp, is one which might be expected to be of frequent occurrence among a people, the lowest and most depraved of whom are continually drugging themselves with this narcotic, I have, however, only met with one recorded instance, in which a man about seventy years old, living at Mynpoorie, was convicted of having murdered one Himmut Khan by strangling him while in a state of intoxication from the effects of bang.*

The general medico-legal circumstances attendant upon poisoning with Nux Vomica [Strychnos Nux Vomica—Vern. Yettie Cotay; Tam. Musada; Tel. Culaka, Cutaka also Veshamoos tibeejum; Sans. Kuchila; Beng. Koodaka doruatta, Cing. Koochla: Dauk, Hind, Khanekul kelb, Arab.—(O'Shaughnessy)], are two well known to demand repetition. The Strychnos Nux Vomica is "a native of Coromandel, Ceylon, and the Bengal jungles;" it was noticed in the woods of the Carnatic by Fryer about the year 1671. Mr. Baker says that "The natives of Hindoostan often take the Kuchilo nut morning and evening, continuously for many months, beginning

^{*} Nizamut Adawlut Reports, N. W. P., 20th July 1852, p. 689.

with the eighth of a grain, and gradually increasing the dose to an entire nut, or about 20 grains. [!] If taken immediately before or after meals, no unpleasant effect is produced; but, if this precaution be neglected, spasms are apt to ensue."*

"The Nux Vomica (Kusta, Kupilu) is mentioned in the Shastras as prepared by being steeped for three days in conjee-water, and then mixed with mustard oil and other medicines."† Dr. Fleming believed that the drug was seldom, if ever, employed in medicine by the Hindus, on account of its dangerous properties. He adds, however, that it is sometimes used for a very pernicious purpose by the distillers, who add a quantity of it in the process of distilling arrack, to render the spirit more intoxicating.

Commonly as the Nux Vomica finds a place among the bazar drugs of Bengal, it would appear that it is by no means very frequently employed, in this country, as a means of destroying life. The Chemical Examiners' records only contain two cases in which there was any satisfactory reason for concluding, that death had resulted from the administration of this drug.‡ One of these cases is perfectly clear and convincing.

In 1853, the magistrate of Goruckpore forwarded the contents of the stomach of one Mungoo, Mehter, together with a letter from Dr. Atchison, the Civil Surgeon, to the following effect: On the 1st June, at 9 A. M., the man drank off a bottle of common bazar spirit, which he had purchased the night before in the Goruckpore bazar. Immediately after

^{*} Transactions of the Medical and Physical Society of Calcutta.

[†] Wise.

[‡] In the first of these cases "A bottle containing a small quantity of the contents of a stomach" was sent from Deyrah, for chemical examination in 1853, without any information regarding the particulars of the case. Dr. Mouat found that it gave evidence of the presence of a powerful vegetable bitter, which presented nearly the characters of Strychnine, but the quantity was so extremely minute as to prevent him from ascertaining this with such undoubted certainty as is absolutely necessary in a medico-legal case.

drinking the liquid, he remarked to a by-stander "something is wrong, this shurab is intensely bitter;" soon afterwards, spasms came on, and frightful convulsions; there was perfect opisthotonos of the whole body. Intellect was entire throughout. On the abatement of the tetanic convulsions, coma succeeded, and he died in three quarters of an hour. liquor, which caused death, cost only three pice, whence Dr. Atchison inferred that it could not have been very strong or intoxicating. Dr. Mouat found that the bottle contained about six ounces of a brownish turbid fluid, in which, with very great difficulty, he succeeded in detecting a trace of strychnine; -if, as he writes, the test for that substance is to be relied upon. After separating the organic matter present, he evaporated half the fluid to dryness, and endeavored to obtain, from this residue, crystals of strychnine. In this he failed, as the amount present must have been extremely minute. He then treated a very small portion of this residue with strong sulphuric acid, and added to it a grain, in powder, of the Ferro Cyanide of Potassium (Red Prussiate of Potash); upon mixing these well together, in a watch glass, a scarcely perceptible change of color to violet was produced. He then repeated the experiment with another portion, substituting the Bichromate for the Red Prussiate of Potash. The characteristic violet color was immediately produced; and, as it is now regarded by eminent chemists in Europe, as the most delicate and certain test of the presence of Strychnia, he was led to believe that the individual had been poisoned. Dr. Mouat further recommended an inquiry as to whether the practice of distilling alcohol with the powdered bark of the Strychnos, or with Nux Vomica itself, is known to be practised by natives in the bazar of Goruckpore. thought it difficult to suppose that it would be resorted to for other than criminal purposes, as its intense bitterness would cause its immediate detection by any one not in a state of intoxication. We have seen, however, that

Dr. Fleming long ago ascribed this practice of drugging Arrack to a design of somewhat less criminal character.*

Opium.—Vern., Afeem; Duk., Ufyoon; Arab., Sheer-i-kush-kush: Pers., Apaynum; Sans., (O'Shaughnessy.)

Prevalent as the vice of Opium-eating, with all its direst consequences, is in Bengal; especially in the Eastern and Southern districts—vast numbers of infatuated wretches having accustomed themselves to consume from 6 rutties (9 grains) to a rupee's weight (180 grains) of nearly pure Opium daily;—we have no grounds for believing that the drug is frequently used, in this part of the country, as a means either of suicide† or of murder. It has been seen however, that Dr. Honigberger attributes its rather frequent use, as a poison, to the people of Lahore; and I observe that, in his Report for October 1852—March 1853, the Sub-Assistant Surgeon of Delhi mentions that, out 19 cases of poisoning sent by the Police to the Dispensary during that period, 14 were instances of poisoning by Opium‡

^{*} More than one suspicious case of death, occurring shortly after drinking bitter spirit, will be found in the Nizamut Reports;—as the following: Certain persons invited one Ramdoolub, with whom they had a dispute, to their house, and welcomed him with wine (spirit?), of which they all partook. The wine first brought being speedily despatched, one of them remarked that he had a bottle of better wine; and, sending for it, poured a small quantity of it into a vessel, and presented it to Ramdoolub who, on drinking it, observed that it was very bitter, and shortly after, exclaiming that he felt his body on fire, and that he had been poisoned, became senseless, and expired in a few hours. It was considered that the deceased died by excessive drinking.

[†] The only case of attempted suicide by Opium which has occurred within my practice, during the last seven years, was that of a respectable Hindu woman who, in a paroxysm of anger, swallowed a rupee's weight (180 grains) of good opium, hastily rubbed up in oil. I saw her early, and, as the drug had been swallowed nearly in a solid state, emetics were chiefly relied upon. She fortunately consented to take these; but, although vomiting was kept up during a great part of the day, she remained for many hours in considerable danger.

[‡] The remaining cases were 3 by Dhatoora, and 2 by Arsenic.

Several testimonies concur in declaring that Opium was commonly employed among those tribes who systematically destroyed the lives of their female children. Mr. Montgomery* enumerates, among the other means resorted to in Goojerat, the administration of a small pill of Opium to the child, which destroys life in a few hours; more recently, it has been the practice to effect the same result by rubbing the mother's nipples with Opium. Again, a native authority states that, "Opium is not unfrequently made the instrument through which the Rajpoots perpetrate the horrifying deed. The manner of doing it is thus related :- the mother applies it to the nipples of her breast, and it is insensibly imbibed with the milk by the infant, and has the effect of extinguishing its life. A Rajpoot, who is in my service, told me, when I asked him for some information upon this topic, that his countrymen stick a bit of the drug to the roofs of their infants' mouths, and allow them to remain in this dangerous position for a minute or two, during which the heat of the mouth melts the drug, and it is taken into their system, and hurries them into eternity.†"

The Police Commissioner's Report, L. P. for 1851 refers to a case in which a woman administered Opium forcibly to a child with whose mother she had quarrelled. She became insane during the investigation. The same officer's report for 1843 also alludes to the case of a mother who administered Opium to her own infant, under the impression that its death would be on the head of her brother-in-law, with whom she had had a dispute :—a description of crime very frequent among natives, to which fuller allusion will presently be made.

The Chemical Examiners' records supply us with only three cases in which the presence of Opium in suspected

^{*} Punjab Papers on Female Infanticide.

[†] Coverjee Rustomjee Mody, Prize Essay on Female Infanticide, Bombay, 1849, p. 11.

matters, or in the stomach after death was fully and unexceptionably demonstrated. In the first of these, a packet was sent down for analysis by the Magistrate of Shahjehanpore, with a request for information as to whether the poison (should any exist) could have been poured down the deceased child's throat after death. Dr. Mouat found the packet to contain a small quantity of a dark brown powder, in which he detected a minute amount of Opium. The Chemical Examiner replied that it would be difficult, if not impossible, to pour any substance down the throat after death, without the use of a tube, or some other mechanical contrivance. The entire absence of any details connected with the history of the case, however, prevented him from giving any more positive opinion on this point.*

In the second case, the Sub-Assistant Surgeon of Ramree forwarded two bottles, containing the contents of the stomach and bowels of a Burmese, whose death was said to have been caused by taking crude Opium. Nearly all the symptoms and post mortem appearances were reported as those usually met with in cases of narcotic poisoning. Mr. Siddons, on submitting the contents of the bottles to analysis, detected the presence of Meconic acid and Morphia.

In February 1853, the Civil Assistant Surgeon of Gya forwarded the stomach, with its contents, of a man who was "supposed to have met with his death from poison by Opium." Mr. Siddons's examination of the suspected matters resulted in the detection of Meconic acid and Morphia.

Two other less demonstrative cases appear in the records. In the first of these, the stomach and its contents of a man, the post mortem examination of whose body revealed every

^{*} This question is not unfrequently mooted in India, although I cannot point to any second instance in which it has been made a matter of public inquiry. For self-evident reasons, it is one which can rarely present any difficulties to the medical officer, if suggested previous to his examination of the body.

sign of poisoning (it is not said by what), were forwarded by the Civil Assistant Surgeon of Azimgurh. Dr. Mouat found that the contents of the stomach were reddish-brown in colour, and appeared to consist of half-digested food. This matter smelt strongly of Opium, which he detected in it; but, in the entire absence of any history of the case, it was impossible to say whether that drug was the cause of death.

In February 1854, the Civil Assistant Surgeon of Chittagong forwarded the contents of the stomach of a Mussulmaun, who was stated to have been in good health up to the day preceding his death when, at 8 A. M., he took food. At 2 P. M. he complained of pain in the stomach and lay down. He continued to complain until 3 on the following morning, when he became insensible, and died in two hours. His mother accused his wife and mother-in-law of poisoning him; they stated, that he died of cholera. On examination, 37 hours after death, the body was found to be stout and in good condition, with no marks of violence; countenance composed, pupils dilated, dark bloody fluid oozing from the nostrils. On dividing the scalp, blood flowed freely. The membranes and substance of the brain were highly congested, there were slight serous effusion beneath the arachnoid, and considerable effusion of bloody serum in the ventricles. The vessels of the base were also congested. Heart natural in formation, the right ventricle contained a quantity of dark coagula, the left a smaller quantity. The coats of the large vessels were unusually red. The stomach and intestines were distended with flatus. The stomach contained a small quantity of viscid blackish substance, possessing a peculiar odour, and mixed with a few flakes of apparently half-digested food, and shreds of woody fibre. There were no traces of inflammation in either the stomach or the intestines, the mucous coat being pale. Both large and small intestines contained abundance of healthy fæces. The bladder was distended with urine. The tongue and nostrils were stained of the same color as that of the matter found in the stomach. Dr. Beatson inferred, from these appearances, that death had been caused by some narcotic poison. Dr. Macnamara ascertained that the suspected fluid contained some alkaloid, soluble in dilute [muriatic?] and Acetic acid, and precipitated from its acid solution by Ammonia. He examined the crystals under the microscope, and believed them to be those of Morphia; but, owing to their small quantity, (the fluid received not being more than two drachms,) enough of the fluid could not be obtained to be treated with the liquid tests for Morphia. From similar causes, Meconic acid could not be detected. He therefore, although firmly believing that Morphia was present in the liquid, would hesitate to affirm the fact on oath.

I have not met with any facts which would lead to a belief that Opium is used, in this country, to facilitate the commission of theft. The action of the drug is less rapid and certain than that of the Dhatoora, its taste and smell are well known to all natives, and can scarcely be disguised, and persons habituated to the practice of Opium-eating are not easily hocussed.*

In 1853 one Musst. Newlee confessed before the police and the joint magistrate of Shahjehanpore that, having been beaten by her husband, she mixed a pice weight of Opium in dal, which he partook of and went to sleep: she then struck

^{*} In a case of theft by administering poison tried at Allahabad in 1854, the prisoner declared that the prosecutor, while in his company at a brothel, eat one part of a small quantity of opium of which he (the prisoner) ate two parts. According to the prisoner's account, however, the prosecutor did not become insensible until the following day, and it was shown in the evidence that the state of insensibility continued three days. The drug given was, probably, Dhatoora.—Nizamut Adawlut Reports, N. W. P., 23rd Jan. 1854 p. 42.

him on the neck, face and back and he died immediately. The civil surgeon found that the deceased's lower incisor teeth were knocked in, and a portion of the jaw broken; and that there were other superficial wounds apparently inflicted after death. The deposition mentions that these injuries were not sufficient to account for death. stomach was full of food, but no trace of poison could be found. At the Sessions Court, the prisoner denied her former confession, saying that it was made through fear. The judge observed that the conclusion of the medical officer, that the wounds on deceased were not sufficient to account for death, prevented the supposition that death was caused by them alone; but his conclusion, that they were caused after death, because there was no hæmorrhage from them, was not, he considered, obvious, because the witnesses to the sooruthal mentioned that there was much blood spilt on the charpoy. He noticed that it did not appear that the food had been analysed; therefore, the assertion that there were no traces of poison, did not, in his opinion, lessen or invalidate the conclusion afforded by the circumstances of the case, and the prisoner's confession that Opium was administered. If the deceased had not been in a state of stupor, it would be difficult to understand how he should have remained lying quiet on the charpoy while a number of painful, but not disabling, wounds were being inflicted upon him. The quantity of Opium, weight of one pice, would be about ten and a half mashas, or, in apothecary's weight, nearly three drachms; this would furnish to even a small portion of the dish of dal more than sufficient of the drug to destroy life. ' judge considered that there remained a doubt as to whether the death of the deceased was caused by the poison, and whether the crime proved should be murder by poison, if death were caused by that and the wounding together; it seemed quite possible that injuries, otherwise of trivial effect, should

have proved fatal to a man in the dangerous stupor caused by Opium, and which is so often succeeded by fatal insensibility. Sentence,—Death.*

Cases in which Children are Drugged with Opium by their Nurses are, unhappily, of by no means unfrequent occurrence in India. Two cases of the kind have happened within my own knowledge, although not in my practice. I believe that, in one of these cases, death resulted. The other occurred, not long since, in the practice of my friend Mr. Bedford, of the General Hospital. The infant was completely narcotised, and was restored with great difficulty.

Mr. James Taylor mentions that the practice of giving Opium to infants is very common among hired Mussulmaun nurses. It is commenced when the child is a few days old, and is generally continued until it is four years of age. The drug is administered under the impression that it defends the child from cold; but, more often, with a view of quieting it when troublesome; and the practice is frequently carried by native nurses into European families. Deaths from an overdose are, he believes, of frequent occurrence. Within eight months, he had seen two instances of infants, under the age of ten months, who were thus accidentally killed by it, and he knew of another case, in a European family, where the parents attributed the loss of a child to it.†

A few years since, one of the medical officers at Allahabad complained of "certain savage customs" prevalent in that

^{*} Nizamut Adawlut Reports, N. W. P., 23rd June 1853, p. 787. It seems likely that the opinion of the Medical Officer, that the wounds were inflicted after death, was based upon physiological observation of their condition; and it appears probable that wounds, especially superficial wounds, inflicted upon a person labouring under that extreme condition of cerebral and pulmonary congestion which precedes death from poisoning by a narcotic, would not present the usual appearances of wounds inflicted during life.

[†] Op. Citat, p. 263.

city, whereby, at or about the second month of its infantile life, every child is made to take Opium, or some other narcotic, or wine to lull it to sleep. "This unnatural and cruel practice," he says, "has gained so firm a footing, in that city in particular, that even the rich mothers, who can easily afford maid servants for their children, nay, who have them already, indulge in it frequently. If for a time they abstain, it is with no very good results. The ample opportunity offered to the mother by this inhuman course, and the very few number of times she is required to suckle her child, induce her soon to overlook the evil and dangerous consequences, and to resume the task of destruction."*

Mussamut Bala, of the city of Bareilly, was tried, in 1854, for the wilful murder of the infant (38 days old) of a native, by administeriug Opium. The woman had been engaged to suckle the child, and the father deposed that, four or five days previous to its death, she refused to continue in service. The Sub-assistant Surgeon stated that he found the child dying with the symptoms of Opium poisoning, and affirmed that the prisoner made confession in his presence of having given to the infant a piece of Opium of the size of a pea. The Judge remarked that it is a wellknown fact that it is not the custom of the people of that country to administer Opium (though it is frequently in use by them as a sedative medicine to children) to infants under forty days old. The father, however, appears, at first, to have confirmed the woman's statement that the infant had been in the habit of taking a daily dose of Opium, and that she had unwittingly increased the dose beyond the ordinary or daily portion. He added that he regarded the result as accidental, and that he wished to lay no charge against the nurse. He

^{*} As cited in Chambers's Papers for the People, vol. 2, p. 16.—The Sanitary Movement.

afterwards, however, asserted to the contrary. The Superior Court acquitted the prisoner.*

In these cases, the Opium, reduced to a paste, is usually smeared upon the child's tongue, where its characteristic brown appearance should be sought for.

It will be shown, in the chapter on INFANTICIDE, that Tobacco has been systematically used in the Gwalior and Agra Districts, &c. as a means of destroying young infants. The first of the following cases, is even of a darker character. The second is merely a recent instance of this ancient atrocity. Mussamut Jumna was tried at Agra for the wilful murder of her new-born male infant by administering to it pounded Tobacco. The chowkedar of the village in which the woman had resided for many years stated that she was a widow ;—a report having arisen that she had given birth to an illegitimate child, he went and taxed her with the fact, which she denied. Upon his repeating his inquiries, she, after some demur, produced the child's body in a basket. Blood was flowing from the nose. No dhye (as is usual) assisted at the birth, nor was the fact of her pregnancy even reported by her or her mother, but he subsequently admitted that, some time previously, the woman went with him to the thannah, and the prisoner promised that, if a child was born, it should be properly cared for! Two witnesses testified to her having confessed that she gave the child Tobacco. She confessed this to the police, and before the magistrate, but maintained on trial, that the child died from natural causes very shortly after birth. She was found guilty and sentenced to imprisonment for life in transportation.+

^{*} Nizamut Adawlut Reports, N. W. P., 30th March 1854, p. 331. See also a case in which a wretched woman of Muttra was believed to have endeavoured to destroy her infant by Opium, and then exposed it in a dry well. — Ibid, 23rd Dec. 1852, p. 1441.

[†] Nizamut Adawlut Reports, N. W. P., 6th Nov. 1852, p. 1311.

In the same year, the suspicions of the police at Agra were excited by the fact that the pregnancy of the wife of one Ghasoonder, a rajpoot thakoor, had not been registered, as required by rules shortly before promulgated by the magistrate with a view to check the prevalent crime of infanticide. Consequently, when the chowkeedar reported the birth and immediate death of the child (a female), an immediate investigation took place, and the grandmother of the child admitted before several witnesses, who attested her written confession, that she had killed the child by giving it Tobacco. The prisoner was sentenced to imprisonment for life.*

Plumbago Rosea.-Vern. Lal Chitra, Chitraca (Racta Chitraca, Fleming) Sans. Chitra molum and Kodivaylee, Tam. Chiturmol; Duk. Chita; Hind. Chitra; Beng. Shiturridge; Arab, Tumbe codiveli; Hort Malab. † This acrid plant, as well as the P. Europea; Vern. Chitra Vani, Sans. and the P. ZEYLANDICA, Chita, H., Chitraca, S. (Fleming); is cultivated in the gardens of Bengal, and a paste made with the roots is employed in native, and even in European practice, as a very active and useful vesicatory. Great light has been thrown, by the research of Dr. O'Shaughnessy, upon the use of the Lall Chitra as a poison, especially as administered by the natives with a view to procure Abortion. We learn, from the Bengal Dispensatory, that an essential principle, Plumbagin, was discovered in these plants, by M. Dulong in 1824. It abounds chiefly in the bark of the root, and is thus prepared :- the bark of the root is acted on by ether, the ethereal tincture mixed with water, and the ether recovered by distillation. The watery liquid is then boiled, and filtered while hot; on cooling, crystals of Plumbagin are deposited; the process is to be repeated as long as crystals are procured. Plumbagin occurs in brilliant yellow

^{*} Nizamut Adawlut Reports, N. W. P., 9th Dec. 1852, p. 1463. † O'Shaughnessy.

crystals of sweetish, but acrid and hot taste, easily fusible. partially volatile, scantily soluble in cold, freely in boiling water, very soluble in alcohol and ether, in the concentrated acids, and in alkaline solutions, with which it strikes a deep red color; with hydrate of alumina or sub-acetate of lead, a crimson red colored precipitate is formed, which constitutes a very valuable and delicate test, available in medicolegal inquiries. The root, in its various forms, continues Dr. O'Shaughnessy, is much employed as a poison in India, and, as an irritant to occasion abortion, it is introduced into the vagina and applied directly to the neck of the uterus.* In a criminal case of the former kind, in 1837, he succeeded in detecting the poison by acting on the contents of the stomach with alcohol, concentrating the tincture, re-dissolving in a small quantity of boiling water, and adding the sub-acetate of lead, by which the very characteristic red color was immediately occasioned. It is, however, mentioned prominently by this authority that there are other yellow coloring matters which, with alkalies, present analogous appearances; but that, to any one who takes the trouble of comparing the effect in a series of experiments on such articles as turmeric, rhubarb, calumba root, the Mishmee teeta, &c., no difficulty will arise in his decision, if plumbago be present. Rhubarb, perhaps, approaches nearer than any other; but, with caustic magnesia, rhubarb gives a yellowish brown, while plumbago gives a crimson sediment. In illustration of the delicacy of this process, he adds that five grains of powdered plumbago were mixed with eight ounces of putrid blood and filth from the dissecting-room; dilute sulphuric acid was added, and the mixture warmed and strained through cloth. A nearly

^{*} It will be seen, in the remarks on Criminal Abortion, that this root is frequently used with far more violence than is here described.

colorless solution was obtained, this was treated with ether, and the ethereal solution separated; on mixing this with a weak solution of potash in water, the characteristic crimson color at once appeared.

The records contain two instances in which Men were poisoned by the Lall Chitra. In May, 1843, a woman living in Howrah confessed that, being on ill terms with her husband, she pounded a small piece of reddish-colored root which had been given to her and, mixing it with milk, gave it to her husband, who was taken ill in about two hours after swallowing it, and died after having vomited ten times, and being purged once. The Civil Assistant Surgeon observed a slight flush of inflammation on the surfaces of the stomach and small intestines. The stomach was preserved unopened, but the mucous membrane of the intestine continous with it was observed to be highly injected. On opening the stomach, Dr. Mouat found a small quantity of fluid of a deep coffee-color with a few grains of half-digested rice. The surface of the organ was much corrugated, and covered with small patches of inflammatory blush. On analysing the contents of the stomach, some of the matter vomited, and the remains of the food said to have been taken by the deceased, Dr. Mouat could detect no trace of any mineral poison, but obtained distinct evidence of the characteristic appearance produced by the Lall Chitra.

In October, 1853, the Civil Assistant Surgeon of Azimghur forwarded the stomach, with its contents, of a man supposed to have died by poison, together with a substance found near the body, and supposed by the Police to be poison. The stomach was received by Dr. Mouat in an advanced state of decomposition, but still exhibited traces of inflammation, and was found to contain Lall Chitra. The substance sent was also found to be a portion of the root of the Plumbago Rosea. Further reference of the use of this poison will be found under the head of "Criminal Abortion.".

EMPLOYMENT OF POISONS BY NATIVE PRACTITIONERS.

There is every reason to believe that the ignorant native doctors in this country by no means unfrequently administer poisonous drugs, in the treatment of disease, with so much indiscretion and recklessness as to cause death. As such cases occasionally, though rarely, are found to call for medico-legal investigation,* a brief allusion to the chief of the deadly remedies employed by these Kobirajira and Hukeems will not be out of place here.

CUPRI SULPHAS. -- Tutiya, H., Tutt'ha, (Fleming.) -- Is mentioned in the Shastras as one of the mineral poisons which may be used, in a diluted form, as medicines. A case came under my notice, about four years since, in which there was reason to believe that death had been accelerated by rather small doses of Sulphate of Copper injudiciously prescribed. The body of an unhealthy-looking native who had been under treatment for bowel complaint by a kobiraj, and had died rather suddenly, was brought to me for examination. I could only discover marked signs of irritation in the mucous membrane of the stomach. This organ was nearly empty, as there had, doubtless, been some vomiting. I could not detect a trace of copper in its scanty contents, but one or two shreds of vegetable matter retained a deep green color, not usually found after the process of digestion has commenced. Two or three pills, containing very coarsely

^{*} In October, 1853, Dr. Mouat received for chemical examination the stomach of a native who had, by mistake, swallowed a fluid medicine prescribed by a hukeem for external use, in consequence of which he died, the same evening with symptoms of irritant poisoning. The Chemical Examiner failed to discover any poison recognisable by chemical tests in the inflamed stomach, and considered that the irritant matter had probably been ejected by vomiting. He very justly added that the case was evidently accidental, and that no criminality could attach to the hukeem, as such accidents might happen, and have happened, in the hands of careful, conscientious, European practitioners.

pounded Sulphate of Copper, mixed with some green succulent vegetable matter, were sent in, as specimens of the medicine which deceased had taken. It appeared probable that none of the pills had contained more than a grain and a half or two grains of the Sulphate; but, although a large dose of this salt may, of course, be given as an emetic, it is probable that doses of one or two grains, coarsely powdered, repeated frequently, would cause death, by gastric and intestinal irritation, especially if prescribed when the mucous membrane of the intestinal canal is in a state of vascular excitement. The case was, I believe, viewed upon my report as one of misadventure. A rather doubtful case of poisoning by some salt of copper occurred in February, 1854. Civil Assistant Surgeon of Umballah forwarded two pills for examination. It was stated that one pill of the same kind had caused the death of an individual in that district, who had received it from a "Kahar" on the road. The native doctor who examined the body stated that he was unable to detect any marks of poison, and that death had occurred by other and natural causes; his report, however, was not relied upon. Dr. Macnamara found a small quantity of Copper in each of the pills.

In 1841, Dr. O'Shaughnessy mentioned that cases of poisoning by Sulphate of Copper had occurred in Calcutta. That gentleman discovered that one of three suspicious powders forwarded to him for examination by the Civil Surgeon of Hooghly was Acetate of Copper (Zangar and Pitrai, H. Pitalata, S. Fleming.)*

The BISH BOREE, or Bish Baree, appears to be almost universally resorted to, by the Bengalee practitioners, in cases of

^{*} I find it mentioned in one of the Nizamut Adawlut Reports N. W. P. that the water in which a copper pice has been boiled is considered by the natives of that part of the country as a useful emetic. It is almost needless to say that, if tolerably pure water be used, it can receive no metallic admixture in this process.

fever, where the symptoms do not yield readily to milder remedies.

In an interesting paper on this subject,* Baboo C. C. Moitre, Sub-Assistant Surgeon, Nattore, mentions that, although it is a matter of great difficulty to ascertain the composition of Bish Baree, it appears, from his inquiries, that the following substances are its principal ingredients:— White Arsenic, Sulphuret of Arsenic, Sulphur, Mercury, and the Seeds of the Croton Tiglium pounded. There are, he adds, various forms of Bish Baree, some containing the mildest vegetable poisons, others the more powerful. Snake Poison† is said to be an ingredient, but the quantity used cannot be

^{*} Bengal Hurkaru Medical and Scientific Gazette, May 22nd, 1852.

[†] European Physicians residing in the East have, in several instances, allowed their scientific ardour to outrun their discretion in experiments upon Snake poison, as an internal remedy. Meade, as cited by Dr. Taylor, described the viper poison as having a sharp burning taste. When a drop, undiluted, was placed on the tongue, the organ became swollen, and there was a sensation of soreness which remained two or three days. Russell applied one drop of the poison of the cobra to his tongue and found it tasteless. It is commonly said that it may be swallowed with impunity, but Dr. Hering found, while residing at Surinam, that, on taking even small doses of it, much diluted with water, very preceptible effects were produced; such as pains throughout the body, abundant secretion of mucus from the nose and œsophagus, and diarrhœa (Treatise on Poisons). A recent investigator, Dr. Jetio, asserts that snake poison, though tasteless, is not harmless when taken into the stomach. Dr. Honigberger appears to be a believer in the medicinal virtue of serpent poison. He tells us that, on one occasion, he prepared it from the virus of the Aspis Naja; another time, he procured it from that of the Aspidoclonion; from whichever obtained, there appeared to him to be little difference in the effects produced. He prepares it by expressing a drop of the limpid fluid from the poison gland of a living snake, cunningly secured, upon a small lump of sugar; this is instantly deposited in a porcelain mortar and subjected to trituration with a few drops of spirit. The powder, when shaken up in a drachm of proof spirit, is fit for use. It is to be kept from the light, and to be well shaken up before it is administered. One drop constitutes a dose. Even in this homœopathic quantity, the remedy appears to have been worse than the disease.- "Rumbling in the bowels,"-for which it is alone recommended.

ascertained with certainty. Musk is not unfrequently used; the whole of these ingredients are not always compounded into the same mass; any two or three of these form a boree.

The Baboo regards the Bish Baree as a powerful excitant, determining blood to the head, and increasing the frequency and fulness of the pulse, acting on the pulmonary organs as an irritant, producing at first a dry cough and subsequently accumulation of mucus in the bronchial tubes. It also acts as a powerful irritant on the abdominal organs,vomiting, diarrhœa and hiccup being the usual effects of its exhibition. It exercises a similar influence on the bladder and kidneys, inducing strangury and diminishing the quantity of the urine. It can, sometimes, give rise to retention of urine. Still, singularly enough, the Baboo considers that, when due caution is observed to prescribe this medicine only in cases "where there are no local complications existing"-its effect being more or less that of a stimulant irritant upon almost all the organs of the body-"it is a very useful agent ;-Ammonia is not half so efficacious !"

Baboo Isserchunder Gangooly, now of Howrah, has also written a brief account of the Bish Boree, which he says is a generic term comprising a large group of medicinal preparations, the chief of which is Aconite; though many metallic substances enter into their composition, the principal of which are Mercury and Arsenic. This gentleman also considers that there are some of the Rusauns which are much more powerful stimulants than any which are to be found in our Pharmacopæia. The chief of these are Baboo Gopaul Bose's Nas; Kalanul; Soochika Pills; Jurangkoosh Pills; and the Rambawn Pill. Some of these contain Arsenic, Poison of the Black Cobra, Opium, and Sulphate of Copper; and others Aconite, Realgar, &c.*

^{*} Bengal Hurkaru Medical and Scientific Gazette, for 7th February and 18th December 1852,

I have only once had an imperfect opportunity of noticing the ill effects of this remedy,-in the person of a Sherishtadar of high caste, whom I visited in the last stage of fever, although he obstinately refused to submit to treatment by our medicines. I found him supported by pillows, speaking very rapidly and incoherently, but in a low and broken voice; his eyes were sunken, but inflamed and ferretty, his skin dry and tight, but not remarkably hot; his tongue parched, shrunken and vividly red at the edges, evidencing severe gastric or intestinal irritation. The atmosphere of the room in which he lay was intensely hot and close, and loaded with the odour of musk. The brahmin who sat beside him interdicted all interference with his case, except the administration of a dose of quinine, which he, however, instantly spat out. He died in a few hours. My friend Mr. Herbert Baillie, of Hooghly, informs me that he has succeeded in saving more than one patient poisoned by the Bish boree or Rusaun Previous to death, the state of excitement treatment. described above gives place to collapse. Having been called to patients in this latter stage, he has succeeded in arousing the vital powers by the prompt use of Ammonia and other diffusible stimulants.

Cases of poisoning by those medicinal preparations of Mercury which are in common use among the inhabitants of India,—as by the Red Sulphuret (factitious cinnabar) Hingool (vermillion) Shengerf H. (Fleming,) "Darshikna," similar to our corrosive sublimate (Honigberger) and by Rascapúr, a mixture of calomel and corrosive sublimate,*—are

^{*} A case of supposed poisoning by Rascapúr or Ruskapoor was tried Upcountry, a few years since. It deserves special attention, as involving a caution against reliance upon the statements of inexperienced chemists in questions of life and death. Gouree was tried for the murder of Musst. Wazeerun, a prostitute, by poison. It appeared that the prisoner, who had an illicit intimacy with the deceased, visited her on a certain day, enticed her out, and gave her sweetmeats. After eating these, the woman began to complain of having cramp in her limbs and tongue, and was purged. She was taken to the

not likely to call very frequently for the opinion of the medical witness. An interesting case of poisoning in a

Cotwalee, where she deposed on oath that Gouree, that morning, gave her something in sheereenee, and that her feet and arms were cramped and her stomach was griped. When he gave it to her, he coaxed her: and said that she was not to give any to her female companion. He gave her two pieces (do danah) and some broken pieces of sheereenee. She died shortly after her admission to the Dispensary. The Sub-Assistant Surgeon is reported to have given the following extraordinary chemical evidence (in the absence of the Civil Surgeon.) "The deceased was, on her arrival, in a state of insensibility. Hearing that she was supposed to have taken poison, he extracted the contents of her stomach by the stomach-pump. He took a small portion of the contents, and, having mixed a small quantity of nitric acid and of carbonate of potass with it [!], boiled the whole together, then filtered; and, after filtering, boiled the liquid to the consistence of a syrup; that he then applied hydro-sulphuret of ammonia to the syrup which immediately precipitated a black substance, which was the sulphuret of mercury." [Not a single word is given in substantiation of this assertion];-"that, from this test, it was clear that corrosive sublimate had been administered; that he also submitted the syrup to another test, viz., hydriodate of potass, which should have occasioned a red precipitate, but it did not; that this was probably owing to the substance which was administered being Ruskapoor, which is not pure corrosive sublimate, being mixed with calomel; that he also submitted the syrup to other tests, viz., ammoniaco nitrate of silver, ammoniaco sulphate of copper, and protomuriate of tin; but that the result in all was not satisfactory and from the same cause." That the woman came to her senses after the stomach-pump was used, and spoke a little to an old woman who was in attendance on her, and then relapsed into her former state in which she continued up to her death, which took place about an hour after her admission into the Dispensary; that he did not ask her any questions during the interval; that he (this was at the conclusion of his deposition) did ask her some questions during the interval; and, in answer, she stated that she felt intense burning pain in her belly and cramp of all the members of her body; that these were the ordinary consequences of taking Ruskapoor; that he examined the body after death in company with the Civil Surgeon; that there was a slight degree of vascularity on the internal coat of the stomach; that he could not say if the other organs were in a healthy state, as he went away before the Civil Surgeon had concluded the examination of the body; that, in his opinion, deceased died from Ruskapoor having been given her, this is an impure native preparation of corrosive sublimate; that purging is a common consequence of corrosive sublimate having been administered; that, if corrosive sublimate be given in a pure state, the effects would be apparent in five or six minutes; but, if given in an impure state, in a longer time. That there would have been a greater degree of redness of the stomach, if the corrosive sublimate had been pure; that he could form no opinion

native by Corrosive Sublimate, which had been used for preserving the skins of birds, is recorded by Mr. J. Murray.*

The utter rashness with which the native practitioners carry on their (in itself not ill-devised) plan of Mercurial

as to the quantity of Ruskapoor which must have been administered, though he can safely state that more was administered than would have been as a medicine; that a quantity of Ruskapoor sufficient to cause death might be administered in a little sweetmeat; and that, amongst the contents of the stomach, some cream-like substance was observed, that might have been sweetmeat (pera). The jury acquitted. The sessions judge convicted. That the deceased died from having taken Ruskapoor, there could, he thought, be no doubt, on the evidence of the Sub-Assistant Surgeon. It was true that all the tests applied were not satisfactory in their results; but a sufficient cause for their not being so was assigned. The result, however, of one test was most satisfactory, and the usual symptoms consequent on Ruskapoor being administered, viz., purging, cramps, a burning sensation in the stomach, and a redness of the coats of the stomach, were observed. The strength of the general evidence, as showing that the woman was destroyed by poison administered by the prisoner, was then insisted upon. The judge believed that the jury acquitted,—as they had not confidence in chemical tests. He recommended that the prisoner should be sentenced to death. The judges of the Superior Court considered the crime to be proved against the prisoner by the evidence in the case, and the traces of poison found in the analysis of the contents of the stomach of deceased.

It cannot be doubted for a moment that the general facts adduced in the trial fully proved that the woman's death was caused by poison. It is equally certain, however, that the chemical evidence (as it stands in the printed report) adds not the smallest imaginable weight to those facts. It proves, in short, nothing whatever. The mere fact of a black precipitate resulting from the addition of hydro-sulphuret of ammonia to a portion of the contents of the stomach-standing alone-is not proof that the suspected fluid contained corrosive sublimate,-(this being the least reliable test for the poison in question*) -especially when no reason is given us for believing that the metal was subsequently obtained from this precipitate. This may, possibly, have been done, and then the experiment would have been conclusive; but, as it would appear that the whole chemical process is given in the report, and as,judging from the fact of the operator's having expected to detect corrosive sublimate in a fluid by treating it first with nitric acid and carbonate of potass and afterwards with ammonio-nitrate of silver, and ammonio-sulphate of copper,-it is evident that his chemical knowledge was, to say the least, confused, it may fairly be considered as altogether doubtful whether mercury was discovered, or was present in the stomach.

^{*} Transactions of the Medical and Physical Society of Bombay, vol. i., p. 322.

* Taylor on Poisons, p. 410.

Fumigation in cases of syphilis is undoubtedly such as, in many cases, might call for the interference of the law; still it is probably not, in reality, more criminal than the wholesale system of salivation which obtained in some of our own syphilis wards twenty years ago. Several of the more recent of the Chemical Examiners' Reports mention the detection of traces of mercurial preparations in suspected fluids, but reveal nothing which could be regarded as evidence of poisoning by Corrosive Sublimate.

ADMINISTRATION OF MIXED POISONS.

A considerable number of facts from time to time transpire indicative of the prevalence of the employment, among the natives, of various poisons, -animal and vegetable, irritant and narcotic,-compounded together for purposes of murder or self-destruction. A case strongly pointing to this practice occurred to Mr. Herbert Baillie, a short time since. man was brought to the Hooghly Imambarrah with several incised wounds, apparently self-inflicted, all on the left side of the neck and chest. He appeared to be under the influence of some powerful narcotic, and gradually sank, without having shown any symptoms of irritant poisoning. Upon post mortem examination, however, a large quantity of white arsenic was discovered in the stomach. Although no other poison was discoverable, it can scarcely be doubted that the dose of arsenic had been qualified by a large addition of some narcotic, probably Dhatoora.

Dr. Morehead, of Bombay, has recorded the case of a Hindu Goldsmith who was found comatose in the public street. When admitted, his pupils were dilated, the breathing was natural, the pulse frequent; there was no appearance of injury or disease. An emetic acted readily, and he became sensible. He vomited several times during the day, and passed two or three motions of gelatinous-looking

mucus. Towards evening, the pulse became very feeble, the breathing hurried, the thirst and anxiety considerable, with considerable retching. He died 23 hours after admission. He merely stated that he had eaten some sweetmeats the night before he was brought to hospital. Arsenious acid was found upon analysis of the contents of the stomach. The traces of the irritant action of this poison were very distinctly marked in the stomach, small intestines, and cœcum. Dr. Morehead adds that, upon admission to the hospital, this case was viewed as one of narcotic poisoning, and was treated as such. Subsequently, its nature was sufficiently evident. While the narcotic symptoms were present, his attention was attracted by the circumstance that there was a fixed frown on the countenance, an expression of suffering not usual in simple narcotism, and to which probably more importance as a diagnostic sign should have been attached.* This case has been cited by Dr. Taylor+ in illustration of the opinion that narcotism may result from the introduction of arsenic into the system. It will, however, be observed, that the head-symptoms were present only at an early stage of the case; and that, for many hours previous to death, the symptoms were those of irritant poisoning. Doubtless the arsenic was taken combined with some narcotic.

In 1842, Dr. O'Shaughnessy remarked that, "In India, compounds of acrid [poisons] and narcotics are often employed, by which the vomiting is checked while the poison is doing its work."

Cases in which the symptoms led strongly to a belief that the poison administered was a mixture of *Aconite and Dhatoora*, will be found in the records of the Chemical Examiners; but, as this was not absolutely proved by analysis, their

^{*} Trans. of the Med. and Physical Society of Bombay, for 1845-6, p. 100.

[†] Medical Jurisprudence, 5th Ed., p. 9.

details need not be given here. Portions of Aconite and Nux Vomica were found among several substances detected upon the person of a man, who attempted to destroy himself at Allahabad with a wish to bring discredit upon his relations.

Mr. H. Baillie of Hooghly, has kindly given me the case of a patient whom he treated in March, 1854, suffering from the effects of a mixed poison, the chief constituent of which appears to have been Hellebore. The patient, a young man, was found in the street, apparently in the collapse stage of The skin was cold and clammy, that of the fingers was shrivelled, and the nails were of a bluish hue. He was constantly purged and vomited incessantly. It was observed that the vomiting differed from that of cholera, inasmuch as it was far from free, and the ejected matter was a thick tenacious mucus. He seemed to champ with his mouth, which was covered with this ropy mucus. He said that it was vain to think of saving him, as he had a few hours previously taken poison-Meeta-Bish* which he had procured from a native druggist. He added that, for two hours after taking the poison, he perceived no uneasiness: he then felt a burning sensation in the throat and stomach, which was shortly followed by violent efforts to retch, which had increased in severity up to that time. The pulse was scarcely perceptible, the tongue had a white dry fur down its centre, its tip and edges appeared raw and red. He complained of a sense of constriction about the fauces and intense thirst, all attempts to satisfy which immediately brought on retching. There was some epigastric tenderness on pressure. His countenance had a remarkably odd, almost comical expression, from the first, the eyelids were nearly

^{*} This is the common designation of Aconite, but he may have been mistaken in the name, or may have been supplied with the root of White Hellebore instead,

closed, and he seemed to be peeping through the lashes. He recovered slowly under the use of counter-irritants and moderate stimulants. A portion of some vegetable substance was found in the corner of his chudder. On being sent to Dr. Falconer, this was found to belong to a species of Veratrum. The man stated that, he had mixed some of it with other poison received from the native dealer, and had taken both together.

As Mr. Baillie observes, the symptoms closely resembled those of poisoning by Hellebore.

RARE CASES OF POISONING.

The Records of the Chemical Examiner's Office contain various interesting details of cases in which poisons, not commonly used in India with criminal intent, were employed.

Oxalic Acid.—Two remarkable instances of death from this poison are preserved.

In June, 1852, Mr. Siddons received from the Calcutta Police a bottle, said to contain the stomach and other viscera of a native woman, supposed to have been poisoned. Upon analysis of the contents, he found a very large quantity of Oxalic Acid, quite sufficient to produce death. In a note appended to the memorandum of his deposition, Mr. Siddons observed—"this is a very remarkable case. The woman was a dhoby's wife, and these people use oxalate of potash to removed iron stains: this shows the march of intellect, and with it crime."

I am indebted to Mr. Burgess, of Howrah, for having obtained for me some interesting information on this point. He finds, by inquiry of several dhobies, that they generally endeavour to remove iron moulds by a mixture of lime juice and common salt. When the repeated use of this fails, they resort to Oxalic Acid, which always succeeds, and which they call the "burrah fit duwah." He had just before seen a phial of this acid in the possession of one of them.

In September, 1853, a cook in the service of one of the apothecaries, attached to the artillery division, Mooltan, was found dead in the cook-room, with his face to the wall and his right hand clasped over his stomach. On inspection, no external marks of violence were discovered. The body was that of a stout able man. The fingers and mouth had both been convulsed. The stomach was contracted strongly from spasm. Its contents were only a few grains of dal. The mucous surface of the lower arch was greatly and recently inflamed. Both cerebrum and cerebellum were greatly congested; there was some slight effusion of serum beneath the pia-mater. No actual effusion of blood had occurred. The body presented no other unnatural appearances. The medical officer believed that the congestion of the brain was fully sufficient to produce death, and that the sudden inflammation of the stomach was certainly due to the presence of an acrid substance, on which account, he advised that it should be sent to the Chemical Examiner. Upon analysis, Dr. Mouat detected the presence of a very minute quantity of Oxalic Acid. Dr. Mouat suggested that, as the deceased was the servant of an assistant apothecary, he may have had access to the medicines in the hospital dispensary, and have taken the Oxalic Acid in mistake for Epsom salts, should there have been any of the former drug in store.*

The Chemical Examiner added that this is a very rare form of poisoning in India, this being the second case that has come within his knowledge in the last fourteen years.

SULPHATE OF ZINC.—According to Dr. O'Shaughnessy, cases of poisoning by this salt have occurred in Calcutta, but I cannot discover the records of any.

SULPHURIC ACID, Gundac-ca-Atr H. (Fleming.)—In May, 1853, a native at Pilibhut, near Bareilly, while in the act

^{*} It is, however, difficult to perceive what purpose Oxalic Acid could serve in the dispensary of a Military hospital.

of eating some sweetmeats, which had been proferred to him, complained of feeling a peculiar burning sensation in the back of his throat. He went back to the house where he had received the edible, and accused the man of having poisoned him. He died in four hours, having exhibited all the signs of irritant poisoning. On examing a portion of the sweetmeat, Dr. Mouat found that it contained a considerable quantity of Sulphuric Acid. He added that this was the first instance of poisoning by Sulphuric Acid that he had ever heard of in India.

NERIUM ODORUM.—Vern. Kurrubee. Hind (O'Shaughnessy).—Also Kaner, Kunnar, or Kunere.

In 1843, a very interesting case of fatal poisoning by the root of the Nerium, which abounds in gardens all over India, was sent to the Chemical Examiner by Dr. A. Greig, of Seetapore. On the 9th March, 1840, at about 11 o'clock A. M., a man, aged about 50, was brought to Dr. Greig on a charpoy. He was apparently senseless and unable to answer questions. The pulse was preternaturally slow and soft, but regular, with an inclination to stop. On inquiry, it was found that he had eaten some of the root of the Kaner (Nerium Odorum) mixed with some mustard oil, about an hour and a half before, with the intention of destroying himself, on account of some domestic quarrel. He was stated to have vomited a considerable quantity of the mixture soon after taking it. He was ordered to be moved about, and draughts of warm water were given to produce vomiting, until the arrival of an emetic from the hospital. Free vomiting was induced by these means. The matter ejected was of a yellow colour and oily consistence. Under this treatment, he revived considerably. He never admitted that he felt any pain in the region of the stomach. Some hours afterwards (in the evening), he relapsed into a state of insensibility. He was immediately taken to the hospital and treated with stimulants and frictions. A mustard poultice was applied

to the epigastrium, and an enema of warm water given. He improved during the night; and, on the morning of the 10th, Dr. Greig found him able to sit up. His pulse was natural, he expressed himself quite well, and wished to have some food. About two hours afterwards, however, he was reported to have died suddenly, after making some exertion. body was examined five hours after death. There was no emaciation. The eyes were deeply sunk: the muscles were hard, contracted, and moved with difficulty. The heart was found of the natural size, its cavities, the ventricles especially, were filled with black fluid blood. The lungs were natural. The stomach contained a quantity of a dark yellowish fluid, having somewhat the odour of tamarind. On its internal surface, near the cardiac and pyloric orifices posteriorly, were found small patches studded with red points, and one or two slight abrasions of the mucous membrane. The liver appeared somewhat distended, the spleen and intestines were natural. It was ascertained that he had procured the bark of the root from Dr. Greig's own garden, and had beaten it to powder before mixing it with oil. The quantity taken could not be correctly ascertained, but must have been at least two or three ounces, judging from the extent of the cut surface of the root of the tree from which he obtained it. Dr. Greig considered that the poison operated fatally by its directly depressing influence upon the nervous system.

A remarkable case of poisoning by Oleander was tried at Cawnpore early in the present year. A woman, Deonee, was charged with the wilful murder of her husband aided by Dhowkalla, her paramour. The prisoner confessed that she had purchased what she called Opium, and that it was given to her husband in his food. The Civil Surgeon positively affirmed that the deceased died from the effects of some strong irritant poison not of Opium, its effects being not at all similar to those produced by narcotics, and that

it was, most probably, a vegetable poison, which he believed, from the appearance of a small portion which adhered to the Chukkee, or grinding-stone, to be the bark of the plant known as Kunere a variety of the Oleander family, which he stated are included botanically under the class 'Nerium' of which there are five different species, all natives of warm latitudes, and several very common in India; the whole plant is thought to be poisonous, but especially the bark of the roots. It was proved that the substance pounded on the stone by the male prisoner was of a black colour, and in size about a finger's length and breadth. Further that the powdered drug was replaced in the rag in which it was brought from market, and was, in the victim's absence, mixed with the rice and milk which his wife had provided for his supper. When the man had eaten of this keer, he complained of its bitter taste, to remove which he chewed some sugar cane and a carrot, and was seized with violent purging and vomiting, and died during the night. The female prisoner threw away what remained of the poisoned food, washing the dishes in which it had been cooked. The medical officer expressed an opinion that the substance administered was not Arsenic. He had observed similar symptoms in a previous case of poisoning by Kunere. Both prisoners were sentenced to transportation for life.*

Terminalia Bellerica.—(Belleric Myrobalon).—Vern. Beheyra Hind. Bahira Sans.—O'Shaughnessy describes the tree as growing in the mountainous parts of India; and as common in Mysore. "Drupe oval, somewhat five-angled, size, when dry, of a gall nut—colour dirty brown; size of a nutmeg and fleshy, when fresh, with a grey silky down, very astringent; kernels eaten and deemed intoxicating; bark abounds in gum." Ainslie reckons the fruit

^{*} Nizamut Adawlut Reports, N. W. P., 13th March 1855, p. 345.

as astringent, tonic, and attenuant. Dose one or two direms." The only cases of poisoning by the Bahira have been recorded by Mr. C. E. Raddock, Sub-Assistant Surgeon, in charge Malwa Bheel Corps. Three boys, from five to nine years of age, picked up and ate some of the dry nuts near the house of a Chumar who had brought them from the jungles for the purpose of colouring leather. Two of these boys become drowsy, complained of headache and sickness at stomach, and vomited freely a thick white frothy mucus. The third, a rather weakly boy of seven, was first seen by Mr. Raddock on the following morning. He was in his father's lap and appeared as if asleep; the legs and arms were relaxed and bent; eyes closed, breathing soft. There was total insensibility; shaking and calling did not make him stir in the least, or answer. The pulse was scarcely perceptible, action of the heart frequent and weak. Body of natural warmth, legs cold, eyes rather glistening, pupils fixed, neither contracted nor dilated, jaws closed, and only to be opened by much force. This child had eaten the largest quantity of kernels-between 20 and 30. At the time, or subsequently, nothing was complained of. He played all day and at night before going to bed; went to sleep, and was not noticed until next morning, when he was found insensible and was supposed to be dead. With difficulty he was made to vomit three or four times, the eyes opened with a heavy dull expression and closed again; though he relapsed, his condition was now improved, the insensibility was not so deep, and his hand was moved to his throat. Small quantities of strong black tea were administered. About 10 A. M. he became sensible, opened his eyes and answered when spoken to; towards the afternoon he walked about and improved greatly. At 5 in the evening he was sensible but drowsy, pulse small and rapid, complained of being giddy, had vomited twice since morning, with relief to

the symptoms—His recovery was speedy. Mr. Raddock justly infers from these cases, that the *Bahira* is a mild narcotic poison. In the last mentioned case, he is convinced that it would have proved fatal, had the stomach pump not been used or had emetics failed. He adds that, in two of the boys who ate about the same quantity, no effects were produced till about eight hours after, and the poison was got rid of by vomiting; In the third, who ate the most, no effects were produced in 12 hours, at least, no vomiting resulted, and, during sleep, insensibility came on.*

Dr. H. Cleghorn, of Madras, has obliged me with the following notes—

"Euphorbia.—There are several species of Euphorbia, as the E. Neriifolia, Antiquorum, Acaulis, and others which abound in a milky caustic juice—this produces a blister, when rubbed on the integuments, and serious inflammation if dropped into the eye—several cases have happened within my knowledge, where the sight has been endangered from this cause.

"Hura Crepitans—the Sand-Box Tree, introduced from the West Indies, is not uncommon at the Presidency towns—the seeds are violent dangerous purgatives, and the fruit is therefore unsafe in the hands of children, who are not unfrequently seen playing about with it.

"There are several species of Arum, requiring examination, of a suspicious, if not of a poisonous nature—on one occasion five Mysore villagers were poisoned by partaking of the acrid rhizomes of an Arum, imperfect specimens of which I sent to Dr. Wight for identification, but he could not distinguish the species. If the roots had been boiled, the fatal results would not have occurred,—(as is well known) the deleterious property is easily driven off by heat."

^{*} Indian Annals of Medical Science, April 1855, p. 709.

POUNDED GLASS.—Dr. R. Haines has published an interesting case in which a Mahratta Artist of Bombay, having been seized in the act of committing a robbery, managed to break up and swallow a quantity of bottle glass. The remainder of the bottle was produced—a reddish brown quart bottle, such as Rhenish wine is imported in.

He merely complained of a little pricking sensation in the throat and stomach. He was made to vomit, but no glass was ejected. He took castor oil, the stools were yellow and loose, not bloody. At the bottom of the vessel were found a number of pieces of thin bottle glass, precisely corresponding with the remains of the bottle shown by the policeman. There were about twenty fragments of various sizes, the largest an inch long by a quarter of an inch broad, the smallest as large as a grain of rice. There was considerable tenderness at the epigastrium which continued more or less until his discharge on the 8th day.

Mr. Haines remarks that cases of this kind are by no means infrequent in that part of India, the idea of the poisonous nature of pounded glass being even more generally received among the natives than in Europe. It is generally taken for the purpose of committing suicide. One or two other such cases have come under his observation since the one above mentioned. Where such large fragments, slender and sharp-pointed, have been swallowed, some degree of danger, he thinks, must always exist of the pieces sticking crosswise in some portion of the intestinal tube, and producing ulceration, which might lead to the laying open either of a large vessel or of the cavity of the peritoneum. Hence, he insists, it will always be advisable to keep the patient under observation for ten or twelve days, by which time symptoms of such ulceration, if it existed, would manifest themselves.

It is very singular, however, with how much impunity fragments of glass have frequently been swallowed. It

seems to have been a rather common practice among mountebanks and drunkards, in the last century, to eat the glass after drinking its contents. Sound teeth and a strong jaw appear generally to have afforded these idiots an impunity which they scarcely deserved.*

It frequently happens, in India, that infants swallow the piece of Sponge which is tied at the mouth of their nursing bottles. The accident generally causes much alarm; but, in two cases which I have seen, the foreign body has been passed in a few hours without causing any inconvenience.

ACCIDENTAL POISONING.

COPPER.—Cooking vessels of this metal being universally employed by Europeans and by most East Indian and Mussulmaun families throughout India, (except by a few, who use earthern pots for greater security), cases of poisoning by Copper not unfrequently occur, where, by the carelessness of servants, the usual precaution of having these vessels newly tinned every month is not observed. In such cases, the salt, or acid, or oily matter contained in rich soups, stews or curries, which require long boiling, acts chemically upon the exposed copper surface, and becomes highly poisonous. It is now well understood that keeping the exposed surface of the copper perfectly bright and clean is no safeguard against these impregnations. I am acquainted with a family among whom very severe cases of poisoning from this cause, fortunately not terminating fatally, have occurred twice, within the last six years.+

^{*} It was believed that the "Powder of Succession" of the Italian poisoners was Diamond Dust. It is probable, however, that its compounders used less expensive substances of far greater activity.

[†] In this country, where copper vessels are used so very extensively, the following conclusions, appended by Dr. Corrigan to some cases of Slow

Carbonic Acid.—It appears probable that the incautious manner in which the natives burn charcoal in close ill-ventilated rooms must, not unfrequently, lead to fatal results, at least where the practice is followed in brick houses—the smaller huts are rarely sufficiently air-tight to prevent the escape of the gas. Mr. Baillie, of Hooghly, has mentioned to me a case of this kind which recently occurred in his practice. He was in attendance upon the infant of a wealthy Hindu suffering from an ordinary attack of fever. After the usual symptoms had been abated, he was surprised to find that the child always appeared to be drowsy. On one

Poisoning by Copper published last year in the Dublin Hospital Gazette, may be found valuable .- " 1st. They show us that copper, or its carbonate, will act as a slow poison by absorption, undermining the constitution, producing emaciation, catarrh, and loss of strength, and leaving the system in a state little capable of resisting the ordinary exciting causes of many diseases .-2nd. The symptoms, although not acute, are well-marked, -emaciation, a cachectic appearance, loss of muscular strength, colick pains, cough without physical signs to account for it, and the peculiar characteristic sign of retraction of the gums, with a purple, not a blue edge.-3rd. In none of the cases, although there was muscular debility, was there either acute colic with constipation, or the local paralysis that so often results from the poison of lead, and the colour of the gums was quite distinct from that produced by lead .- 4th. Copper, in slow poisoning, seems to exert its deleterious influence mainly on the nutritive functions, or assimilation, including absorption and secretion; while lead acts energetically on the nervous system of both organic and animal life, exhibited in its action on the former by the obstinate constipation, and on the latter by the violent pains of lead colic, and by the production of its peculiar paralysis .- 5th. The knowledge that copper, or its carbonate, is capable of acting as a slow poison will be useful, as it may lead us to discover the nature of some, at first sight, anomalous diseases, that might otherwise elude our diagnosis. The tint of colour produced on the gums, whether by copper or lead, remains a very long time. It had not disappeared from any of the cases narrated, as long as they were under my observation. In the case of a policeman, who has been very lately in the Whitworth Hospital, the blue colour produced by lead was very distinct. He had been in the police force two years. Previously to his becoming a policeman, he had been a painter."

or two occasions, he found that the atmosphere of the small brick room in which the child lay was unusually close—and that the child appeared to revive when the windows were opened. On about the third day, he found the child lying upon the lap of a nurse, who was seated on the ground close to a pan of charcoal, with the fumes of which the room was almost unsupportably redolent. The infant lay torpid, as usual—but soon revived and did well in a clear atmosphere. It subsequently appeared that the child had been thus exposed to the influence of the poison for several days.

During the rains, charcoal pans are much used in European houses for drying towels, &c., which are spread on a bamboo frame over the pan. I have found my own children sitting round a carbonic acid manufactory of this kind, when the air of a lofty room had become very perceptibly vitiated by carbonic acid.

It was reported in the Calcutta papers in May last that, several deaths having recently occurred by persons descending into wells for lotas which had been dropped, the Chief Magistrate, at the recommendation of the Coroner, had ordered a notice to be given by beat of tomtom throughout the native part of the town, warning the people of the danger of going down into wells without taking the precaution of ascertaining whether a light will burn near the surface of the water. It would seem that this mode of warning is an old custom which had fallen into disuse.

TARTARIZED ANTIMONY.—I lately heard of an instance in which a family residing near Calcutta had suffered greatly from the stupidity of a native servant, who added a quantity of this preparation, which he found lying about, to a curry, mistaking it for salt!

HYDRATED OXIDE OF LEAD.—The practice of keeping drinking water in long-necked leaden bottles, which do not admit of being properly cleaned out, most undoubtedly leads

to much severe illness in this country. Filtered rain water of great purity, almost perfectly free from saline matter, being commonly in use, the chemical action of this fluid upon the containing leaden vessels must be incessant. Some years since, having to prepare some medicine at a patient's house, I called for water, which was brought in a leaden surai. Upon pouring it out, I was startled to find it perfectly milky from admixture, as was afterwards proved, with a very large quantity of Oxide of Lead. It was found that the water (about half a pint) had been standing in the vessel for nearly a week. Had the invalid called for this draught in the night, it would, in all probability, have destroyed life.

Some months back, I was consulted by a gentleman for a weakness in one of his feet. On endeavoring to plant the foot firmly on the ground, one of the muscles of the sole. probably the adductor pollicis, appeared to fail suddenly; he was, therefore, compelled to rest in walking on the heel and outer side of the foot. This had come on gradually without any hurt, that he was aware of, or other apparent cause. Being almost at a loss to account for this, I inquired whether his servants kept his drinking water in leaden vessels. He at once replied that he had purchased one at Moulmein, and had used it constantly until a short time previously, when the neck had come off. There was no appearance of a lead line upon the gums and, as he appeared in robust health, I merely recommended frictions and the salt and water douche. and advised him to wear an inflexible sole. The weakness gradually wore off, and he has since walked firmly.

POISONOUS GRAIN AND LEGUMES.

Rice.—It is a fact practically understood by every native of Bengal that new rice cannot be eaten with impunity, as it generally proves indigestible and is liable to give rise to diarrhoa, dysentery and other evidences of intestinal irrita-

tion. The use of very new rice has generally been forbidden in the Jails of Bengal, but it is considered that the grain is not perfectly wholesome until it has been carefully stored for two years. Mr. F. P. Strong, Surgeon to the 24-Pergunnahs, whose attention has, for many years, been directed to the important subject of dieting prisoners, has shown* by tabular statements that an inferior kind of grain, known in the neighbourhood of Calcutta as "Desee" rice, is so unwholesome as to be positively destructive to the lives of those who eat it constantly. Some years since, it was believed by many that outbreaks of Epidemic Cholera were mainly due to an unwholesome condition of the rice of the season. Without admitting this, however, it cannot be doubted that inferior rice, apart it would seem from any positive disease in the grain, is a very dangerous article of food, especially to those unaccustomed to its use. Dr. McNab published, in 1838,† some valuable remarks on "Bad Rice when used as food productive of Dysentery and other Alvine Affections." His observations were chiefly made among sepoys who, on their arrival in Bengal from the Upper Provinces, had their wheat flour(Ata) adulterated with ground rice of a cheap and inferior kind. Dr. McNab states that,-" When the disease was at its worst in the regiment, the symptoms became exceedingly distressing, very many had excessive torminæ and tenesmus with stools consisting entirely of blood and mucus in white flakes, destitute of a single trace of feculent matter. From 16 to 20, or even 24, were not uncommon occurrences in the course of the night, leaving hardly half an hour's interval between each evacuation. The calls were

^{*} Indian Annals of Medical Science, No. V., for October 1855, p. 168.

[†] Quarterly Journal of the Calcutta Medical and Physical Society, July. Dr. Finch considered that the injurious effects of a mixed rice and ata diet had been overrated,—Trans. Medical and Physical Society, vol. ix. Part 1. p. 20.

urgent and required instant obedience. On pressure, few had pain above the pubes, or indeed in any other part of the abdomen; the sensation in the former place was characterized as an impatient sort of uneasiness, so to speak, which did not amount even to tenderness: none felt sick at stomach, some complained of dry tongue with thirst, and slight increase of surface heat; whilst others, though the local symptoms were, perhaps, equally intense, suffered but little general disturbance of the system. The pulse, in most instances, had an accelerated beat" * *. " The tongue, excepting where pyrexia existed, was usually moist though coated to a greater or less degree; the fur being sometimes of considerable thickness and of a pale yellowish colour. When dry, the colour of the tongue inclined to redness."-In short, the disease was simple uncomplicated Dysentery, arising entirely from irritation of the intestinal mucous membrane.

Dr. Kenneth Mackinnon, in speaking of the diseases most prevalent among the native inhabitants of Tirhoot, says—"I have met with one case of genuine dry gangrene; and I am inclined to think further observation will show that the diseased grains in this country will sometimes show a kind of ergot, and that will, I suppose, produce the dry gangrene. Other writers have stated that a permanent contraction of the knee joints is a frequent consequence of eating some kinds of Kodoo,—the Paspalum Frumentaceum: numbers of people so affected, are to be seen here."*

Lathyrus Sativus.—Colonel Sleeman appears to have been among the first who directed attention to the injurious consequences resulting from the use of this legume amongst the people of Central and Northern India. He states that, in 1829, the wheat and other spring crops in the villages about Saugor, were destroyed by a severe hail-

^{*} On the Public Health, Climate, Hygiene and Prevailing Diseases of Bengal and the North-West Provinces, p. 36.

storm; in 1830, they were deficient from the want of seasonable rains; and, in 1831, they were destroyed by blight. During those three years, this teoree, or what, in other parts of India, is called kesårree, (a kind of wild vetch which, though not sown itself, is left carelessly to grow among the wheat and other grain, and given in the green and dry state to cattle,) remained uninjured, and thrived with great luxuriance. In 1831, they reaped a rich crop of it from the blighted wheat fields; and subsisted upon it during that and the following years, giving the stalks and leaves only to their cattle. In 1833, the sad effects of this food began to manifest themselves. The younger part of the population of this and the surrounding villages, from the age of 30 downwards, began to be deprived of the use of their limbs below the waist, by paralytic strokes, in all cases sudden, but in some more severe than in others. About half the youth of this village of both sexes became affected during the years 1833-34; and many of them lost the use of their lower limbs entirely, and were unable to move. The youth of the surrounding villages, in which the teoree, from the same causes, formed the chief article of food during the years 1831-32, suffered in an equal degree. Since the year 1834, no new case had occurred; but no person once attacked, had been found to recover the use of the limbs affected, and Col. Sleeman's tent was surrounded by great numbers of the youth in different stages of the disease. Some of them were very fine-looking young men, of good caste and respectable families; and all stated that their pains and infirmities were confined entirely to the parts below the waist. They described the attacks as coming on suddenly, often while the person was asleep, and without any warning symptoms whatever; and stated that a greater portion of the young men were attacked than of the young women. It was the prevailing opinion of the natives, throughout the country,

that both horses and bullocks, which have been fed much upon teoree, are liable to lose the use of the limbs*. More recently, Dr. Kinloch W. Kirk has published some interesting remarks upon the injurious effects of this kesarree dal upon the poorer inhabitants of Upper Sindh. His attention was first directed to the subject by a villager bringing his wife, about 30 years of age, to him with paralysis of her lower extremities, she had been so afflicted for the last four years, the man said, -"it is from kesarree; we are very poor, and she was obliged to eat it for five months on end." Dr. Kirk had never heard of such effects before from any grain and asked whether it was good of its kind; finding it was so, he sent the man into the bazar to bring him a handful, which he subsequently showed to some respectable natives, and was told that disease from its use was very common all over the country. The villagers said that, if they sowed a better kind of grain, it would be plundered by the Beloochees from the hills, but that they would not take this. He did not enter a village in Sindh where this vetch was not to be found in the bazar, and daily used by great numbers of poor people, nor where several were not rendered most helpless objects by the use of it. Their general health seemed good, their only complaint being that they had no power in their legs, but they moved about lifting themselves on their arms: kesarree they described as causing "Badee," or severe pains in the joints like those of acute rheumatism in the first instance, but gradually changing into the permanent affection described, the seat of which is probably in the lumbar portion of the spinal cord. Under the use of a poisonous food of this kind, the injury which meets the eye is nothing to the unseen evil, which does not terminate with the individual; but extends itself to the children of the third and

^{*} Op. Citat, Vol. 1, p. 135.

fourth generation. All natives know that this dâl is a poison, and eat it only because it is cheap, thinking that they can stop in time to save themselves from its consequences. Dr. Kirk adds an expression of confidence that, could the amount of the evil be known, it would awaken the sympathy of Government in behalf of the people who are compelled by want to endure it; indeed he considers that it would be a boon were its cultivation suppressed entirely.*

EXAMINATION OF THE MEDICINAL STOCKS OF BUN-NEEAS, &c.

It will not unfrequently happen that the civil surgeon will be required to examine and report upon the medicinal stock of a native trader seized under suspicious circumstances. This will generally comprise a variety of charms, the teeth of alligators, the dried teats of the jackal, or of some animal of like size, scales of the manis, tigers' claws, &c., &c., together with a few inert substances, such as chunam (lime), iron-rust, tabashir, &c., and several poisons, -white arsenic, (perhaps, bearing marks of scraping on the edge,) orpiment, realgar, crude antimony, dhatoora seeds, gunjah leaves, churrus, and the roots of aconite and hellebore. The following is a list of this kind from the Records. 1. "Ordinary bazar spirit. 2. The liquid had disappeared, the lumps are vegetable matter, nature cannot be positively stated. 3. Sugar slime. 4. Oil of Cinnamon, Ditto of Peppermint. 5. Dhatoora seeds. 6. Pills which, on analysis, yield oxide of lead. 7. Dhatoora fruits entire, with seed. 8. Vegetable powder, nature cannot be positively stated. 9. Yellow Sulphuret of Arsenic (Hurtal) and Sulphuret of Copper. 10. A quantity of the roots of the Sungya

^{*} Medical Topography of Upper Sindh, p. 60. For ample particulars of similar effects resulting from the use of the *Lathyrus Cicera* and the *Ervum Ervilia*, or Bitter Vetch, in several of the continental states of Europe, *See* Taylor on Poisons, p. 535.

Bikh (Aconitum Ferox of Nipal,) a deadly poison. 11. Vegetable powder, nature cannot be positively affirmed."

RECOGNITION OF VEGETABLE POISONS,

The modes of recognizing the Vegetable poisons, most employed in India, by chemical tests and by microscopical examination, is a subject which especially demands careful investigation by our best practical chemists and botanists. Cases of mineral poisoning offer few difficulties; but-with the exception of Opium, Nux Vomica, Plumbago Rosea, and Croton Oil—vegetable matters, especially when long exposed to fermentation and putrefaction, generally defy analysis. Although rules are laid down in chemical works for the separation of Daturine and Aconitine, it can rarely be possible to detect these alkaloids, where they have only existed in minute quantities, in mixtures of decaying animal and vegetable matter, or have been exposed for days to the effects of heat and fermentation. This is a very unfortunate circumstance, as it cannot be doubted that these two are the vegetable poisons most frequently employed for homicidal purposes in this country. The late Mr. Siddons remarked, with great truth, that, -- "The natives of Bengal are growing exceedingly expert at poisoning; and, since the hanging of a number who used arsenic, corrosive sublimate, &c.,-metallic poisons are seldom had recourse to; a fact worthy of the most serious attention."* In 1852, the Chemical Examiner indented for a powerful microscope, and matters sent for examination, such as blood and other stains, minute crystalline deposits, vegetable tissues, &c., &c., are now carefully subjected to that test. Nearly every vegetable structure, which has not lost its organic form by chemical or putrefactive decomposition, may now be distinctively recognized upon the field of a

^{*} Letter to the Civil Assistant Surgeon of Gyah, dated 10th March, 1853.

microscope.* A well-conducted microscopical examination of the tissues of the poisonous roots, seeds, barks, &c., commonly employed in India, and especially of the Root of the Aconitum Ferox and of the Episperm of the Dhatoora Fastuosa would prove a real boon to the profession, and to the cause of humanity and justice.†

In cases where vegetable poisons are given in the form of extract or decoction, and where putrefaction has much advanced, recognition of their presence by microscopical examination is, of course, out of the question. Still, except in the cases of Opium, Nux Vomica, and Gunjah, these modes of preparation seldom obtain among poisoners in India. A coarse powder, which has probably been triturated between two rough stones, is the form in which both vegetable and mineral poisons are usually mixed with the victim's food. It should be especially borne in mind that, in all cases, the preservation of vegetable poisons in suspected matters is greatly aided by the addition of a sufficient quantity of pure spirit to the compound, immediately it comes into the medical officer's possession.‡

^{*} See Mr. G. Birkett's remarks on the detection of the Crystals of Arsenious and Oxalic Acid by the Microscope.—Medical Times and Gazette, April 28th, 1855.

[†] I am authorised to state that the Editors of the Indian Annals of Medical Science will be happy to afford all the assistance in their power in the publication of the results of such investigation, and will undertake to have any careful drawings of the microscopical appearances presented by the vegetable tissues, which may be sent to them, copied for their Journal by the best Engravers.

[‡] Dr. Mouat observes,—with reference to Dr. Taylor's remark, that addition of spirit to matters intended for chemical examination materially complicates the analysis,—that it is correct, as regards Europe, where the means of making a chemical examination are always at hand; but, that it is not applicable to a country, where a suspected substance has to travel several hundred miles, and putrefaction is rapid and complete before it can be submitted to any analysis.

But few general rules can be laid down with regard to-The manner, in which poisons are generally administered in India-Our criminal records affording instances in which they have been given in nearly every kind of food and drink common among the natives; -in water, wine, spirits, sherbet, suttoo, or parched grain, dâl (lentils,) rice, kuddoo and other turkarees (vegetables), in goor (treacle or coarse sugar), in sweetmeats, &c., &c. The last is, however, a favorite mode of concealing poison among the natives. The Majoon, a compound of sugar, butter, flour, milk, and sidhee or bang* is a preparation of the Cannabis Indica, which can probably be purchased in nearly every bazar in India, and which is known to every native; and it is to be feared that other confectionary, containing Opium, Dhatoora, + &c., may also be prepared by nefarious dealers, -although acquaintance with such deadly sweets is entirely ignored by nearly all who are questioned upon the subject. Numerous cases might be cited in which Arsenic, Dhatoora, and Aconite have been mixed in sweetmeats for criminal purposes.

OUTWARD ASPECT OF THE BODY AND COUNTENANCE IN DEATH FROM POISONING.

The reports sent into the Nizamut, about fourteen years ago, are replete with evidence of the existence of a general belief, not only in the minds of the police and of the judicial officers, but also among the medical witnesses, that certain outward appearances are to be received as indications, that death has resulted from poison. Thus we find it inquired: "Are you of opinion that any poisonous substance taken

^{*} O'Shaughnessy.

[†] Dr. O'Shaughnessy's informant on the manner in which Majoon is prepared said that, sometimes, by special order of customers, he introduced Dhatoora seeds, but never Nux Vomica.

internally, would have caused the rapid decomposition of the body; and what appearances does the body of a person, being a native of this country, generally exhibit on being poisoned?" The reply is-"I do not think that poison would much accelerate decomposition, but different poisons would have different effects upon the body. The face and features of a person who had died from taking poison would be distorted, and show an expression of pain," &c. Again, it is questioned—"It is stated in the evidence that the body turned black, and blood flowed from the eyes and nose; -are these symptoms usual in cases of death from poison, or indications of the same?" The reply is-"The body would turn black in cases in which mineral poison had been administered, but I think not in cases in which vegetable poison had been employed. The bleeding from the eyes and nose is not uncommon after death in other cases." The medical witness in another case says-"The nails were blueish, which is another mark of poison." This gentleman elsewhere says, "The general appearance of the body was as though poison had been administered. The nails were black, and the skin unusually pallid." It was believed, for many centuries,* that the bodies of individuals who had died under the

^{*} According to Tacitus, Britannicus was destroyed by a poison, concocted by Locusta, by command of Nero, which acted instantaneously, the unfortunate youth appearing to be stricken down by epilepsy. Dio Cassius mentions that an extraordinary lividity overspread the face of the corpse, which it was attempted to conceal by the application of a pigment. We are told, by Guicciardini, that when Pope Alexander VI. died, about a week after swallowing a poison which he had prepared for some of his Cardinals, his body became a most frightful spectacle; it was so very black, swelled and deformed, that it could scarcely be known; the nose appeared full of putrified pus flowing from it, the mouth hove up in a frightful manner, and the tongue became monstrously swelled, so that it filled the whole mouth. It was a sight so very shocking and horrible that people were not able to look on it, nor to endure the pestilential stench that came therefrom, so were obliged to turn their heads aside and retire. Apart from the effects of poison, this was simply

effects of poison exhibited, outwardly, certain tokens of its operation. In their entire innocence of either chemical or pathological knowledge, the ancients clung with absolute reliance to this error, which affords a very singular example of false induction, inasmuch as, while the inference was erroneous,

the natural progress of decomposition in the remains of a gross-bodied sensualist, exposed to public view in the middle of a Roman August. So, in the case of one of Alexander's victims, [?] the Cardinal of Sienna, we are told that after his death in confinement, his body was allowed to be buried publicly; but care was taken to have it well wrapped up and covered; but, upon his mother's suspecting foul play, and boldly uncovering it, there were plainly discovered to the spectators the visible marks of his having been poisoned. Similar appearances are said to have led to a close investigation of the deaths, in1536, of the Dauphin Francis, son of Francis I.; and, in 1522, of the Cardinal de Medici, both of whom appear to have died from the effects of poison. So again the libellous Eglisham asserted, as a proof that poison had been administered to James the First, that the king's body and head swelled above measure, his hair, with the skin of his head, stuck to his pillow, and his nails became loose upon his fingers and toes. The same person, in attempting to show that the death of the Marquis of Hamilton had been brought about in like manner, says-" No sooner was he dead, when the force of the poison began to overcome the force of his body, it began to swell in such sort, that his thighs was swollen six times as big as their natural proportion, his belly became as big as the belly of an ox, his arms as the natural quantity of his thighs, his neck as broad as his shoulders, his cheeks over the top of his nose, that his nose could not be seen or distinguished; the skin of his forehead two fingers high. He was all over of divers colours, full of waters, some white, some black, some red, some yellow, some green, some blue, and that as well within his body as without. His mouth and nose foaming blood, mixed with froth, of divers colours, a yard high." Here we have merely an account of the appearances resulting from rapid decomposition intentionally exaggerated ad captandum. Still again, Sir Henry Halford, in commenting upon the death of Britannicus, says-"I remember to have seen [1780] the face of Sir Theodosius Boughton, when the corpse had been disinterred, in order to be examined for the satisfaction of the Coroner's Jury, and its colour resembled that of a pickled walnut."

Appearances of this kind are seen by Civil Surgeons in India every week, in bodies brought in for examination during the hot weather, in cases where there exists not the slightest reason to suppose that death has resulted from poison.

the observation whence it was deduced was perfectly correct: the rapid progress of decomposition noticed in the bodies of strong and full-blooded persons suddenly cut off by poison being contrasted with the comparatively slow and dry decay of those dying from exhausting chronic diseases, or from wounds attended with profuse hæmorrhage. The appearances which were, of old, regarded as so characteristic of death by poisoning are the natural evidences of rapid decomposition in a body of full habit. It is certainly true that some animal poisons, which act fatally by disintegrating the blood, appear to favor the rapid advance of post mortem decomposition. This may be the case with snake poison, it is certainly so with urea. It was remarked by myself and others, many years since, that the bodies of persons dying of renal disease often became excessively offensive, even before the vital heat had entirely left them. It is also stated that animals bitten by certain venomous snakes become enormously swollen in a few minutes, and remain so after death. This has not been observed to be the case in India; but I am informed by a friend who spent some years in Australia that he has twice observed this result in a dog and a horse which died from snake bite in that country; still this point must remain open for investigation. There is not the slightest ground, however, for believing that mineral or vegetable poisons have any such effects. Dr. Taylor says, "The bodies of persons poisoned are not more rapidly decomposed, cæteris paribus, than those of others who have died a sudden and violent death from any other cause whatever." With regard to Distortion of the Countenance after death; nothing of the kind can possibly occurexcept from merely mechanical causes. Whatever amount of agony may precede death, all nervous action, and, with it, all suffering, and all expression of pain by muscular contraction must cease with the cessation of life. Where the eyes remain open, and the jaw is not secured, the face will assume a ghastly appearance, when rigidity sets in; but no practised medical man would mistake this for an expression of pain, or for distortion produced during life.

In ancient times, these erroneous opinions did infinite mischief—And, in the present day, they cannot be too strongly discountenanced, when occurring among non-professional persons.

MODE OF TRANSMITTING SUSPECTED MATTERS FOR CHEMICAL EXAMINATION.

In India, unfortunately, but little systematic arrangement has hitherto been observed in sending in cases of supposed poisoning for investigation, whether to the civil stations or to the office of the Chemical Examiner. Suspicious portions of food and matters stated to have been vomited are, commonly, sent in by Darogahs, in open vessels, with which nearly any person might tamper with scarcely a chance of detection, and in unsealed coverings of leaves or paper. Again, no systematic plan whatever is adhered to in the manner of transmitting packets from civil stations to the office of the Chemical Examiner. The Government Regulation is, that such packets of suspected matters, together with full reports of the details of the cases, should be transmitted to the Chemical Examiner direct through the magistrate.* This rule is generally attended to; but, not unfrequently, the medical officers send the packages with their reports direct to the Chemical Examiner. The pages of this officer's records are filled with remonstrances upon the hasty and insecure manner in which suspected matters have been packed and transmitted,-the vessels have not been air-tight,

^{*} See Government Orders, Circular 129, April 4th, 1843. Circular 110, June 24th, 1842.

their mouths have not been properly tied as well as sealed, the corks have started out; or the putrid matters, not having had strong spirit poured upon them, have burst the bottles,— or jars enclosed in boxes, without proper care in packing the interstices closely with tow, cotton, or hay, have broken, and the horribly putrid contents have exuded in every direction. It is evident that, although the transport of glass or earthern vessels many hundred miles by hand is, of course, attended with considerable risk of breakage, many of these accidents might be avoided, if certain rules and precautions were adhered to.

The Medical Board have, on several occasions during the last twelve years, issued circulars calling the attention of Medical Officers to the proper mode of packing morbid preparations and suspected matters. In their circular letter No. 131, dated 31st May 1852, the Board, under instructions from Government, aquaint Medical Officers:—

"That they are to consider it to be their duty on all occasions of post mortem examination in which the signs are such as, in their opinion, to require that the contents of the stomach, or portions of the stomach itself, or of any other part of the body, should be transmitted to the Presidency to be tested by the Government Chemical Examiner, either to put up with their own hands these suspected substances in a suitable vessel, or see them put up at once by an assistant or subordinate, and after affixing as many impressions of their own seal as they may think necessary to guard, as far as possible, against the vessel being opened or tampered with, without detection, to dispatch them," &c.

I recently made the following suggestions to the Magistrate of the Howrah district, for the guidance of Darogahs, in transmitting matters for chemical examination:

In cases of poisoning, Darogahs are in the habit of sending in cooking vessels, containing suspicious food, either open or slightly covered with leaves. I would recommend that a few wide-mouthed stoppered bottles should be supplied to each thannah for the conveyance of such matters. The Darogah should be ordered to see that a portion of the contents of the cooking or eating vessel is carefully placed in a bottle, especial care being taken to drain in all sedimentary matters. (Portions of the earth upon which persons supposed to have been poisoned have vomited, or upon which suspicious food has been thrown, should also be carefully collected and sent in.)

The bottle, being then stoppered, should have its mouth securely tied over with thick waxed cloth, and strong twine passing across the stopper. The cloth and string should then be completely covered with sealingwax, upon which the office seal of the thannah should be impressed. The bottle, enveloped in waxed cloth, should be sent in by hand.

It would be highly advisable that every Civil Surgeon should be supplied with a few glass or porcelain jars, manufactured for the express purpose, out of materials in which the absence of arsenic, barytes, lead, &c., had been clearly ascertained by chemical examination. These would be best secured by the earthen stoppers set in iron which are now generally used for English preserve pots, intended for exportation to hot climates. These, together with strong spirit, leather, twine, and hard sealing-wax should always be ready in the inspection room, and all suspected matters should be placed in these vessels, and secured and sealed therein by the Civil Surgeon himself, before he quits the room in which the body has been examined. Every bottle should not only be sealed with distinct impressions of the Surgeon's and Magistrate's seals, impressions of which should accompany the letters to the Chemical Examiner, but should also be labelled or be accompanied with a memorandum of the matters sent, the station, the names of the Magistrate and Civil Surgeon, and the dates of their letters, with reference to the case despatched to the Chemical Examiner. The practice of enclosing the letters in

the parcel containing the suspected matters is highly objectionable. In many such cases, the contents of the bottles escaping, have completely saturated the letters which, in one or two instances, have required to be subjected to a tedious chemical process before their contents could be rendered legible.

The following judicious directions for securing packages to be transmitted to the Chemical Examiner, were published by Dr. O'Shaughnessy in 1842:

"Preservation and despatch of suspected matters.—Three objects should be carefully attended to, in the despatch of all suspected matters—the proof of identity: the impossibility of any interference during transit: and, thirdly, preservation from decomposition.

I have frequently received articles for analysis in bottles merely corked in wooden boxes, secured by a few nails, &c. In more than one case, the contents of the bottles had partially escaped, or those of various parcels were mixed together.

It is obvious that it would be exceedingly difficult to convict any accused party on evidence given on the analysis of such articles.

Articles for analysis should be, whenever practicable, enclosed in glass bottles accurately corked, tied and sealed with hard wax, and by the private seal of the Surgeon or Magistrate. Bottles should be enclosed in a thick layer of raw cotton, and all placed in tin and soldered up. When wooden boxes must be used, these should be sealed and taped at every opening, below as well as above. All liquid and animal matters liable to decomposition should be put up in, or mixed with, the strongest spirit available. This effectually prevents decomposition and, without interfering with the subsequent analysis, thereby obviates many serious accidents. I have known two instances of bottles bursting, and the contents being totally lost in transit by the fermentation of their contents. In Major P.'s case, one of the bottles exploded in the Laboratory with a loud report, and the contents were lost, except a small portion."

IDENTIFICATION OF MATTERS SUPPOSED TO CONTAIN POISON.

The following extract from a letter addressed by Dr. Mouat to the Magistrate of Agra in July 1853, involves an important question with regard to the non-validity of evidence deduced from the chemical examination of suspected matters, insecurely preserved and transmitted, without sufficient proof of their identity:

"I have long been of opinion, that evidence derived from suspected substances, sent to Calcutta for examination, is of no value, and would not be admitted in any Court of Justice on the Continent of Europe, where a greater degree of care and guardedness is required in all medicolegal cases than in England or in India. No precaution whatever is taken to prove the real identity of the substance, and most cases are unaccompanied with any history or other detail. Strictly speaking, the identity of the substance should be deposed to, and it should be examined in Court, that the examiner may be subjected to cross examination, regarding the process upon which he bases his judgment. As this is impracticable, in this country, the Civil Surgeon should, I am of opinion, swear to the substance when properly packed in open Court, and it should then be again covered and sealed by the Magistrate. The Chemical Examiner, upon receipt of the package, should prove the receipt of the substance so identified with unbroken seals, and should attest his own examination before a Magistrate : even this, I fear, will not render his testimony of primary value; as he cannot be subjected to cross examination for the benefit of the accused party. I am unacquainted with the laws in India regulating this matter, and cannot, therefore, say how far the proceeding, above suggested, may be deemed practicable or advisable. Nothing can, however, be more unsatisfactory than the present manner in which such cases are sent to the Chemical Examiner for report."

Evidence of the identity of poisoned matters is strictly required in the Sessions Courts. In a case of road poisoning tried at Moradabad in 1852. [Already quoted at p. 116]

the Superior Court decided that "the Sugar sent to the Civil Surgeon for examination and report, with which Dhatoora and Nux Vomica were stated" [by that officer] "to have been mixed, should have been produced upon the trial and sworn to, and evidence should have been given to show that it was the same which was found in the house of the prisoner Kishnoo; also in whose custody it had since remained, and that there had been no opportunity of its being tampered with or changed. In these respects, the record of the trial was defective; and there was also no proof of the sugar in question having ever been in the possession of the" [other] "prisoner Jhana.*" In a case of poisoning by arsenic, tried at Bareilly in the same year, the Judges of the higher Court requested that the Sessions Judge would ascertain what means had been adopted by the Magistrate for the prevention of any tampering with the contents of the stomach,—the sealing up of which, it would seem, he had left to his Nazir,-instead of having this important duty performed in his own presence. It was explained that the body was sent for examination to the Sub-Assistant Surgeon who, being shortly afterwards removed to Calcutta, was unable to analyze the contents of the stomach. The Sub-Assistant Surgeon was, therefore, ordered to send the bottle containing the stomach to the Joint Magistrate; this he did, and it was received and re-sealed in the presence of the Joint Magistrate and also before four witnesses; the bottle was then made over to the Nazir of the Court to keep in his custody until it could be sent to Dr. Kirk, at Bareilly, to analyze. There was no possibility of the contents being tampered with, as a special peon took the bottle to Bareilly with a letter to Dr. Kirk. † Again, late in 1854, the Sessions Judge

^{*} Nizamut Adawlut Reports, **N. W. P.**, 21st August 1852, p. 853. † *Ibid*, 2nd September 1852, p. 960.

of Moradabad remarked, in a case of poisoning by Aconite, that-"in the Magistrate's record was a letter to his address from the Civil Assistant Surgeon of Moradabad, reporting that the dal which he had examined contained particles of the poison above named. There was no proof in his record, or any evidence in his [the Judge's] Court to prove that the dal referred to in the letter was a portion of that which had been cooked by Raheeman, of which she and the principal witnesses in this case had partaken; and he was, therefore, under the necessity of suspending the trial. He directed the Magistrate to furnish the required proof, his order being contained in a proceeding which was very explicit. The Magistrate replied that he was unable to comprehend what proof was required; and that it would be as reasonable to send up witnesses to prove that swords or lattees, sent to Court with any Sessions case, belonged to the prisoners, as to furnish proof that the dal sent to the Civil Assistant Surgeon was part of that which had been found by the police on the premises of the persons who had been intoxicated or poisoned. He. however, ordered the Kotwal to send any witnesses that might be procurable, and directed the Civil Assistant Surgeon to attend at the Judge's Court."-The proof of identity failed.*

MEDICAL EVIDENCE IN CASES OF POISONING.

It appears to have been only of late years that the validity of the written evidence of the Chemical Examiner in cases of poisoning tried in the courts of the Mofussil has been questioned. In October 1852, and again in the following September, the Sessions Judge, Saugor and Nerbudda Territories, brought before the Sudder Court of the North-West Provinces a difficulty in respect to references autho-

^{*} Nizamut Adawlut Reports, N. W. P., 27th November 1854, p. 766.

rised to be made to the Chemical Examiner to Government at the Presidency for information "which, when acquired, there is no available mode of embodying into legal evidence, recordable by the Court trying a criminal case, or of any effect on the result of the trial." The local means of analytic examination are, he observed, in most instances, notoriously inadequate to the discovery of the nature of substances (even mineral) supposed to be poisonous, with any such degree of certainty as would amount to legal evidence of the fact. In cases of supposed poisoning (unhappily far from uncommon) the prosperous or adverse issue of the inquiry may often entirely turn on the availableness of such professional testimony.

The Court replied that the difficulty commented upon by the Sessions Judge is common to all the Courts of those Provinces, in all of which the want of the evidence of a Chemical Examiner is not unfrequently felt. As, however, the opinion of such an officer is of no value unless it can be made available evidence, and as no apparent means existed by which this end could be obtained, as regards analysis made by the Government Examiner in Calcutta, the Court would suggest that, in all cases where such evidence might be required, the reference should be made to the Civil Surgeons, whose analysis, though, perhaps, not so scientific as one by the Chemical Examiner, would at all events, quantum valeat, be susceptible of proof on trial.

At that time, however, medical officers in civil employ were furnished with no other Chemical re-agents and apparatus than those which might happen to be included among the medical stores of their Hospitals.

A decision of great importance, as bearing upon this point, was delivered by the Judge of Allahabad in May 1854.* A

^{*} This case has already been referred to, at page 73.

road poisoner, having halted for the night with two travellers whom he had met with on the way, his companions were attacked with vomiting and purging, and died in the morning. The prisoner attempted to escape, but was brought back and searched, when a packet of powder was found in his kummerbund, together with some strings of pearls, which latter he admitted to have belonged to one of the deceased travellers. The Civil Surgeon examined the bodies, and deposed that the men had died from poison. He abstained from giving an opinion as to the description of poison used, and from analysing the powder and a portion of the flour of which the deceased persons had partaken, on account of his not being provided with proper tests for such purposes; and he forwarded the stomachs, the powder, and the flour to the Chemical Examiner in Calcutta, with the view of having the question determined. The Chemical Examiner reported that the powder and flour both contained arsenic, and that the stomachs also contained arsenic, and in very considerable quantities. On the application of the Deputy Magistrate, the Judge proposed to the Sudder Court to convert this report into legal evidence by calling upon the Chemical Examiner to swear to the truth of the report, before a Magistrate in Calcutta, in the presence of two witnesses, to be sent to Allahabad, to give evidence on the trial to the genuineness of the affidavit. The court rejected this proposal, on the ground that this course was met by the insuperable objection that there would be no opportunity of cross-examining the Chemical Examiner, the real witness as to facts; * and directed

^{*} I find, in the Records of the Chemical Examiner, that the same objection to receiving that officer's deposition on affidavit was made on several occasions previous to this. The law on this subject is laid down in C. O., Nos. 110 and 146, of vol. iii.—" Magistrates are not to call upon the Chemical Examiner to make affidavits before the Chief Magistrate of Calcutta,

the Deputy Magistrate to send for the stomachs, powder, and flour from Calcutta. This was done, but the Chemical Examiner reported that every thing had been thrown away as soon as the analysis was finished. As the report of the Chemical Examiner was not considered evidence in the eye of the law, and the nature of the powder was not tested by any witness at the trial, the case had to be treated as if no powder had been found on the person of the prisoner. The Civil Assistant Surgeon deposed, upon the evidence afforded by his dissections, that the men died of poison of an irritant nature, such as arsenic. Upon this and the other very clear evidences of criminality brought forward in the trial, the prisoner was sentenced to death.*

Consequently upon the delivery of the opinion of the Sudder Court of the North-West Provinces cited at the commencement of this Chapter, Mr. C. G. E. Ford, Civil Assistant Surgeon of Nursingpore, suggested that, in accordance with the custom of the Madras Presidency, small analytical chests should be supplied for the use of Civil Stations in this Presidency. Upon this, the Medical Board recommended to Government that a supply of small cases containing the most useful tests for poisons should be procured from Europe. Forty boxes of this kind were supplied

regarding any matter referred for examination, as such affidavits are not legal evidence." It would appear, however, that such an affidavit may have some weight as corroborative evidence. In a case of poisoning by arsenic tried in 1852 before the Sessions Judge of the Saugor and Nerbudda Territories, the Judge reported that the testimony of the officer in Civil Medical charge, as to the appearances presented on dissection of the stomach, corroborated by the clear evidence, on affidavit, of the Government Chemical Examiner, to the detection of a quantity of arsenic in the contents of the stomach, left no doubt at all, in connection with the proved facts of the case, that the death of the deceased resulted from poison.—Nizamut Adawlut Reports, N. W. P., 8th March 1852, p. 160.

^{*} Nizamut Adawlut Reports, N. W. P., for May 1854, p. 570.

in February 1855, and have since been distributed to the principal Civil Stations in Bengal and the North-West Provinces.

Many of the principal trials for poisoning which have occurred in Europe and America during the last fifteen years, however, abundantly show that, in obscure cases, where the more delicate modes of analysis are required, the opinions of none but professed Chemists who have devoted nearly their whole attention to the subject of toxicology, can be absolutely authoritative. It would, probably, be desirable that, in each circle of medical superintendence, one officer, selected on account of his proficiency in chemical manipulation, should be appointed Chemical Examiner.

Another frequent and very just cause for complaint, by the Chemical Examiners, has always arisen from the scantiness of the information furnished to them regarding the history of the suspected cases or matters under investigation. The rule, however, upon this point is sufficiently strict and definite, as laid down in a Government minute of the 18th January, 1854—

"Read letter No. 45, from the Chemical Examiner to Government, dated the 9th instant, requesting, for reasons stated, that all cases forwarded to the Chemical Examiner for analysis and report may be accompanied by the fullest details that can be procured for his information and guidance."

An order was passed to this effect.

A repetition of this order will be found in Skipwith's Magistrate's Guide, 902 and C. O. Sup. Pol. L. P. No. 6 of 1843.

In accordance with this rule, a few Officers furnish not only very full details of the histories of the cases, and of the appearances discovered on dissection, but also extracts from the depositions of witnesses and other data, whereby the Chemical Examiner is enabled to perceive in what direction his investigations should be especially directed. More fre-

quently, however, the details sent are extremely meagre and unsatisfactory; and, in a very great number of instances, all information is evidently intentionally withheld, the transmission of suspected matters for chemical examination being simply notified in the letters of the Magistrate and Civil Surgeon. For some time after I had begun to peruse the Chemical Examiner's records, I felt quite unable to account for the very general prevalence of this latter practice. This, however, was explained by a very able and experienced brother officer, who, in reply to my question upon this subject, assured me that the transmission of details was considered as an unnecessary interference, which might be viewed as intended to bias the opinion of the Chemical Examiner. If it be possible that so mistaken an idea can prevail in the service, it is but necessary to repeat that it can only be acted upon in violation of the first laws of Medical Jurisprudence, and in transgression of an express Government order.

LAWS IN FORCE FOR THE PUNISHMENT OF THE CRIME OF POISONING IN INDIA.

Any person against whom the crime of wilful murder, by drowning or poisoning, may be established—"Penalty"—to suffer death by Seasut.—Regulation VIII. of 1799, Section V.

The simple offence of administering poison, with intent to commit murder, if unattended with any aggravated circumstances, may be disposed of by the Sessions Judge "Penalty"—imprisonment not exceeding seven years—Regulation LIII. of 1803, Section II., Construction No. 755, February 7th, 1833.

A person administering an innoxious drug, under the impression that it is poison, incurs punishment by *Tazeer*, under the Mahomedan Law, —Macnaghten's Reports, vol. i, p. 307.

According to Moulvee Siraj-ool-Huk's exposition of the Mahomedan Law "the killing by poison, in whatever manner it be given, is not deemed wilful homicide; that the fine of blood is payable, as for manslaughter, if the poison be compulsively put by another into the mouth
of the deceased; but that, if the deceased took the poison into his own
hand, and eat or drank it, without compulsion, though he did not know
it to be poison, the giver is liable to discretionary punishment only."
He adds, however, that the opinion of Tuhavee, viz., "that—if a person mix poison with food, and give it to another, who eats it, without
knowing it to be poisonous, and dies,—the giver of the poison ought to
suffer death by Seasut," should prevail, "as the mixing poison with
food is a heinous offence, such as is declared punishable with death for
the security of mankind."—Macnaghten's Reports, vol. i., p. 60.

ADMINISTRATION OF POISONOUS DRUGS WITH A VIEW TO ROBBERY.

All cases in which the prisoners may be convicted of administering poisonous drugs to persons, with a view to robbing them while in a state of insensibility,—whether death shall have ensued or not—come within the provisions of Clause 4, Section VIII., Regulation XVII. 1817; and the Sessions Judge must pass sentence of imprisonment in transportation for life, and refer the case, if the prisoners are convicted, for the final sentence of the Nizamut Adawlut—C. O. No. 291 of vol. i. Construction No. 365, N. A. R., vol. iii., page 333.

As thuggee officers are vested with Magisterial powers with respect to the specific crimes of thuggee and poisoning, so persons committed on a charge of poisoning, may be tried by the Sessions Judge specially appointed for the trial of thugs.—Construction No. 1107.

Persons accused of robbery and murder, or of either of those crimes, under circumstances justifying a suspicion that the crimes have been perpetrated by persons engaged in a systematic combination for such purposes, are to be made over to the Assistant to the General Superintendent for the suppression of thuggee, who will commit the persons so transferred to be tried before the Special Sessions Judge for the trial of thugs, and will make investigations, as to the existence of combinations of the kind described with a view to the suppression of the offences to which they give rise. [This order was circulated in the Behar dis-

tricts only, but appears applicable to all the provinces.]—C. O. No. 92 of vol. iii.

The above rule is applicable only to the crime of administering poisonous drugs to persons, with a view to robbing them when in a state of insensibility; and does not include the offence of administering drugs and substances of a merely intoxicating character, and not of a nature to endanger life, for the purpose recited; consequently those cases only are referrable to the Nizamut Adawlut, in which the prisoners are accused and convicted of having administered poisonous drugs.—C. O. No. 64 of vol. iii. N. A. R., vol. v., page 121.

In such cases an indictment is defective, if the name only of the drug used be given, and its designation of poison be not specifically adduced. Such indictments, therefore, are to be worded simply "administering poison or poisonous drugs with intent," &c. (according as either of the above rules applies to the case,) the article given, whether Dhatoora or other substance, being adduced in the evidence in support of the charge.—C. O. No. 83 of vol. iii.

The provisions of Clause 5, Section VIII., Regulation XVII. of 1817, are not applicable to cases of "administering intoxicating drugs and theft."—Construction No. 1324.

There is no law in India controlling the sale of poisons.*

WOUNDS.

TORTURE.

The causes of many of the kinds of bodily injury brought under the notice of medical men in India would be perfectly inexplicable, if attention had not been paid to the various modes of Torture practised by the natives.

^{*} According to Dr. Wallich, the sale of Aconite Root appears to have been prohibited, under the native governments, on pain of heavy penalties, except to persons well known, or by authority.

Seeing that the last vestige of judicial Torture* was not expunged from our own criminal code until the year 1771, it is not surprising that, in ancient times, the absolute rulers of India should have employed this potent means of intimidation and extortion upon their subjects; or that, among a crafty and timid people, the traditions of the practice should be preserved, and not unfrequently acted upon, in the present day.†

Very little information can be gathered from books with regard to Torture, as now practised in Bengal. Mr. Taylor mentions; that it was formerly a common practice among zumindars in the neighbourhood of Dacca to confine their ryots in irons, and to subject them to Torture of different kinds; but that they, in the present day, seldom go beyond the length of imprisoning their ryots, though instances of more severe punishment occasionally occur.

I have been at considerable pains to ascertain the various modes of Torture still known, and had recourse to in Bengal.

^{*} The Peine Forte et Dure.

[†] Murshid Kuli Khan, who became Nawab of Bengal in 1718, was, among his other atrocities, remarkable for the severity with which he extorted revenue from the zumindars. We are told that he used to oblige defaulters " to wear leather long drawers, filled with live cats, and to drink buffalo's milk mixed with salt, till they were brought to death's door by diarrhea." The chora (or whip) was also constantly in use. According to Stewart, one of his agents, Nazir Ahmed, used to deliver over the captive zumindars to be tormented with various refinements of cruelty, such as hanging up by the feet; bastinadoing; and setting them in the sun in summer; and by stripping them naked, and sprinkling them frequently with cold water in winter. Another of his people, Syud Reza Khan, ordered a pond to be dug, filled with every thing disgusting, to which, in scorn of the Hindus, he gave the name of Bickoont (Paradise), and through this detestable pool the defaulters were drawn by a rope tied under their arms. During the seventeenth century, the practice of tying wretches to palm trees with their bodies smeared with honey, to attract the red ants, was by no means unfrequent. It will presently be shown that this last mentioned barbarity is still prevalent in Madras.

[‡] A sketch of the Topography and Statistics of Dacca, 1840.

The information embodied in the following details has been furnished me, in reply to my questions, by several native gentlemen of high character and extensive information.

My original report on this subject appeared in the Indian Annals of Medical Science for October 1854, not many days after it became known in Calcutta that the Governor of Madras had directed, in Minutes of Consultation dated 9th September 1854, that a strict inquiry should be made into the Alleged Practice of Torture for the purpose of realizing the Revenues of the State in that Presidency. The following pages contain reference to all the modes of Torture mentioned in the Report of the Commissioners appointed for the investigation of these practices. It will be observed that a similarity, almost amounting to identity, exists between the modes of torture practised in this and the Madras Presidency,-a fact which goes far to prove that these atrocities have been prevalent in every part of India from a period at which the laws or, at least, the national customs were the same throughout the country.

Torture was not prescribed by the ancient Hindu Lawgivers.* The practice was, doubtless, introduced by the
Mussulmauns. We have abundant evidence, however, that
this atrocity has now become intimately blended with the
customs of all sects and classes of natives throughout India.
The poor practise Torture upon each other; robbers on their
victims, and vice versa; masters upon their servants; zumindars upon their ryots; schoolmasters upon their pupils; husbands upon their wives; and even parents upon their children.†

^{*} Branding and pouring hot oil into the ear are sanctioned by Menu, but only as *punishments* for detected crime—not as tentative measures in cases of suspicion or as modes of Torture.

^{† &}quot;We have instances of Torture being freely practised in every relation of domestic life. Servants are thus treated by their masters and fellowservants; children by their parents and school masters, for the most trifling offences; the very plays of the populace (and the point of a rude people's

It is stated, in the Madras Report, that the priests place the kittee and ananthal (instruments of Torture) before the Triputhy Idols, and expose them to the sun, if their votaries are backward in their offerings.* That one of the most common kinds of punishment in the schools is to suspend a boy by the hands, with the fingers joined to a rope pulled up to a beam; this is inflicted on boys above twelve years of age. Another punishment is to pinion the boys, and cause them to stand in a bending posture with their thumbs on their toes, another is tying the hands with the knees within the arms, and then thrusting a stick between the arms and knees and rolling the boys over. † I have been informed, by a native christian gentleman, that flogging with the stinging bichattee plant and tying portions of this plant upon the body are punishments in common use by native school masters in Bengal. Again, it is stated in the Report that Indian mothers often make their children (as a punishment) stand in painful positions looking at the sun. † The Sub-Judge of Mangalore informed the Committee that, recently, in his own compound, a native tied his child's hands together, and then put some pepper into his eyes, castigation having failed. He understood that this was not at all an uncommon mode with parents of subduing their children, and that not only among the most ignorant classes. § I am informed by my

Drama is in its satire) excite the laughter of many a rural audience by the exhibition of revenue squeezed out of a defaulter coin by coin, through the appliance of familiar "provocatives," under the superintendence of a caricatured Tehsildar; it seems a time-honored institution, and we cannot be astonished if the practice is still widely prevalent among the ignorant, uneducated class of native public servants."—Madras Commissioners' Report, p. 50.

^{*} Appendix C. No. 14, Salem, p. exliii.

[†] Appendix C. No. 10, Canara, p. exiv.

[‡] Appendix C. No. 14, Salem, p exliii.

[§] Appendix C. No. 10, Canara, p. cxv.

friend Mr. Bedford that, previous to my relieving him at Chittagong, the son of an East Indian of indifferent character employed there—with whom I am also acquainted, came to him with inflamed eyes, declaring that his father had punished him by introducing red pepper into them.

Scorching various parts of the body,—1st, burning by the heated chillum of a pipe, or kalika, called in Bengali (Kaliká puriya dág deoyá.) 2nd, by red-hot charcoal or a gul, (Gul puriya dág deoyá.) 3rd, by a lighted torch, (Mashál diya porána.) 4th, by red-hot iron (Loha puriya deon.) 5th, by heated oil, (Garam tel dhaliya deoyá)—or pouring hot oil. It cannot, however, always be ascertained how the burns have been inflicted.

1st. and 2d.—The Surgeons' reports, sent into the Nizamut. contain the details of several cases where Torture by Fire was evidently had recourse to; it is not perfectly clear, in all, by what means the heat was applied, but the following are evidently examples of the 2nd, 3rd, 4th and 5th modes. I have met with one case of the 1st kind in my own practice. In a case sent in by Mr. Stanlake Batson, of Shahabad, in 1841, it is mentioned that "the patient had a circular wound on the fore-arm, near the elbow, occasioned by the application of some heated body to the part." The individual at first appeared to be feigning insanity, and accounted for the injury in more than one improbable way; he, at length, stated that the malik of his village and others alleged against him that his mother was a dain, or witch, and had applied a hot tiklee to his arm to torture him, with a view to compel him to leave the village; although doubtless false, this statement must be taken as representing an existing practice.*

Dr. Archer, of Howrah, informs me that a case occurred within his observation at Kishenagur, in which a native,

^{*} See also Nizamut Adawlut Reports, vol. ii., part 1, of 1852, p. 211, and Macnaghten's Reports, vol. ii., p. 56.

finding a man in his house evidently with no good intention, overpowered and bound the intruder; and then, seating himself beside him, lighted a pipe and continued, from time to time, to apply the heated chillum to the unfortunate wretch's flesh, until he rendered him a very fit subject for medical care.

In examining cases of this kind, it must be borne in mind that the application of the charcoal gul and of a rude but very severe kind of moxa,—both producing circular or oval eschars,—is among the most frequent practices of the native doctors, especially in cases of enlarged spleen and chronic rheumatism, and as an ordinary means of counter-irritation.

A case remarkably illustrative of this point occurred at Mooltaye, in the Saugor territory, in 1851. It was reported to the Tehsildar of the place that a dâk hurkaru,-who had lately come to his home from duty, and for three or four days had been ill with vomiting and purging,-had died the night before; and that, owing to his wife having an intrigue with a person named and to consequent domestic quarrels, there was suspicion of foul play. Upon viewing the body, this officer found that the belly, hands and feet were black, as if scorched by fire. The man's mother-inlaw confessed that she had poisoned him with white arsenic. He appears to have received medical treatment. The Tehsildar afterwards informed the Sessions Judge that it is customary, in those parts, to have the part affected with disease or pain burnt with a hot iron, and that he supposed this process had been applied in the present instance. If so, the Judge considered it likely that it was done at the instance of the sufferer, or, the neighbours; and it would. of course, be the clue of the prisoner (assuming her guilt) to maintain and encourage the belief that his illness was from natural causes.*

^{*} Nizamut Adawlut Reports, N. W. P., Feb. 6 1852, p. 105.

Reference is made, in the Madras Report,* to the prevalence there of cases in which wounds and marks, with blistering juices, &c., are self-inflicted for purposes of false accusation. In March last, the Assistant Magistrate of Howrah sent me a girl, about ten years old, for my opinion as to how certain marks on her cheeks, arms and back were caused. She asserted that they were burned with a hot chillum, whereas the accused declared that they had been made with some paint. I found a large circular brown mark on either cheek, each of these marks had a clean and perfectly defined edge. The marks on the arms and back were parallel brown streaks with clean edges, there was no vesication, but the cuticle was beginning to separate. Such even, clear edged, symmetrical marks could not have been inflicted with a heated body upon any person who was not in a state of complete insensibility; and, from their shape, it was evident that they could not have been caused by the application of a chillum. I gave it as my opinion that a fluid irritant had been applied, and that the case had been trumped up.

3rd.—In 1841, Mr. Wilkie, of Dinagepore, reported that a Mussulmaun woman had died from the effects of being burnt with a mashal. He found a circular ulcer, three inches in diameter, on the back; the whole of the inner sides of both thighs and the pudenda were blistered, as were also both arms and breasts; there was likewise a patch on the outer part of the right thigh, and an ulcer two inches long on the popliteal space of that limb.

In 1845, a well known housebreaker, of Poorneah, was arrested in the act of committing a burglary, and the brother of the owner of the house, being determined to discover where the rest of the gang had secreted the property, tied up the robber with his feet to one post and his hand to

^{*} Appendix C. No. 8, Cuddapah, p. xevii.

another immediately opposite; and then, with the assistance of the chowkeedar and another servant, lit a good-sized torch and burnt him from head to foot. The police concealed this atrocity. A few days afterwards, the Magistrate received a report from the Darogah and Mohurir, who sent in the thief in a cart, saying that he was ill with fever. The Magistrate, going to see him, found "his flesh literally burnt off his bones." He died that night, refusing to say how or by whom he had been thus treated. The Darogah and Mohurir were sentenced to five years' imprisonment for endeavouring to conceal this atrocity by false report.*

In the following case, Torture of this kind was evidently the preliminary to murder, under the most barbarous circumstances: In September, 1845, Mr. Wilkie, of Dinagepore, examined the body of a Mussulmaun woman, in which he found that the lower part of the abdomen, the external genitals, thighs, legs, feet and palms of the hands had been extensively scorched by fire, before life was extinct. There was a wound above the left ear. This ear and part of the right ear were cut off. Mr. Wilkie considered that she had probably been first stunned and then burnt. It appears more likely, however, that the fatal blow on the head was inflicted last. Again, in 1844, Mr. Macintyre, of Furreedpore, found on the body of a Mussulmaunee, "a compound fracture of the right leg and violent contusion about the breast and head. She appeared to have been burnt about the breast and armpits," where the skin was blistered in large patches; some violence also seemed to have been inflicted about the pudenda. In 1849, Dr. T. W. Wilson, of Rajshaye, examined the person of a Hindu female, and found a rather trivial burn, apparently occasioned by the applica-

^{*} Report of the State of the Police in the Lower Provinces, for 1845, p. 19.

tion of some heated substance to the skin of the hips, close to the anus, producing blistering and removal of the cuticle.*

In 1852, near Azimgurh, an elderly man of some wealth and of notoriously dissolute habits, was killed in the house of one of his assamees, where he had an intrigue with a married female. The native Doctor deposed that he found the body covered with blisters from the application of fire, and the hair of the head and face was burnt off.† Marks of violence were found on the throat, the windpipe had been forcibly compressed by the application of some hard substance, and death by strangulation had resulted.‡

The flame of a torch or the oil which drops from it is the manner of Torture commonly used by Dacoits to compel persons to give up concealed property.

In his Report for 1848, Mr. Dampier mentions || that, in the district of Nuddeah alone, one hundred and seventy-four persons were entered, within the year, as having been engaged in dacoitees with Torture. In some instances, this barbarity has been carried to fatal lengths, as in the case of an old man of Dinagepore who was so severely burnt with torches by dacoits, to make him give up his money, that he died nine days afterwards; ¶ and in that of another aged man who was

^{*} See also the case of a man convicted of wounding the pudenda of his wife, and of having thrown burning fuel upon her, as punishment for unchastity, Nizamut Adawlut Returns, vol. i. of 1852, p. 762.

[†] Burning the beard (Dariporia dhaya) is also mentioned as a Bengali mode of Torture.

[†] Nizamut Adawlut Reports, N. W. P., Jan. 7th 1853, p. 24.

[§] See Macnaghten's Reports, vol. 1, p. 14; Nizamut Adawlut Reports, vol. 3, part 1 of 1853, p. 51, (with a red hot stick,) and p. 410, (with a torch); of 1854, p. 451, (torch); p. 728, (torch); *Ibid*, p. 742, (torch); Bengal Police Reports, 1838, p. 36, (burning); Nizamut Adawlut Reports, August 1854, p. 182, (sprinkling with hot oil); *Ibid*, p. 247, (torch); *Ibid*, December 1854, (oil from a torch,) p. 853; *Ibid*, Feb. of same year, p. 259, (torch); Jan. 1852, p. 48, (torch.); Nizamut Adawlut Reports, N. W. P., 27th Aug. 1852, p. 907, (hot oil.)

^{||} P. 53. | ¶ Police Report, L. P., 1838, p. 44.

similarly tortured in Nuddeah, with so much cruelty that he died from lock-jaw four days subsequently.* The only instance which I find in which any other mode of Torture was employed by dacoits was one in which the woman of the house had her thigh compressed between two pieces of bamboo, called a *chepa*, to enforce her to discover her husband's property. This, however, occurred in Assam—(Kamroop).†

A case is mentioned in the Madras Report in which two peons were punished for burning a suspected person with the end of a cheroot.

4th.—A few months since, a man was sent to me for examination by the Magistrate of Howrah with evident traces of a recent burn on the perineum and buttock and about the anus, (there was no internal injury). He declared that a heated iron had been applied by certain persons a day or two previously. I confirmed the probability of his assertion. In August 1843, a man and his concubine were sentenced, at Nuddeah, for burning the pudenda, and also other parts of the body of a Hindu female child, three years old, with a red hot iron hata (ladle).§

In 1853, one Jeebia (Hindu) and others, complained to the Deputy Magistrate of Nowada, accusing certain persons of having burnt her with a hot iron hussooa (sickle) on her body, and made her mother eat cow's flesh, charging them with having bewitched a child. She and others were, in consequence, tried for perjury; the Court, however, decided that there was no direct or positive proof of the falsehood of the above statements.

^{*} Police Report for 1845, p. 57. † Police Report, August 1854, p. 218. ‡ Madras Report, Appen. 7, p. lxxxiv.

[§] Nizamut Adawlut Returns, vol. iv., part 2, p. 279.

^{||} See case in which an unfortunate ryot of Midnapore was seized, evidently by the orders of his talookdar, and carried to a house where he was tortured by fire, and beaten to death with sticks and shoes.—Nizamut Adawlut Reports, Nov. 1853, p. 792.

In 1840, one Rajee Mundul, from motives of jealousy, burnt his wife on the thigh and other parts of her body with a heated sickle; she was found dead on the following day, and the prisoner confessed to having burnt her, not thinking that it would cause her death.*

Again, a man was convicted, at Rungpore in 1844, of having burnt his wife (whom he had caught in the act of committing adultery) with a hot iron. Death appears to have resulted.†

A goldsmith of Cawnpore was sentenced to imprisonment and a heavy fine, in 1853, for having tied his runaway apprentice's arms, stopped his mouth with some cloth, and burnt him in ten or twelve different parts of his body with a heated iron spoon. The boy suffered some time in Hospital, and was marked for life.‡

These uses of the hot iron are also well understood in Madras. Lately, a man in Tanjore branded a young boy with a hot sickle for an act of ordinary carelessness; later still, a man of Vallore swung a young girl to the beam of his house by her hands and hair, beat her and branded her face and arm with a hot knife, because she had taken nine pice from his room. The Head Assistant Magistrate of Tinnevelly reported that there was then "a man in Hospital suffering from severe mal-treatment, having been half-roasted alive," by villagers who caught him in an attempt to rob.

^{*} Police Report, L. P., for 1840, p. 62. † *Ibid*, for 1844, p. 33.

[†] Nizamut Adawlut Reports, N. W. P., 30th September 1853, p. 1217—"If he (a once born man) mentions the names and classes of twice born persons with contumely, an iron style, ten fingers long, shall be thurst, red-hot, into his mouth."—Menu, v. 271.

[§] Appendix C., No. 16, p. clxix. || *Ibid*, exevi.

5th.—There is a case, in Macnaghten's Reports,* in which a Mussulmaun slave girl, between eight and nine years of age, accused her mistress of tying her with a cord, heating some oil, and pouring it on her private parts. The correctness of this statement appears to have been confirmed by the Civil Surgeon.

In 1842, Mr. Kean, of Moorshedabad, reported the case of a Hindu in whom both hands and one foot were so much burned that mortification ensued. The injured toes, the fingers of both hands, and a large portion of the right hand were thrown off. Mr. Kean considered that the injury must have resulted from the immersion of the parts in some boiling liquid.

In the same year, the body of a Mussulmaun girl was sent in for inspection to Mr. J. Macrae, at Monghyr. All that could be discovered was that "the hands and lower parts of the arms were burnt almost to cinders."

In his Report for the first six months of 1842, Mr. Dampier mentions a case in which the police of Thannah Mirzapore, in the Moorshedabad district, tied together the fingers and toes of a man suspected of dacoity and drove wedges between them to the greatest extent of tension. He was then laid out on his back in the sun; this not producing the desired effect, his hands and feet were dipped into boiling water, then the ligatures were unloosened and bandages dipped in oil, tied round the fingers of both hands and the toes of the left foot, and lighted. Failing to obtain a confession, they kept him in the Thannah, without any remedies being applied, until the fingers and toes became gangrenous. These parts ultimately dropped off.†

In 1854, one Nunda, Sonar, of Sarun, inflicted this horrible torture upon his own child. The boy, aged only about

^{*} Vol. 1, p. 55.

[†] All the Police Officers were, of course, severely punished for this atrocity.

ten years, was found one night by the police lying crying in the street. His body bore marks of beating, and his hands of burning. He stated that his father had beaten him the day before; and that, six months previously, he had, when drunk, tied him up, bound his hands with tow, and then set fire to it; and that, during the six months, he had been confined in the house. The poor child had lost the use of his hands, and his statement was fully corroborated by witnesses.*

A horrible case of murder by torture, in which this barbarity was used, was brought to light in March last. Some idols and other property, belonging to the Raja of Pergunnah Jalda in the Maunbhoom district, having been stolen, several suspected persons were apprehended by the Raja's people and brought to his gurh, or petty fortress. They were, one and all, tortured to extort confession. All were beaten and kept in restraint for about three days, being at night all fastened by the feet to one rope. Two, however, being the most suspected, were the most severely treated. Their fingers were tied together and shivers of bamboo were driven between them. This was also done to the toes; boiling oil was then poured on their hands and feet. Having made a kind of pincers, by tying two cross-sticks together, they squeezed therewith the testicles of Sadhoo Churn (who subsequently died) "and so emasculated him." A string with a noose was put on his penis, and, the other end of the string being made fast to a tree, one of the tormentors struck the tense string with a stick. Upon the body of this unfortunate man being examined by the Civil Surgeon, it was found that the hands were fearfully lacerated, as if by stakes or pieces of iron driven through them; besides which, he had marks of having been scalded with boiling oil or water. The medical officer considered that the injuries inflicted on the

^{*} Nizamut Adawlut Reports, December 1854, p. 793.

hands, feet and private parts of the deceased, were sufficient to cause, and did cause death.*

The same brutality appears to be commonly practised in Madras. The Civil Surgeon of Chingleput received into the jail, in May 1854, a female suffering from two "severe burns, one on the inside of each of her thighs, high up, close to her private parts."†

The Judge of Mangalore mentions that, in a case which came judicially before him, a Brahmin woman had burned with hot oil the thigh of another woman whom she suspected of theft.‡ The Civil Surgeon of Coimbatore mentions a case in which a Sheristadar, to extort confession, enveloped the limbs of a person in cotton soaked in oil which he set fire to. Death ensued §

A few years since, a wealthy merchant of Arrah, suspecting some of his female servants of theft, put them to the ordeal of dipping their hands into a vessel of boiling water.

The Collector and Magistrate of Tanjore reports that, recently, a man of that district, having lost some small article from his house, "proceeded, as a matter of ordinary routine, to dip the hands of his three wives in boiling cow-dung, to induce them to confess if they had taken it.

^{*} Nizamut Adawlut Reports, March 2, 1855, p. 315. † Appendix C., No. 12, p. cxxii.

[‡] Ibid, No. 10, p. cxiii. § Appendix C., p. clxxxv.

^{||} Mr. Dampier's Report, 1846, p. 2. For some curious accounts of the ordeal by boiling oil, see Forbes's Oriental Memoirs. "On great occasions let the king cause the party (accused) to hold fire, or to dive under water, &c."

[&]quot;He whom the blazing fire burns not, whom the water soon forces not up, or who meets with no speedy misfortune, must be held veracious in his testimony on oath."—Menu. c. v. 114 and 115. It is almost unnecessary to say how completely these Indian modes of ordeal correspond with those maintained for many centuries throughout Northern Europe.

[¶] Appendix C., No. 16, p. clxix.

Pouring hot oil into the ears and nose, (Tel dhala) is a mode of torture well known in Bengal.*

Torture is also said to be inflicted by compelling the victim to sit on an iron vessel containing heated sand or oil. This is termed, Tela bhajá—frying in oil.

Fastening the body to the limb of a tree under which a fire has been kindled, for the purpose of suffocating with the smoke.†

Tying the hands behind the back, and hoisting the body up by a rope fastened to the wrists.—The order for this punishment is Lut Koy—make him swing

This practice is alluded to by Hamilton, who mentions that, in 1709, a native, who had incurred the vengeance of the Nuwab of Chickacul, "was set in the hot scorching sun three days, with his hands fastened to a stake over his head, and one of his legs tied up till his heel touched his buttock."

So recently as January last, a tehseeldar and two chupprassees were convicted, at Saharunpore, of torturing, beating, and starving ten men, with a view, apparently, of obtaining information regarding a robbery. The mode of torture practised was suspension by the arms which were tied behind the backs of the sufferers to a tree; this cruelty was proved to have been repeated, at intervals, during many days; the Civil Surgeon deposed that one of the persons thus treated died. He, like eight of the nine sufferers, showed marks of ligatures having been bound tightly round his arms; but, in addition, there were marks of burning on the body, the greater part of which was covered with large blisters. This was admitted by the man's companions to have been caused

^{* &}quot;Should one, through pride, give instruction to priests concerning their duty, let the king order some hot oil to be dropped into his mouth and ear."—

Menu. c. v. 272.

[†] Appendix C. p. civ.

by hot applications and fomentations injudiciously employed for the purpose of restoring the use of his limbs. Several of the people had temporarily lost the use of one or both of the arms.*

Suspension by the arms or hands is, however, generally accompanied by severe beating, as in the case of a man at Barrackpore who, being suspected of theft, was detained by the police, who tied his arms behind his back by a cloth to which a rope was attached, by which he was suspended to a bamboo rafter and then beaten. He was thus left hanging until released by a traveller, on whose approach the police fled. The Darogah and several of the police were sentenced to two years' imprisonment.†

In December 1854, three men of Bijnore were sentenced to seven years' imprisonment in irons for having killed a person whom they charged with stealing a hooquah. They tied his arms behind his back, and suspended him from the end of a pole supporting the thatch of a hut, and then beat him with lattees and their fists. He died in consequence of their ill usage a few days afterwards.‡

In the same month a man of Bareilly was found guilty of having killed a boy whom he employed in his mango plantation, by beating him with a lattee after having suspended him to a tree by a rope tied to his hands. § This mode of suspension and beating is also commonly employed in Madras. Several instances will be found in the Report.

Suspending by the Feet (Páye rashi diya jhulàna.)—In January last, three men were sentenced at Jounpore for

^{*} Decisions of the Nizamut Adawlut, N. W. P., 21st January 1854, p. 54. See instances of the infliction of the same kind of suspension in Madras. Appendix E. p. liii.

[†] Nizamut Adawlut Reports, 23rd January 1855, p. 103. † Nizamut Adawlut Reports, N. W. P., 1st December 1854, p. 787. § *Ibid*, p. 873.

^{||} Report, p. 50. Appendix E. pp. xliv., &c.

having suspended a man (who appears to have been stealing plantains) to a tree with his head downwards, and having beaten his feet until the "lower part of the limbs were literally pounded into a confused mass." Death resulted in a few hours.*

It appeared, in a trial at Baitool in 1852, that dacoits had tied a man head and feet to a charpoy which was then placed on end, so that he hung with his head downward.†

In 1853, certain persons were tried at Mymensing, for suspending a suspected thief by the feet to a beam and beating him to death.‡

Suspending by the feet to the bough of a tree is mentioned as a torture practised in Bellary.§

Suspending by the Hair.—A few months since, a Thannadar of Ahmenabad was dismissed for having suspended a prisoner by the hair of his head to a beam, and having ordered him to be beaten, while in that position, with fists and with a kora.

Just before the Madras Report appeared a wretch swung a young girl to the beam of his house by her hands and hair, and cruelly beat and burnt her while in that position.

Lifting by the Moustache—Is mentioned among the tortures in vogue in police cases in Madras** also Lifting by the Ears.††

Introducing Red Pepper (Lall Mertch) into the Nostrils, (naké langkár jhál deon) or Eyes. Burning Lunka Mertch

^{*} Nizamut Adawlut Reports, 24th January 1855, p. 100.

[†] Nizamut Adawlut Reports, N. W. P., 27th August 1852, p. 910.

[‡] In Hindu fable, one of the candidates for absorption into Brumhu is represented as hanging, for centuries, with his head downwards.

[§] Appendix C., p. civ.

^{||} Nizamut Adawlut Reports, N. W. P., 1st March 1855, p. 281.

[¶] Appendix C., p. clxix. ** Report, p. 50.

^{††} Appendix C., p. clxv.

under the nose. (Lunka Mertch dho dya.) Covering the Head with a bag which has contained Red Pepper (Langkar thaliyate mukha poro). Rubbing Chillies on the Breasts of Females. Introduction of Red Pepper into the Vagina (Asthana sthane langka deon) or Urethra.-These barbarities are very frequently practised, both in this and in the Madras Presidency. In June 1853, a man and his mother were sentenced, at Dinagepore, to long terms of imprisonment, for having introduced chillies and ginger into the vagina of the wife of the former, and for burning her with a red hot chillum and charagdhan, (an earthen-ware pipe about a cubit in length with a round top, for placing a lamp upon). The Civil Assistant Surgeon stated that the woman had received very severe burns on the thighs and pudenda, causing extensive sloughing and great constitutional disturbance, so much so, as to endanger life; chillies had also been introduced into the vagina, causing severe inflammation and consequent sloughing. The chillies came away after her admission into Hospital.

The Judge of Mangalore met with a case in which a poor man was totally blinded by having an acrid juice put into his Eyes; in another instance a person who found a boy stealing his cashew nuts, rubbed the acrid juice of that tree into the boy's Eyes.*—See page 204.

A Clergyman informed the Collector and Magistrate of Tanjore that, having missed a cheque from his table, he made inquiry among his servants regarding it. In order to ascertain whether it had been taken by the only child on the establishment, his Eyes were filled with red chillies by the other servants, in order to force a confession from him.†

The Civil Judge of Salem, also mentions, among the general kinds of torture practised by the Police in that district,

^{*} Appendix C., No. 10, Canara, p. cxiii. † Appendix C., No. 16, p. cxiii.

putting Pepper or Chillies into the Eyes, or into the Urethra or Anus.*

I am informed that introducing the Arum Colocasia (Kachoordata) into the Ears. (Kana Kachoordata Daya) and also Dhatoora (Kana dhatoora daya) are modes of Torture practised in Bengal.

Tying Bichootee upon the Limbs and Body appears to be a very common practice in Bengal, to which allusion has already been made. I also hear of "Besprinkling the Body with Alkoosh water." (Alkoosh juldya.) The Alkoosh being described as "a creeper, like Bichootee."

Some months since, I examined a man under whose chin there were a great number of extremely fine, but distinct, cuts or scratches, which had barely entered the cutis. These were said to have been produced by fastening on his neck a Pounded or Split Bamboo. This appears to be a well-known mode of Torture.

Introduction of a Ruler, Stick, or other foreign body into the Vagina (Rúle puriya deon, and Lati puriya deon— Rúldhaya).

It would appear that this mode of torture is not unfrequently inflicted. My opinion was called for in two alleged cases of the kind, at Howrah, during twelve months. In one of these it was alleged that an office ruler was the instrument employed. The woman (a widow) stated that the violence had occasioned severe hæmorrhage and pain: she was certainly anemiated and, for two or three days, there appeared to be great tenderness above the pubes. In the other case, it was asserted that a bamboo stick had been employed. Both women were menstruating at the time, (a very suspicions circumstance). No bruise or laceration could be detected in either case. Very guarded opinions were therefore given.

^{*} Appendix C., No. xiv., p. cxlv.

Mr. Simmons, apothecary at Gowalparah, reported, in 1841, upon the case of a Hindu woman, said to have been ill-treated by her husband, in which he found sloughing of the vagina, extending to the nympha and groin on one side, and to the urethra. The bladder had also become considerably diseased. He was of opinion that these effects had been caused by the thrusting of some sharp instrument into the upper part of the vulva.

Last year, one Calachand Darra, of Jessore, (married to a young girl who was very unwilling to remain with him,) upon his wife's refusing to sleep with him, strangled her; and afterwards suspended the body by a cord to a tamarind tree, attempting to make it appear that she had destroyed herself. Witnesses who first saw the body observed that the genitals were swollen, marks of injury to the pudenda were also evident when the darogah held the inquest. The native doctor who viewed the body said that there was the appearance of a stick having been forced into the private parts, but he could not examine minutely, as the body was decomposed.*

One Hurree Ram and a relation of his were condemned to death, at Bareilly, in 1852, for the murder of the wife of the former. It appears probable that the unfortunate woman had given her husband cause for jealousy. Cries were heard in the night, when a neighbour, rushing in, found the man transfixing his wife's neck with a spear, while his relation held her head. It was found, upon examining the body, that she had been also stabbed in the pudenda.†

Introduction of similar bodies into the Rectum.—This crime is, undoubtedly, common, and has not unfrequently occasioned death. The following cases will be sufficient in illustration, although others might be cited.

^{*} Nizamut Adawlut Reports, 31st July 1854, p. 158 † Nizamut Adawlut Reports, N. W. P., 5th April 1852, p. 268.

In 1842, Dr. T. W. Wilson, then of Mymensing, found on the body of a Mussulmaun woman distinct marks of strangulation and wounds (their character was not described) in the lower bowel which he considerd to be of necessity mortal. An old woman was tried for this crime.

Dr. Dickson, of Behar, examined the body of a Hindu man into whose rectum it was evident that some blunt body, such as a lattee or bamboo, had been forced, producing great injury to the intestine and effusion of blood into the abdominal cavity.

Dr. Kenneth Mackinnon found the bladder punctured in this manner.

Rather frequent allusion is made to this violence, in cases where other severe injuries have been inflicted. Dr. Denham, of Gyah, examined the body of a Hindu man, in which he found contusion about the face, and fracture of all the ribs on the right and of four on the left side. There was also great laceration at the verge of the anus, and the cavity of the abdomen contained a very large quantity of extravasated blood.

In 1848, four natives of Purneah were sentenced to seven years' imprisonment for killing a thief, whom they had captured, by forcing a stick into his fundament.*

In the following year some persons of Bograh, suspecting a man of theft, went to his house at night under pretence of smoking with him. After sitting some time, they suddenly seized him, beat him severely, and employed a bamboo in this manner so violently as to cause his death.

Again, in 1851, a mahajun, of Maldah, having gone to collect advances, his debtor was reported to be from home; but he was invited to remain and smoke, when two of his debtors appeared, beat, kicked and knocked him down, a third then placed his feet upon him, and a fourth, with

^{*} Police Report, L. P., 1848, p. 19. † *Ibid*, 1849, p. 31.

whom he had a suit in the Civil Court, thrust a split bamboo several times into his person. He died the next day.*

A most striking case of this kind was reported by Dr. T. W. Wilson, then of Rajshaye, in 1841. In examining the body of a Hindu man, who had died under suspicious circumstances, Dr. Wilson found some outward marks of bruises on the lower part of the chest and upper part of the abdomen. There was extensive peritonitis. This had been occasioned by the presence of the wooden pipe of a native hookah, lying on the right side of the abdominal cavity. About three inches of the lower end of this pipe remained lodged in the rectum, through the coats of which its upper extremity had passed; the pipe thus introduced was about twelve inches long.

Three Mussulmauns of Allahabad, suspecting a woman of being implicated in a theft, sent for her, on the pretext that she was required at the house of one of them to undergo the ordeal of chewing rice. On her asserting her innocence, she was removed to a closet and beaten. Then one of the wretches got on her chest and held her down—another (a lad of fourteen!) held her feet, while the third forced a

^{*} Police Report L. P., 1851, p. 24.

See a remarkable instance in which a Moorshedabad man,—who had died under ill usage, apparently accompanied with violence of this kind, and whose body proved to have been suspended by his assailants after death,—was found to be the subject of strangulated hernia. The medical evidence appears to have been imperfectly reported. The Civil Surgeon deposed that the body exhibited no external marks of violence; but, internally, there was a great deal of inflammation in the cavity of the abdomen and scrotum, and in the scrotum there was a great quantity of the small intestines and some dark fluid like blood in colour. That the deceased must, at that time, have been afflicted with strangulated hernia, and that the violence received was either directed to the seat of the disease itself, or caused a sudden shock to the system, terminating fatally at once. The printed report, however, which deserves perusal, scarcely admits of a satisfactory explanation of the man's death. Nizamut Adawlut Reports, 20th October 1853, p. 684.

stick into her fundament. Seeing that the blood flowed, they brought water and began to wash the marks off the clothesthe boy pounded huldee, which they applied to the wounded parts. They then pounded charcoal which they were going to apply in order to stop the bleeding. She begged them not to do so, when they let her go; and she went at once to the thannah which was close by. This statement was considered by the Sessions Judge to be fully corroborated by circumstantial evidence. The Civil Surgeon, who examined the woman on the day after the assault, stated that there were severe marks of blows on the back, and that the skin of the fundament was abraded, as if by the introduction of some sharp pointed instrument; that these injuries could not have been the act of a single individual, but that no permanent injury had resulted or was likely to result.*

It is an extraordinary fact, showing how thoroughly conversant the people of Bengal are with this brutal mode of punishment, that, in two instances within the last ten years, young children have been tried for having caused the death of one of their companions in this manner! One example will suffice. It occurred at Rungpore.—"The deceased and the prisoners were children of eight or nine years old. The two latter quarrelled with another, whom they abused; the deceased interfered, when they seized him, and, throwing him down, forced a small stick into his rectum, from the effects of which he died the following morning.

I am informed by Baboo Grischunder Ghose, Deputy Magistrate of Howrah, that there is a practice of Torture in the Eastern and Southern parts of Bengal, by introducing into the anus Kachoor, Cuchao, or Ole Danta, the stalk of the Arum Colocasia.

^{*} Nizamut Adawlut Reports, N. W. P., 22nd November 1853, p. 1412.

† Ibid, for 1846, p. 33.

Introducing a Straw or Wire into the Urethra.*

Compressing the Chest between two bamboos, or placing a stone or other heavy weight upon the Chest.—(Buki bans diya dhulána—or Bansdollah.)

The medical reports to the Nizamut contain many cases in which the ribs on both sides were found broken, and the chest completely crushed. This kind of injury is, doubtless, sometimes caused in affrays by persons jumping or falling upon the body of their victim, but it is well known that compression of the body by bamboos is practised as a Torture, and that it is sometimes carried to fatal lengths. In 1844, Dr. Wilkie, of Dinagepore, deposed that he had no hesitation in testifying that two persons had been "firmly held or bound and died from the effects of Bansdollah, (Torture of rolling and pressing with bamboos), the violence of the injuries causing death from the shock given to the nervous system."

In 1854, certain policemen, also of Dinagepore, seized a person on suspicion of dacoity. It appeared that he was, in the first instance, beaten by the mohurir or acting darogah and his party; and that, on the arrival of the darogah in the early part of the night, he was again severely beaten, three times at least, until, at length, he fell senseless, when he was slung to a bamboo, tied hand and foot, and so carried back dead to a cattle shed. The Civil Assistant Surgeon stated that "death was caused by congestion of blood in the brain from Torture by severe pressure, and that simple beating without some such process as Bansdollah, would not cause the appearances he found without more decided external marks." The Judge considered it to be clear that the beating was performed skilfully by sharp raps on the joints, punching and poking with lattees, so as not to leave external marks, and that the Bansdollah Torture was

^{*} Madras Report, Appendix C., p. cxlv., and Appendix E., No. iv., p. vi.

inflicted after the deceased fell, and that the object of this was to ascertain whether he was shamming or not. The witnesses were at some distance in the dark, and "thelathelee" with lattees, trying to push the deceased up, could not easily be distinguished, under the circumstances, from rolling two lattees fastened together down the thigh and leg.*

It is stated that the people, in that and the neighbouring districts, have a knack of inflicting insupportable suffering, by rolling the limbs in this manner between two sticks, without producing any traces of contusion or discoloration.

The Surgeon of Cuddapah reported to the Madras Commissioners that, a very short time previously, two prisoners had been brought to him stating that they had been tortured—that heavy stones had been placed on their chests and a long piece of wood over this, and that on either end of the wood a man had seated himself, causing an almost total inability to breathe. His opinion was that what was stated by these men had really taken place.†

A like punishment, known as Badha or Chitkara Jotemara—dancing with thick shoes upon a person lying, bound hand and foot, on the ground, is also said to be practised in Bengal.

It will be noticed hereafter that death is sometimes produced by compressing the throat in a similar manner between two sticks.

Probably the commonest mode of Torture in Madras is by the Kittee (in Telugu Cheerata.) This instrument merely consists of two sticks tied together at one end, between which the fingers are placed, as in a lemon-squeezer. (We have seen that an instrument of Torture similar to this is used in Assam), or the unfortunate is compelled to interlace

^{*} Nizamut Adawlut Reports, 22nd April 1854, p. 508. † Appendix C., No. 8, p. xcix,

his fingers, when their ends are grasped and squeezed, sand being sometimes used to ensure a firmer gripe; or he is made to place his hand flat on the ground, and a stick, laid horizontally over the back of his fingers, is pressed downwards at either end; or the fingers are bent forcibly back towards the hand, or the hand upon the fore arm.* Compression of the fingers upon or between bamboos, &c., is also practised in Bengal. (Angul badha Hathorimara). Here also the fingers are tied closely together, and nails or split bamboos are then forced or hammered between them—(dus logee kara). This was one of the Tortures against which Burke inveighed in his denunciation of Debi Sing's proceedings in Rungpore and Dinagepore.

In Madras, pressure by the Kittee is applied in various ways, as to the Ears† and to the Breasts of females.‡ Twisting Womens' Breasts is also mentioned; § so also is plucking at the flesh with large iron pincers. Pinching the inner parts of the Thighs is another practice there.¶ In Bengal also, subjecting the victim to the pinching of several persons, (Chimti Kata) is spoken of as a well known mode of Torture.

Compressing the Testicles and pricking them with Thorns (Holetipadhara.)—These are modes of Torture practised in Bengal. An instance of the first kind has already been noticed at p. 212, and it would appear, from the Madras Report, that it is employed by the Police in that Presidency.** A strange statement, illustrative of this practice, was made by a Cossiah woman, who confessed to the murder of her husband. She affirmed that, when she and the deceased were at work, he climbed a tree, seven or eight cubits high, to get a ratan. It broke in his grasp, and he fell to the ground, when she, seeing his helpless condition, seized the

^{*} Report, p. 48. † Report, p. 34. ‡ Appendix E., No. 22, p. xxvii and xxix.

[§] Appendix C., p.xeli. | Ibid, p. civ. | Page 48. ** Page 50.

opportunity, and, with a stick cut for the purpose, struck him over the nose and face, and completed the murder by squeezing his testicles until he expired. (There were two very severe scalp wounds and the testicles were swollen.) This, the Deputy Commissioner remarks, appears to be an operation understood by the Cossiah women, as the late Mr. Scott, Commissioner of Assam, informed him of a case in which a European soldier, attempting to commit a rape upon a Cossiah woman, was effectually frustrated in his attempt, and severely punished in this manner.* These parts are frequently injured in affrays, the natives having a brutal habit of seizing and dragging along an unfortunate opponent by the scrotum. In a case reported by Dr. Denham in 1843, in which death had been caused by an immense wound across the loins and other injuries, it is mentioned that "the skin covering the organs of generation was completely removed,"-probably in this manner.

A dispute on money matters arising between two traders of Delhie, some indecent language passed; when one seized the other and dragged him along with such violence that the whole preputial integument was torn away.

The various kinds of torture by Beating practised in India will be noticed in the Chapter on Wounds.

Confinement in a Cell filled with Lime (Chunam)—Is also mentioned by Baboo Grischunder Ghose. In a case tried at Backergunge in 1847, it was alleged that Lime had been put into the eyes of a man who was supposed to have met with his death by unfair means. Decomposition had advanced too far to enable Mr. Scanlan to give an opinion upon this point.

Rubbing the Face upon the Ground.—This is also spoken of as a mode of Torture. I, not long since, had a child sent to me

^{*} Nizamut Adawlut Reports, 5th April 1855, p. 371 † Nizamut Adawlut Reports, N. W. P., 21st Sept. 1854, p. 415.

whose face had evidently undergone this severe discipline. The fatal case of a man,—in whom Dr. Murray, of Beerbhoom, found the nose wounded, the lips much torn, the upper jaw fractured, a quantity of mud about the mouth, and two contused wounds on the back of the head,—was probably of this kind.

Binding the Limbs with undue tightness.—Mr. Pagan, of Midnapore, has reported the case of a Mussulmaun woman whose right arm was, upon admission, very much swollen and discolored, from having been bound very tightly with a rope; indeed the skin had been cut by the rope, and mortification had then set in. The skin near the elbow joint had been also bruised. The left arm had suffered in a less degree. The right arm and hand, however, remained permanently shrunk and powerless.* It appears to be the practice of the Police to bring in prisoners with their arms properly secured. Under these circumstances, attempts to escape might, of course, leave suspicious marks on a prisoner's limbs.

Binding the arms backwards with cords so tightly as to impede circulation.

Twisting a Rope round an entire limb so as to impede circulation.—This appears to be a rather common mode of Torture in Madras. The Collector and Magistrate of Salem describes the practice as "tying coir ropes to [around] the muscles of the thighs and arms, and pouring water thereupon to produce extreme tension."‡ The Commissioners give an extract from the report of the Zillah Surgeon of Canara, describing the condition of a man who had been tortured in this manner. He had two very deep, foul and

^{*} See the trial of a man for binding the arms of his insane daughter with undue severity. Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 475.

[†] Ibid, Appendix C., p. cxlvi-and cliii.

[‡] Appendix C., No. 14, p. cxii.

extensive ulcers on his wrists and hands, and a great many smaller ones extending from the wrists to near the shoulders in a spiral direction. The constitutional symptoms were very severe. He stated that his wrists had been placed between two pieces of wood which were repeatedly squeezed together with great force, and that a rough rope, charged with powdered chillies and mustard seed, and moistened with a solution of salt, was very tightly bound round his arms. The ropes were kept on until his arms were swollen four times their natural size [?] The safety of the limbs was endangered, and he left the Hospital without any prospect of recovering the full use of his hands.*

The Zillah Surgeon of Guntoor also reports the case of a prisoner upon whom, from the wrists to the upper third of either forearm, there were distinct marks of tight ligatures. On one wrist, the skin was abraded, and suppuration had followed.

Binding or otherwise constraining the body in painful positions.—A great variety of cruel devices of this kind are in vogue in both Presidencies. Thus—in Bengal—there is keeping a limb flexed or extended. Making the victim stand on one leg and torturing the lifted leg as often as it is allowed to touch the ground. (Ek thanga darkarana.) Binding the arms behind the back and forcing them with a lattee (thick stick) inserted between the back and arms. (Pit moradhiya.) Placing a hand mill, or other weight on the chest. (Bookar upar Jathadya).—This last mentioned punishment may, like Bansdollah, account for a certain proportion of the crushed chests which so frequently come under medical investigation. According to a Hindu history of Bengal, quoted by Ward,

^{*} Report, p. 8.

[†] Ibid, Appendix C., No. 5, Guntoor, p. lxxii.—See also Appendix E pp. xxi—xxxvi (A rope twisted round one arm from the wrist to the shoulder and the person suspended by it for 10 minutes)—and xxxviii.

Kasum Alee Khan put Raja Ram Narayn to death by placing a great weight on his stomach. In 1845, a Gomashta of a Talookdar, in the Chittagong division, when collecting rents, seized a ryot and placing heavy weights on his chest, confined him for 24 hours, the unfortunate man died from the effects of this treatment.*

In Madras, these modes of Torture appear to be cunningly proportioned in severity in such a manner as to cause every degree of suffering from considerable annovance to exquisite torment. Thus there are Stocks for the Hands and Feet. Persons are compelled to remain in a stooping position with a greater or less weight upon the back-to stand on one leg holding the toes, or with the other tied up. In some cases a log of wood is also placed on the head ;+-to stand with the muzzle of a musket resting on the great toes, t or to sit on the haunches with bricks or sharp pointed stones placed in the bends of the knees. One of the most common modes of Torture in Madras is the Anundal (in Telugu Gingeri),-tying a man down in a bent position with his own cloth or a rope passed over his neck and under his toes, the head being sometimes brought down to the knees. Often a stone of greater or less weight (sometimes a man)|| is, at the same time, placed on the back. The whole Report is filled with references to cases in which this Torture was employed in various degrees of severity.

It appears that, in all the above modes of Torture, Exposure to the Sun is usually added to the victim's other causes of suffering.

^{*} Police Report L. P., 1845, p. 44. † Appendix C., p. clxxiv.

[‡] Ibid, p. clxxiv. § Ibid. || Appendix C., p. clxxiv.

[¶] Being carried to final judgment with their heads and legs tied together, is held by the Hindus as one of the punishments of the wicked, anticipatory of the pains of hell.

In some of these cases the Torture is continued until death results.

The Acting Collector of Nellore reported that a case had recently been reported to him in which an old man, having been tied up in a burning sun, was attacked with apoplexy from which, after an interval of some days, he died.*

The details of a very remarkable case of this kind have recently been sent for publication in the Indian Annals of Medical Science, by Sub-Assistant Surgeon Suyd Mahomed Jaun, in Medical charge Jhung,-Punjab. In December 1854, he was called upon to examine the body of a man, aged 50, who was stated, in the thannah report, to have been struck with a shoe on the private parts by a Burkundaz, from the effects of which blow he died in about 18 hours. There were no outward traces of violence. On opening the abdomen about six ounces of bloody serum flowed out. The Pancreas was vertically lacerated from above downwards at its right extremity through about half its breadth. clot of blood was found close to this wound. The whole organ looked highly congested, with extensive extravasation of blood into its cellular tissue. It appeared that the deceased had been arrested on suspicion by the prisoner who, in order to extort a confession, placed him on the ground, tied his hands together, and, having forced his knees between his arms, fixed him in this position by passing a long stick under the bends of the knees and over the arms. Then throwing the wretched man on his back, he began to beat him with a shoe on his buttocks and genitals, and kicked him more than once until he fainted; when, being supposed to be dead or dying, the victim was released. When he came to his senses, the man complained of a severe pain in the epigastrium, but was able to walk home (about a mile) supported by two persons.

^{*} Appendix No. 7, Nellore, p. lxxxi

Placing stinging or gnawing Insects upon the Skin .- A common punishment in Bengal is placing spiders or a kind of beetle called by the natives ghoorghoora pooka on the navel covered with a shell or earthen pot. It is stated that these produce a swelling which is not unlikely to be mistaken by the Surgeon for a large furuncle. In Madras, the Poollay Insect, the Carpenter Beetle, some burrowing beetle, or the potter's insect is frequently secured in a cocoanut shell, over the navel, or is fastened on the scrotum or some other sensitive part.* That old practice, of exposing persons to be gnawed by ants,+ appears still to prevail. The Collector and Magistrate of Canara has known a prisoner to be put into a nest of red ants as a means of extorting confession. ‡ In 1853 the Zillah Surgeon of Guntoor reported to the Judge that he had examined a prisoner in a criminal case, the whole of whose back was disfigured by the cicatrices of numerous small sores, there was also one sore of great size, near the spine, and there were marks of tight ligatures round both arms. The man stated that he remained tied by the arms to a tree all night, and was severely bitten by large black ants. From the appearance of the sores, they being, for the most part, small, isolated, and rather deep, and from the marks of the cords on his arms, the Surgeon was of opinion that the prisoner's statement was correct.§

Sticking Pins or Thorns under the Nails is practised equally in this Presidency and in Madras.

We have already seen that dipping unfortunates in water or mud until they were nearly suffocated was, long ago,

^{*} Appendix C., pp. exli and exlv.

[†] The Burmese say that, among the trials to which Boodhu was subjected, were smearing him with molasses and letting the flies torment him, and scorching with fire.

[‡] Appendix C., No. 10, Canara, p. cviii § Appendix C., No. 5, p. lxxi.

practised by the Mussulmaun rulers in Bengal. Keeping under water (Jaladabana) is still in Bengali Torture. It is also practised in Madras.* The Magistrate and Collector of Tanjore reported that, there was still a young girl under treatment by his native doctor for a severe wound received, when she was dropped down a well by a rope fastened round her neck, by a man who wished to force from her information as to what had become of an ornament lost by another child at play.†

Filling the mouth with pebbles and striking the chin upwards with sufficient force to break the teeth (Darimara) is spoken of as a Bengali punishment.

Pulling the Hair on both sides, (Chooldhara tana.)—In Bengal this is generally practised upon females. In Madras, there are several contrivances of this kind. Such as tying two persons closely together by the top knots, and tying the hair of the head to a donkey's or buffaloe's tail. Plucking out the Beard, (reckoned by the natives a great disgrace,) is a common Torture in both Presidencies.‡ Twisting the ears; striking two offenders' heads together; placing a person in the sun with his hair loose, and compelling him to turn his head rapidly to and fro.§

Beating the ankle and other joints with a soft mallet or piece of wood || appears to be a common Torture in Madras. A case has already been cited in this chapter, p. 216, which shows the barbarous manner in which repeated blows are inflicted upon the extremities by natives of this country. Last year the Surgeon of Behar thus described one only of the injuries which he found upon the body of a man whom several persons had beaten to death with clubs. "The left

^{*} Report, p. 50.

[†] Appendix C., No. 16, p. clxix—see also p. clvi of the same.

‡ Report, p. 48.

[§] Appendix C., p. clxxiv.

[∥] Ibid, pp. clxxxvii, exciii.

arm, from half way down the shoulder to the extremities of the fingers, was one mass of dark colored pulp. The elbow joint was completely destroyed and the bones in the neighbourhood shattered to atoms, and the brachial artery was torn in shreds."*

Since September 1851, all medical men in the Madras Presidency have been instructed by the Medical Board to examine personally every prisoner on his committal to jail. This order, the Commissioners have no doubt, is punctually carried out. Still their attention has been attracted by the singular absence of almost all medical testimony. This, however, appears to be accounted for by the remark that, "ordinarily, the violence is of a petty kind, although causing acute momentary pain; and even many of the severe kinds of Torture invented by native ingenuity, leave no mark behind them. Delay is, no doubt, often purposely interposed between the infliction of ill-usage, and the delivery of the accused to that custody which is subject to European supervision, and thus marks, when made, become obliterated."†

In both Presidencies, native invention has been fertile in the discovery of tortures and ill-treament which leave no marks—Such as Exposure to the Sun. Confinement in the Stocks, (Shaladya). Starvation, (Sokea mara)—(to this is added, in Madras, the Torture of being prevented from obeying the calls of nature) or from Sleeping. Slaps and blows with switches. Imprisonment. Running up and down, is a Madras punishment. In Bengal, Exposure to the Inclemency of the Night Air, (Nangto kara phala raka) and Sprinkling the Body with Water in Cold Weather, (Jhara dhya) are practices long since employed by the Mussulmauns, inveighed

^{*} Nizamut Adawlut Reports, 5th August 1854, p. 222. † P. 15.

against by Burke, and well known in the present day. Closing the Nostrils till the victim is half suffocated (Nak tipadhara) and Tickling (Katakatoor dya) are also mentioned. I even find more than one allusion to the disgusting brutality of Making Water into the Victim's Mouth, (Mooka moota dya). This was done in a case given in Macnaghten's Reports, where an unfortunate wretch was barbarously put to death by several assailants.

Various modes of inflicting degradation and mental suffering are also practised—an enumeration of these may appear foreign to a medical work. Still, as the Surgeon is generally consulted in inquiries of this kind, it is necessary that he should be acquainted with the whole system. Thus, in Madras, persons of respectability are confined with others of low caste; or a Bramin is made to carry a sweeper on his back, or a necklace of bones or other disgusting and polluting materials is placed round his neck.*

These are evidently modes of vexation contrived by the Mussulmauns. It is stated that Seraj-oo-Doulah was betrayed by a fukeer, with whom he took refuge, who had formerly been a merchant, but was degraded by the tyrant by having his head shaved and the urine of an ass poured upon it.

In 1852, a man deposed in a trial at Jounpore that certain Mussulmauns had seized, bound and beaten him, and had thrown him into a pit. One of them had proposed to put bones, goor and mowa into his mouth, and thus deprive him of his caste, but that they decided to carry him into Oude.†

^{*} Report, p. 48.

[†] Nizamut Adawlut Reports, N. W. P., 25th September 1852, p. 1082.

In this part of the country, it is alleged that respectable persons are confined in privies, or are compelled to clean them out, and that women are exposed to every degree of indignity. Some of the details already given, are sufficiently horrible; still, even beyond this, the extent to which this latter atrocity is stated to be practised is such that I feel unwilling to do more than allude to the subject, unless proved cases could be cited, a result which is rendered difficult by the secrecy which would, of course, be maintained both by the injurers and the injured.*

A very extraordinary case was tried, at Meerut, in October 1854, in which it was clearly proved that one Khoobee Singh having, probably by his own criminal conduct, involved himself seriously with the Police, compelled certain persons, his nephew and others, to kill him by striking him with a sword on the back of the neck. Nearly all the witnesses concurred in saying that the chief reason expressed by the unfortunate man, in insisting upon being put to death, was that the Kotwal had accused him of participation in a robbery, and threatened that, if he did not produce the money, he would seize all the women of his family and parade them naked

^{*} More than one case occurs in the Reports of the Courts of Nizamut Adawlut, in which there appeared to be strong reason for believing that the crime of Rape was committed with a cold-blooded intention of bringing disgrace upon the woman's family. In October 1853 a young married woman of Cawnpore was tried for an attempt to murder her infant by throwing herself with the child in her arms into a well. Circumstances came out in evidence which led to the belief that the prisoner had acted under feelings of extreme excitement, caused by the disgraceful conduct of the Zumindar and others who, being enraged at a deposition made by her husband, had revenged themselves upon his wife, by putting upon her a grievous indignity. The men were tried on a charge of Rape, and were found guilty by the Sessions Judge of an aggravated and indecent assault. There was, however, so much inconsistency in the statements of the woman and her witnesses, that the Superior Court acquitted the defendants, on appeal.—Nizamut Adawlut Reports N. W. P., 2nd March 1854.

through the bazar, but that, if he died, his family would not be disgraced.*

Among the questions proposed to witnesses in the late inquiry was the following:-"The Tehsildar probably does not permit it" [Torture] "in his own presence. But is there an understanding that, if he orders a man to be treated Cayidah pracaurum (according to custom), or some words to that effect, he is to be subjected to such ill-usage?"+ I have long believed that there must be certain "Cant" phrases by which the several modes of Torture are known. For a considerable time, I could gain no information on this subject, or the names of the Tortures were merely rendered into Bengali by my informants. The following expressions were, at length, collected for me by a native gentleman whose means of obtaining accurate information are unimpeachable. I may add that his memoranda were sent to me in the middle of March last,—some time before the Report of the Madras Commissioners was submitted to Government.

Bhalakara Bhojhoy. (Make him understand well.)

Jalkhoyak ana. (Bring him after he has drank water.)

Kala ghora niaghoy. (Take him to the black room.)

Jaladoboy. (Keep him under water.)

Khaya ana. (Bring him after he has eaten.)

Patkara ana. (Bring him after he has been well prepared.)

Sava kara ana. (Bring him after he has been well served, or respected.)

Lut Koy. (Make him swing.)

Thanda Kuro,—Garam Kuro. (Cool him, or warm him.)

^{*} Nizamut Adawlut Reports, N. W. P., 18th October 1854, p. 573.—See also for 30th August 1853, p. 1048.

[†] Appendix G., No. 1, p. exxxiv.

HUMAN SACRIFICE.

The practice of Human Sacrifice, (altogether apart from those of Sati and Female Infanticide) constituted, previous to the times of Mahomedan ascendancy in India, a leading feature in the religion of the Hindus. The Life of a Man was the most acceptable sacrifice that could be offered to their sanguinary deities. Hence the immolations and sacrifices at Hurdwar, at the Mahadeo Hills, at Saugor Island, and at Jugganath, and the Satis, once universally practised throughout India and still monstrously prevalent in many of the According to Col. Sleeman, Human Sacrifices were offered in the City of Saugor during the whole of the Mahratta Government, up to the year 1800. The Revd. Mr. Ward collected much important and striking information relative to this practice as prevailing in Bengal, so late as the year 1817. He was informed that, at Chitpore and at Kali-ghat, near Calcutta, human sacrifices had been occasionally offered up to the year 1788, and that the practice was still known to exist at other places, -as at Ksheera, a town near Burdwan, and at Brumha Neetula, near Nudeea, where headless human bodies continued, from time to time, to be found near the temples.

Doubtless the crime is less prevalent than formerly; but there are strong reasons for believing that there is scarcely a district in India in which Human Sacrifice is not still practised as a superstitious rite.

It was held, in the Rudhiradhyáyă, or Sanguinary Chapter of the Calica Puran, that, through sacrifices, Princes obtain bliss, heaven, and victory over their enemies. By a human sacrifice, attended by the forms laid down, Devi is pleased one thousand years, and by the sacrifice of three men one hundred thousand years. [It is of great importance, in a judicial point of view, that it should be borne in

mind that nearly all the scriptures and traditions of the Hindus concur in promising the highest blessings,-such as success in war, numerous offspring, wealth, the realization of all desires, to him who offers a man in sacrifice.] The victim must be a person of good appearance and be prepared by ablutions and requisite ceremonies. The performance of the sacrifice with a Chandrahasa, or Cattri (two weapons of the axe kind) is reckoned the best mode. The sacrificer must previously make use of certain prescribed texts and invocations; an unclean or deformed person, one unwilling, one under twelve years of age, or a female, must never be sacrificed. If a human sacrifice is performed, without the consent of the Prince, the performer incurs sin. In cases of imminent danger, or war, sacrifices may be performed at pleasure, by Princes themselves and their ministers, but by none else. The victim's head is to be struck off, and offered with the blood. Previously to striking the blow, the sacrificer is to invoke the deity and to worship the victim. Having immolated a human victim, with all the requisite ceremonies, at a cemetery or holy place, the sacrificer must be cautious not to cast eyes upon the body,-the head must be presented with averted eyes.*

These details will be found to illustrate, in a very remarkable manner, the proceedings of the criminals in the following recent case. In September 1851, an informer waited upon the Magistrate of Chittagong, offering to cause the apprehension of one Joodhomonee, a Reaug, an old offender, occupying the Jaoni village of Punnooa in the hills to the Northeast of Chittagong. Joodhomonee appears to have been a man of considerable influence in his tribe; and, upon an attempt being made by a large body of Hill-men under

^{*} See Mr. Blacquiere's translation of this Chapter, Asiatic Researches, vol. v., p. 369.

the orders of the darogah to arrest him, his people rushed out, fired at them with muskets, and drove them off. Thirteen days after this affray, Joodhomonee, with a body of armed men, entered a place called Sukhun, where some Kookies had taken up their residence a short time previously. These unfortunate persons, eleven in number, were seized; six were caused to bathe in the river and were taken through the jungle to a place of sacrifice, -a cleared spot, staked round with bamboos about six feet high, with strips scraped up and left adhering to the stems as a kind of ornament. Five sacrificial altars were afterwards found on that spot, and one elsewhere. The sacrifice was performed by torch-light in the presence of many persons. The victims, having been bound, six of Joodhomonee's people, armed with bill-hooks, selected each his sacrifice, and, having performed a religious ceremony, (pooja,) struck off the Kookies' heads, Joodhomonee and another salaaming at each successive sacrifice. On the following night, three more Kookies, two men and a woman, were taken to another spot, and there sacrificed in like manner. After the sacrifice, one of these murderers carried a body to the police and charged one Bhuggoe Roy, an enemy of Joodhomonee, with his death. The other bodies appear to have been thrown into the water. The sacrifice was said to be intended to propitiate the gods in favor of Joodhomonee, and to get his enemy, Bhuggoe Roy, into trouble.

I have cited the above details thus minutely, because this is one of the most recent cases of human sacrifice that has been brought under judicial investigation in India. Mr. Bowring, who tried this case, mentions in his report that the tribes inhabiting the Jaoni Mehals, worship fourteen deotas, or gods, some of which correspond to the Hindu deities, while others are local divinities. He adds—"It has long been notorious that human sacrifices to these gods are not of uncommon

occurrence."* It will be at once remarked that, considering the absence of all but oral tradition upon religious ceremonies among these savages, the sacrifice detailed above was performed in remarkably strict conformity with the rules of the Sanguinary Chapter. Indeed, except in the particulars of the victims being prisoners, and one of their number being a female, every item of the ceremonial appears to have been rigidly carried out.

Although I was then the Medical Officer of Chittagong, the body of the victim was not brought in to me for examination; but, according to the evidence of eye-witnesses, each head was cut off—"as if it were that of a kid."

Some very remarkable details relative to the practice of Human Sacrifice in the Jeyntea territory, by Sylhet, were brought to light in 1821, in the trial of three persons who, at the instigation of the brother-in-law of the Rajah of that country, forcibly seized a boy in the British territory, for the purpose of offering him up as a sacrifice to Kalee. The boy was rescued.† There is, however, reason to believe that the extension of the British rule has placed a check upon the practice of Human Sacrifice in the Sylhet district.

Government have long been actively engaged in endeavoring to put down the system of Human Sacrifice extensively prevailing among the Khonds inhabiting the hill tracts of Orissa. Valuable reports have, from time to time, been published, showing the character and extent of this frightful evil, and the success which has attended our efforts to suppress it. I think it right to quote, from these reports‡, the descriptions which have been given of the various modes in which these Sacrifices are perpetrated, as it will be found

^{*} Nizamut Adawlut Reports, vol. ii., part 1 of 1853, p. 899. † Macnaghten's Reports, vol. ii., p. 108.

[‡] As collected in Selections from the Records of the Government of India: (Home Department,) 1854.

that they illustrate, in several striking particulars, the modes of sacrifice, wounding and torture adopted in other parts of India.

It must be premised that the victims of these sacrifices, or "Meriahs," must, in every case, be bought; otherwise they would not be regarded as acceptable offerings to the deities whom their deaths are intended to propitiate or appeare. They are generally well fed and kindly treated, up to time of sacrifice. The modes of sacrifice differ much in the several districts of Khondistan.

Mr. Russell states that, in the Maliahs of Goomsur, the victim, having first been stupified with toddy, is seized and thrown into a pit, into which the blood of a hog has been previously allowed to flow, his face is pressed down until he is suffocated in the bloody mire. A piece of flesh is then cut from the body by the priest, all present follow his example. The head and face alone remain untouched; and the bones when bare are burned with them in the pit.

Mr. Arbuthnot reports that, among the Codooloos, the victim is kept in a continued state of stupefaction or intoxication from the moment of his seizure until he is sacrificed. The priest cuts a small hole in the stomach of the victim, and the idol is besmeared with the blood which flows from the wound. The people then rush forward, and he is literally cut to pieces, each person, who is so fortunate as to procure it, carries away a morsel of flesh, and presents it to the idol of his own village.

Mr. Ricketts wrote that very contradictory stories were told of the manner in which the ceremony was conducted. One of the most common modes appeared to be to bind the victim between two strong planks or bamboos, one being placed across the chest, the other across the shoulders. These are, first of all, strongly fastened at one end, the victim is then placed between them, a rope is passed round the other ends, which are long enough to give a

good purchase, they are bound together, and the unfortunate sufferer is squeezed to death. Life still ebbing, the body is thrown on the ground, and chopped in two pieces, below the bamboos, with hatchets. Some accounts say that, after the performance of several strange ceremonies, the divided corpse is buried unmutilated. Others say that, as soon as it is divided, those in attendance fall on and cut each a piece.

Mr. Mills learned that the victim's head and neck were introduced between the reft of a strong bamboo split into two parts, the ends of which are then secured together and held by the sacrificers. As soon as he is firmly fixed, the presiding priest advances and, with a sharp and curiously curved axe, breaks the joints of the legs and arms, at the ankle, knee, elbow and wrist; the surrounding mob then fall to and strip the flesh off the bones with knives. bones of the deceased are buried where the sacrifice has been performed, and their situation is generally marked by a long pole stuck into the earth just above them. Colonel Campbell says that, in Chinna Kimedy, the remains are burnt, and the ashes mixed with the new grain to preserve it from insects. According to Capt. MacViccar, in Maji Deso, the Meriah is first surrounded and beaten on the head with heavy metal bangles; and, if this inhuman smashing does not immediately destroy life, strangulation is effected by means of a split bamboo. Colonel Campbell states that the sacrifice called "Junna" is peculiar to the Khonds of Jeypore. It is always succeeded by the sacrifice of three human beings, two to the sun, to the east and west* of the village, and one in the centre. A stout wooden post is firmly fixed in the ground, at the foot of it a narrow grave is dug, and to the top of the post the victim is firmly fastened by the long

^{*} The Sanguinary Chapter ordains, that the human victim is to be immolated to the East, and his blood to be presented in the West.

hair of his head; four assistants hold his outstretched arms and legs, the body being suspended horizontally over the grave, with the face towards the earth. The priest then repeats an invocation, hacking, at intervals, the back part of the shrieking victim's neck. The victim is then decapitated, the body thrown into the grave, and the head left suspended from the post till devoured by wild beasts.

Several details in the above frightful proceedings should be kept in mind, as associating the practice of Meriah Sacrifice (although it may be only accidentally) with other descriptions of murder and sacrifice—these are, especially, the sacrifice of three; the compression of the chest or neck with bamboos (bansdollah); and the infliction of a wound on the back of the neck—also a practice in Bengal, which will be referred to presently.

The Garrows have a barbarous custom of offering a Human Head in some of their religious rites.

Reference is made, in the Reports of the Calcutta Nizamut Adawlut,* to the conviction of four Garrows who murdered two women for the purpose of obtaining their Heads, which were required by one of their countrymen for some superstitious ceremony.

Again, in 1850, a party of Garrows entered the house of a man, in the Mymensing district, and cut off his Head, which, it appeared, they required to be buried with the daughter of their chief. They were opposed by another person, sleeping in the house. They wounded him so severely that he died three days afterwards.† The police succeeded in arresting three of the Garrows, one of whom was sentenced to death.

The Dyaks of Borneo also have a practice of offering Human Heads for the propitiation of malign spirits.

^{*} Vol. v., p. 164, as cited in Beaufort's Digest of the Criminal Law.
† Police Report, L. P., for 1850, p. 32.

The subject of Human Sacrifice by Decapitation-a practice which certainly still exists in this Presidency-is of such great importance that every fact bearing upon it deserves to be collected and carefully weighed. The following details, from the Rev. Mr. Ward's invaluable work on the Customs of the Hindus, will be found to illustrate very clearly the recent cases of Human Sacrifice which succeed them. Ward mentions that, at Chitpore, about the year 1788, a decapitated body was found near the image of Chittreshwaree, which, in the opinion of the spectators, had evidently been offered, on the preceding night, to this goddess. One of the Pundits of the College of Fort William assured him that, about the year 1770, at the village of Soomara, near Gooptipara, he saw the head of a man, with a lamp placed on it, lying in a temple before the image of the goddess Siddheshwaree, and the body lying in the road opposite the temple. He adds that, about seven years previous to the publication of his work, there was found a human body without a head, lying before the temple of the goddess Tara, at the village of Serampore, near Kutwa. In the inside of the temple were different offerings-as ornaments, food, flowers, spirituous liquors, &c. All who saw it knew that a human victim had been slaughtered in the night, and search was made after the murderers, but in vain.

After reading the above facts, we can entertain but little doubt as to the nature and motive of the crime committed in the following instances.—In January 1851, a Hindu Priest was tried, at Midnapore, for murdering a woman. The woman's son made search for her, but the prisoner drove him away, declaring that he had sacrificed his mother, and would sacrifice him. The neighbours then collected, and deceased's head was found, in a room in the prisoner's house where the thakoor was kept, placed before the idol and covered with flowers. The body was in another room. The prisoner

stated that he had killed the deceased with a sword; that the thakoor Saligram had appeared to him in a dream, and had ordered him to offer up a human sacrifice; and, in obedience, he seized the woman, who had come to his house, and cut off her head. No satisfactory proof of insanity being given, fanaticism was not admitted as an extenuation of his crime. He was, therefore, sentenced to death.*

In the previous year, three Brahmins of Baraset, near Calcutta, on the Kalee Poojah, were sacrificing a goat to that goddess. One of them, after cutting off the head of the goat, deliberately cut off the head of his brother, who was holding the animal, with the sacrificial knife; he then attacked and wounded his nephew. The other persons running off, he escaped; but was arrested some months afterwards, and sentenced to death.†

In June 1854, a case of this kind at Saugor. The prisoner and the deceased were cousins, and had been staying at Bundukpore for some days, worshipping at a celebrated shrine dedicated to Mahadeo. On the day of the occurrence, they went to the 'munder' (as the defendant stated), for the purpose of offering up their heads. Shortly after their entrance, the havildar of the temple, on following them, found the head of the deceased on the sacred stone (pindee), the defendant being in the act of cutting his own throat with a sword, and threatening to cut down any one who approached. It was deemed necessary by the Court to inflict such punishment as might deter others from following such an example. The prisoner was therefore sentenced to imprisonment for life in transportation beyond seas.†

^{*} Nizamut Adawlut Reports, vol. iv, part 1 of 1851, p. 24.
† Police Report, L. P., for 1850, p. 63.

[†] Nizamut Adawlut Reports, N. W. P., June 1854, p. 762. See also Nizamut Adawlut Reports, vol. i., p. 13; vol. iv., p. 117; vol. iii., p. 209.

A very extraordinary case of what appears to have been a deliberate Human Sacrifice, was tried at Seebsaugur, in Assam, in the same year. One Gogoieram, considered by his neighbours as a good-tempered man, having a child ill with fever, said that he was going to the jungles for medicinal herbs and to consult augury as to the fate of his infant. He took with him a neighbour's son, seven or eight years old, who had always appeared to be a favorite of his. He confessed that, after proceeding about 200 yards from his own house, the idea entered his head of killing the boyhe hesitated for a time, and then struck the child a single blow with his dao, almost completely severing the head from the trunk—then, putting his mouth to the gullet, he drank the blood. After this, cleaning his weapon carefully on the grass, he went home. On inquiry being made for the child, he said that he had gone to fetch firewood. He then took a meal of rice; and, afterwards, having returned to the place where the body lay, went thence into the jungles to conceal himself. The officer who tried the case came to the conclusion that he deliberately sacrificed the boy to effect the recovery of his own sick child, thinking it would be acceptable to the deotas, or spirits, or the goddess Kalee. Many of the tribes in Assam offer up sacrifices of animals for worldly prosperity; and, in some instances, human beings have been sacrificed to avert sickness or other ills. The medical evidence, that of the neighbours, and even the testimony of the prisoner's mother, all went to prove that the prisoner was, and had always been of sound mind. He was condemned to death.*

^{*} Nizamut Adawlut Reports, 23rd Sept. 1854, p. 412.

RECOGNITION OF WOUNDS INFLICTED AFTER DEATH.

Bodies sent in to the Civil Surgeon for examination very frequently present marks of gnawing by Insects, Fish and Vermin, or have been partially devoured by Dogs, Jackals, Crows and Vultures:—some of the appearances thus caused, may interfere considerably with our means of forming an accurate opinion upon the case.

The generality of bodies are found to have been attacked by Ants. The most destructive of these are the small red kind. Where the body has been left long upon the ground, a gigantic species of black ant also attacks it. It is particularly noticeable that the insects generally commence upon any abraded or raw surface which the body may present; and, -where there have been a number of superficial scratches, perhaps inflicted in the fatal struggle, or where the dried line left by the cord in hanging has remained uncovered,-the gnawings of these creatures into the true skin, completely along the injured tracts, greatly obscure the aspect of the parts, by removing any minute superficial ecchymoses or effusions of blood which may have existed as the only evidence that the injuries were inflicted during life. In a not extremely decomposed body sent to me about a year and a half since, I found that the ants had attacked an oval ulcer on the leg, and had completely eaten away all the tissues within its circumference to the bone.

Fish, Turtle, Rats, and Water Insects are very destructive to bodies submerged in tanks and rivers. In the first case brought to me for examination in this country, I found that blood appeared to have escaped freely from what seemed to be extensive lacerated contusions of the eye-lids and nose. A little further investigation, however, showed that the parts had been gnawed, probably very soon after submersion, by the fish of a small river, into which the woman had fallen.

Bodies which have been left exposed in the fields for a few days, are often brought in nearly devoured by Wild Animals. It appears that these creatures generally attack the limbs and abdomen first. They occasionally leave extensive wounds, inflicted previously to death, entirely untouched—even after having torn away some of the large joints. This I have noticed with great surprise, as it would be supposed that an extensive bleeding surface would first attract their attention.

The question of, whether a Wound has been inflicted Before or After Death—always one of great moment, is often of peculiar importance and difficulty in this country. It is a well-known practice in India, where a death occurs suddenly, from natural causes, to a member of one of two rival houses, for his relations to inflict various wounds upon the corpse and to place it in a spot, where it may be readily discovered, near their enemies' dwelling.* In such cases, it is known by the culprits that the body, being in a greatly advanced state of decomposition when brought in for inspection, will be viewed with considerable doubt by the medical officer; his uncertainty, of course, telling more or less in favor of their plot.

It will generally happen, however, that wounds thus inflicted are so extensive as to render it almost a matter of

^{*} Indeed it would appear that the criminals of the present day prefer the expedient of leaving the body of a person who has, in reality, been murdered.

In 1843, three persons of Nowakolly murdered the daughter of one of them for the purpose of getting up a false complaint against certain parties. In the same year two brothers, of Beerbhoom, were made over for trial on circumstantial evidence, charged with the murder of their infant brother for the purpose of bringing another person into trouble.—Police Report, L. P., 1843, pp. 43, 59. Again, in 1849, a man of Backergunge intrigued with the wife of another, who, to harass him, preferred a false charge of theft against him. The prisoner, in revenge, to involve the other in a graver charge, slew his [own?] idiot cousin, and left the corpse close to the house of his enemy.—Ibid, 1849, p. 46.

certainty that, providing that they caused death, they must have done so by hæmorrhage. Here the discriminative rules which I have found of most practical use are the following— That, cæteris paribus, the body of a person bled to death decomposes more slowly, and with a greater tendency to desiccation, than is usual in any cases but those in which death has been attended with exhausting discharges, as in cholera, dysentery, diarrhœa or phthisis.* Here, however, the emaciated appearance of the body would probably guide the surgeon, even after the recognition of internal lesions had become difficult.—That the muscles of one who has bled to death, have a peculiar whiteness easily distinguished from the anemiated appearance of the same parts in persons long exposed to miasmatic influences. In the former case, the muscles retain their usual consistence, and are nearly white; in the latter, they are flabby and of a greyish hue.-

The conjunctive of the eyelids, parts which long remain moist and free from decomposition, are found unusually white when death has resulted from hemorrhage.

In all cases, however, where recent wounds are observed in a putrid body, and no distinct marks of external or internal ecchymosis, and no appearance of effusion of blood into the serous cavities, or substance of the brain can be discovered, the medical officer's opinion will, of course, be given in the most guarded manner.

A very moderate insight into the criminal habits of the natives will sufficiently convince the Surgeon of the vast

^{*} Whether desiccation of the body occurs early or late, or not at all, will, of course, depend much upon the climate, season, and hygrometric condition of the atmosphere, the amount of adipose tissue, &c. In dry climates and seasons the body generally desiccates quickly. In Seville, we are told by Mr. C. Hervey, the heat creates putrefaction easily, but it soon draws up the noxious effluvia of it, and the bodies of dead dogs and cats, which are thrown plentifully into the streets, are not offensive the day after their being exposed.—Letters from Portugal, Spain, &c., 1785.

importance of tact and caution in determining whether a wound has been inflicted before or after death; all collateral evidence being, at the same time, fully weighed.—A single set of cases may be cited in illustration.

- 1. A thief may be beheaded while in the act of committing a robbery.
- 2. He may be captured, and then beheaded by the people of the house or village.
- 3. He may die from wounds received in the act of committing a robbery; and his accomplices, unable to remove his body, may cut off the head to disguise it.—
 - 4. Or, his accomplices may decapitate him while living.
- 5. An innocent person may be murdered by poison, strangling, &c., and the assassins may cut off the head with a view to concealment, or with a desire to wreak their vengeance upon the insensible body.*

^{* 1.} A case was reported, not very long since, in which a person caught a burglar making his way through a hole which he had burrowed in a mud wall. Seizing a sword, he nearly struck off the unfortunate wretch's head, while he lay struggling in the narrow aperture.* In 1846, a Behar man, being awakened by persons who were robbing his house, took his sword and went quietly outside, and, on the burglar coming out, cut off his head with a single blow. Being then attacked by the comrade of the man killed, he laid him dead also.†

^{2.} It will be shown, in another Chapter, that the practice of decapitating persons captured in the act of burglary is of frequent occurrence in this Presidency.

^{3. 4.} The Report of the Police Committee, (1836, p. 122,) contains a remarkable case illustrative of this point. A native of Hidgellee was called away in the night by certain persons, and never returned. On the following day, his wife inquired of one of those who had called her husband what had become of him. He replied that he had not called her husband. Search was then made, and the body was found in a river some distance off. There were two spear wounds in the chest. The body had been decapitated, but the head was discovered at a distance. The suspicion was that the deceased, a

Nizamut Adawlut Reports, 5th Feb. 1852, p. 158.
 † Police Report, L. P., for 1846, p. 14.

Under these various circumstances, the following particulars should be noticed.

bad character, had been concerned in a burglary, and, getting wounded, was killed by his accomplices to prevent detection through him; and this was corroborated by some articles of suspicious property being found near the house of deceased, having been removed from the house by direction of his widow. A long and very singular inquiry by the police ensued; but it appears that no further light was ever thrown upon the manner in which the man had met his death. There is a very current, and probably authentic story of a traveller in India who, being awakened in the night by a robber moving about his tent, seized the intruder by his feet, as he was crawling out. The traveller pulled against the thief's accomplices, until, the opposition giving way,—he dragged in a decapitated body.

5. The reports contain several cases of this description. In 1853, one Ruttee, having persuaded another man's mistress to elope with him, cut off her head and the left lower limb in a jungle, hid them and stole her ornaments.*

In 1854, a widow of Bareilly left her house, and never returned. It appears that she was strangled by several persons in the jungle, that her body was concealed for three days, and was then decapitated, to prevent detection, and thrown into a blind well, which was filled in with earth.†

Two men were tried, at Bareilly, in 1852, for the murder of a servant. The decapitated body was found in the nuddee, the hands and feet were bound with ropes. The Sub-Assistant Surgeon stated that the body was much decomposed, but that there appeared marks which induced the conclusion that the head was separated from the body by cutting with a saw. The prisoners said that deceased had hanged himself; and that, fearing inquiry, they had first buried the corpse and had afterwards beheaded it and sunk it in the nuddee with four ghurras. Nizamut Adawlut Reports, N. W. P., 23rd July 1852, p. 727.

The corpse of a female was found in a village, near Burdwan, with the head, feet, and hands cut off. A person came forward and deposed on oath that the body was that of his sister, who had been murdered by certain persons, and named his witnesses. On the arrival of the mohurrer, he stated, on oath, that his previous evidence was false, and that his sister died a natural death. No further facts could be elicited.‡

A young man of property and good family, but of dissipated habits, of Ghazeepore, went with his brother-in-law and another to the former's house,

Nizamut Adawlut Reports, N. W. P., 29th Novr. of that year, p. 1420.
 † Ibid, 13th Novr. 1854, p. 711.
 ‡ Police Report, L. P., 1846, p. 67.

- 1. The body of a person decapitated in the very act of committing a robbery, or in fair fight, will, in all probability, present merely clean cuts, (indeed the body may be found hacked all over, if the first wound was not mortal,) and perhaps some contusions. The head and body will be exsanguine and the pupils dilated; and, for some hours, the muscles of the neck will be retracted.
- 2. On the body of a captured thief, beheaded or cut on the neck in cold blood, there will, probably, be (judging by the reports of three recorded cases in which the punishment was committed with koodalees, adzes,)* the traces of repeated hacking blows or cuts. A sharp sword, inflicting a clean wound, is not likely to be used, while the struggling victim is held down upon the ground. There is a case, however, on record in which it is stated that, while three persons held the

where, while he was either asleep or drunk, he was stabbed to death. They kept the body two days; when, having decapitated it, they had it carried in a basket to a well, into which they threw it, and buried the head in an adjacent field.*

One Dhurm Singh, of Bareilly, was beaten to death in his own house by, or certainly with the knowledge of Lalljeeta, his own nephew, who was supposed to be criminally intimate with his (Dhurm's) wife, and Badam Singh, with whose cousin's daughter the unfortunate man had, himself, intrigued. The murderers conveyed the body away on a cart, and threw it down at about a mile distance, where Badam nearly severed the head from the body with a sword. When found, the corpse was tied hand and foot. It was considered that the wound was inflicted to make it appear that he had been attacked and killed by robbers—it appears very probable, however, (especially when the case is compared with others, which will be cited hereafter,) that the wounding after death was rather intended as an expression of vengeance for an unpardonable injury.

For recent instances in which the bodies of murdered persons were *Dismembered*,—See Nizamut Adawlut Reports, vol. iii. part 1 of 1853, pp. 54 and 680, and part 2 of vol. iv. 26th September 1854, p. 427.

* Nizamut Adawlut Reports, 14th June 1853, p. 796, and 17th June, p. 810, and one in which a knife was used, *Ibid*, 1st Jan. 1852, p. 1.—Nizamut Adawlut Reports, N. W. P., January 3rd 1852, p. 4.

^{*} Nizamut Adawlut Reports, N. W. P., 9th March 1855, p. 328.

deceased down, a fourth, "with a large knife used in sacrifices, cut off his head with one blow, and with a second divided the body at the waist." It will be shown, hereafter, that the infliction of such mutilations as these, by single strokes of a heavy weapon, is possible. Still, in the absence of medical evidence, it may be questioned whether, in the above case, the murderer only struck twice.*

- 3. 4. Where a man has been mortally wounded in the act of robbery, and his body has been carried away by his accomplices who, not having had time to bury it, have beheaded it to prevent recognition, the presence of other mortal wounds, taken with the general evidence, will go very far to explain the nature of the occurrence—as in the case given at pp. 51. 52 of this Manual. If, as would be probable, death was caused by external hæmorrhage, the head would be exsanguine, but the muscles of the neck would not be contracted, if the head were not removed very soon after death. In the fear and hurry of a pursuit, however, the fugitives might only pause for a minute or two, while their wounded companion fell and breathed his last, before they removed the head. The only manner in which the Surgeon could distinguish between this last case and one in which the head of a fainting person had been cut off, or in which a person merely disabled and unable to keep up with his companions in flight had been decapitated, would be by forming an accurate estimate of the severity of the original wounds,-all collateral evidence also being called in aid.
- 5. Where the head is cut off several hours after death, it will probably not be altogether exsanguine, the muscles of the neck will not be contracted, the pupils will, generally, be in the condition usual after death,—neither dilated nor contracted; it may present traces of contusions, &c. After

^{*} Police Report, L. P., for 1845, p. 71.

decomposition has fully set in, the appearances will, of course, be obscured; but, other conditions being equal, the head of a person cut off during life will swell less, as decomposition advances, and dry much sooner than one removed after death.

SELF-INFLICTED INJURIES.

In accusations of crimes against the person, false evidence and simulation are so frequent throughout India that, in the case of nearly every wounded person brought before him for an opinion, the Surgeon's first inquiries should be,—Was this injury self-inflicted? and,—Was it inflicted in the manner alleged?

Considerable aid would be given to the investigation of police cases, involving charges of wounding, if the form of the lithographed letter which is forwarded by Magistrates to Civil Surgeons, in cases of assault, &c., were modified as follows:

At present, the Medical Officer's reply to the Magistrate's requisition generally conveys merely his own opinion of the nature of the case, probably without reference to the credibility of the wounded person's statement, and almost invariably without any knowledge whatever of the counter-statement of the accused. A precaution of this kind would certainly lead to the immediate detection of many serious attempts at fraud, which, under the present system, either succeed or are only quashed at the end of a tedious and expensive inquiry.

As a general rule, the natives of India, in common with most other persons, are unwilling to inflict severe injuries upon themselves for purposes of false accusation;—there are more Neros than Scævolas or Feltons*. Still, among these people, a good deal of caution and reflection is required on the part of the Medical Officer in many cases.

The instances which have occurred to myself did not require much discrimination.

A few years since, a man was brought to me with several recent wounds on the head which he said were inflicted by a person who attacked him with a dhao (heavy bill-hook). Some of them were about two inches long, but they did not penetrate much below the true skin, and the edges of each incision were so perfectly smooth that it was certain that they could not possibly have been inflicted with the coarse-edged weapon alleged, or, indeed, with any other instrument likely to be procurable by a native—except a razor.

In visiting a country with the customs of whose inhabitants he is not well acquainted, the Surgeon, when called upon to decide whether certain injuries upon the person of a native have or have not been self-

^{*} John Felton is said to have enclosed a joint of his little finger, which he had hacked off, as a proof that he was in earnest, in a cartel sent to a brother officer who had offended him. It is well that the Surgeon should be aware of the degree of resolution which a person, not insane or prompted by suicidal determination, may display in inflicting pain upon himself for a definite purpose. It is well known to Army Surgeons that men stationed for long terms in the West Indies, frequently placed their thumbs, and even their hands over the muzzles of their pieces and blew them away, with the hope of being invalided and sent home. I know an instance of a medical man who had sufficient nerve to extract one of his own firmly-set grinders with a tooth-key. Cranmer's constancy, in stretching forth his hand into the flames, need not have been cited, had it not recently been discussed as a physical impossibility. The act appears, however, to have been possible enough, seeing that the fire had already taken the victim's feet;-beyond this, the amount of pain endured could scarcely be increased. Much more resolution was shown by the woman who allowed Bonner to hold her hand over a candle until the sinews cracked. When Mandrin, the noted French robber, was broken on the wheel, he screamed violently, as the first blow fell on his collar bone :at the second stroke, he laughed. The executioner paused, and inquired why he did this? He replied-" to think that I should fear the second blow, when the first had deprived me of all feeling."

At about the same time, I was called by the police to the house of a native woman who, they stated, was dying. I found a very trivial ragged wound on the throat, apparently inflicted with a pair of scissors. It afterwards appeared that the woman, a prostitute, had been disappointed by the marriage of a person with whom she had lived, and had wounded herself with an intention of bringing him into trouble.

In 1852, one Luchmun Doss, alias Khunjuna, was tried at Bareilly for a murder committed eight years previously. Several witnesses deposed that they were well able to recognize the prisoner as the murderer; one of them stated further, in identification of the prisoner, that, some time before the murder, the prisoner had a quarrel with a person named, and that, for the purpose of getting up a false charge, he cut himself with a bussoolah (adze) in the middle of the calf of the leg, the mark of which injury still remained on his person. The Civil Surgeon examined the prisoner at the Judge's request, and certified that he still bore marks of such an injury. The jury found the prisoner guilty, and the Sessions Judge recommended a capital sentence. The Judge of the Superior Court, however, proved demonstratively that the

inflicted, will gain but little aid from his text books on Medical Jurisprudence. Nearly every nation has its own peculiar modes of self-destruction and self-torture.—The Siamese, we are told, generally commits
suicide by ripping up his belly with a long knife; the civil and quiet
mannered Malay, when insulted, at once seeks the death of a mad dog
in running Amok. Stringent laws have been required to prevent the timid
Brahmins of Hindustan from burning themselves in their enemies' territories, and from throwing themselves into wells when offended or interfered
with. According to Ward, the Hindus relate that there existed, formerly, at
Kasheera, a village near Nudeeya, an instrument called Kuravut, which was
used by devotees to cut off their own heads. It was made in the shape of a
half-moon, with a sharp edge, and was placed at the back of the neck, having chains fastened at the two extremities. The infatuated devotee, placing
his feet on the stirrups, gave a violent jerk, and severed his head from his
body!

prisoner differed entirely from the real murderer in age and in appearance. He further noticed that, on referring to the Civil Surgeon's evidence, he found that the prisoner's scar was on the calf of the left leg; but that, on looking at the descriptive roll [of the murderer] of 1845, his scar was on the shin of the right leg. The prisoner's immediate release was ordered.*

Certain prisoners, of Bareilly, who had cruelly butchered three unarmed men, stated that they had been struck and wounded by their victims. The Judge examined the marks;—"they were not of sword cuts, but small scratches, evidently self-inflicted, or with their connivance, to which some substance had been applied to prevent their healing."†

In 1854 six men were tried at Mirzapore, for having murdered four persons by sword and spear wounds. One of the prisoners had a wound on his shoulder, which the Civil Surgeon considered was the result of a blow partly warded off. This, however, the Judge held, must be pure conjecture, and the fact that the cut was but a quarter of an inch in depth was, in his opinion, conclusive that it had not been inflicted with force; its position just below the left shoulder, he thought, made it unlikely that he inflicted it himself; but the Judge was inclined to believe that he got it done by one of the other prisoners, with a view of giving the affair the colour of an affray—All the prisoners were sentenced to 14 years' transportation.‡

In 1853, three native women and two children were found lying dead in a heap, with their throats cut, in their bungalow at the station of Baitool. The husband of one of the females gave the alarm, stating that the crime had been committed

^{*} Nizamut Adawlut Reports, N. W. P., 19th October 1852, p. 1209.

[†] *Ibid*, July 22nd, 1853, p. 899.

[‡] Ibid, 3rd February 1854, p. 121.

by dakoits, who had also wounded and bound him. It, however, soon became evident that this man was the murderer. The Medical Officer found that his wounds were very slight. The chief was on the thigh, three inches long, in no part penetrating completely through the true skin. The Officiating Commissioner, who reported the case, stated that it was evident, from Dr. Chisholm's deposition, that all the blood upon the man's body and clothes and on the gravel walk could not have flowed from those very trifling wounds. His account of the way in which he received his wounds was also not to be credited; for, had he been cut at with swords, under no circumstances could the wounds have been so slight, if the weapons with which they were inflicted had not previously come in contact with something other than his body, by which the force of the blow could be lessened; but this it was considered to be proved was not the case, the spot where he stated that he received his wounds bearing no traces of any blows of a sword or cutting instrument having been intercepted by any surrounding object. But, whether the blows were intercepted or not, it appeared impossible that the wound and scratch on the left thigh could have been inflicted in the manner described. Their direction was such that a pursuing enemy could not have given them with a sword or other weapon; and, from the roundness of a man's thigh, a wound of the length of either the cut or scratch must have been considerably deeper in the middle than at either end, but this was not the case. Their being exactly parallel was also strongly against the man's story; and, from their direction, parallelism and uniform want of depth, they were just the sort of wounds that a fainthearted man would inflict on himself-first timidly drawing the sword over his thigh, and inflicting a mere scratch, and then, knowing that the safety of his neck depended on his having some wound to show, half plucking up his courage and giving himself a wound, it is true, but a very slight one.*

The most difficult cases are those in which the injuries shown in support of a false charge have been inflicted, not by the prosecutor himself, but by his accomplices or instigators.

I have been favored by Dr. Kenneth Mackinnon with notes of two very important cases bearing upon this point.—A case occurred at Dinapore, in 1844, in which the servants of a Medical Officer were said to have been attacked and wounded by certain parties at night. The wounds were so slight and numerous, and other circumstances were so suspicious, that Dr. Mackinnon believed them to be self-inflicted. The Magistrate concurred in this opinion, and sentenced the servants for false complaint. The Magistrate's decision, however, was subsequently reversed by higher authority, and the original defendants were punished. Dr. Mackinnon heard, years afterwards, that a native doctor confessed, at Umballah, that he had himself inflicted the wounds.

In 1839, a young lad was sent to Dr. Mackinnon by the Magistrate of Tirhoot. The index finger of the right hand was severed at the joint between the first phalanx and the metacarpal bone, and the thumb also at the same articulation. Dr. Mackinnon then gave his opinion merely to the effect that a sharp cutting instrument must have been used to effect the amputation. The case before the magistrate was, that one zumeendar accused another of having met his slave boy in a wood, attacked him, and, with one blow of a sword, inflicted the injury above described. It was only in his examination before the Sessions Judge that Dr. Mackinnon was informed how the injury was stated to have been inflicted. He gave it as his opinion that the blow of a

^{*} Nizamut Adawlut Reports, N. W. P., 25th Feb., 1853, p. 283.—A most important case weighed and investigated with great care and ability.

sword could not have neatly disarticulated the thumb and fore-finger without injuring the rest of the hand—(the reader will perceive this on looking at his own hand.) This view of the matter led to a keen cross questioning, when the slave boy made a full confession that his master had cut off his fingers with a knife. The Magistrate's decision, which had sentenced the party first accused to fine and imprisonment, was quashed, and the original plaintiff was punished for subornation of perjury.

INJURIES INFLICTED BY WILD ANIMALS.

In out-stations, it from time to time becomes necessary to distinguish injuries inflicted by Elephants, Tigers, and Alligators.

The Elephant generally seizes his victim, raises him in the air, dashes him violently upon the ground, and tramples upon him. The results, for the most part, are that the chest is driven in, some of the larger viscera are commonly ruptured, and more than one limb usually receives a compound fracture. In other cases, we are told, the animal jerks his victim to and fro between his fore and hind legs. The elephant has been frequently made the executioner of criminals by the native princes of this country.* A remarkable crime was committed in Tirhoot in 1849. A mahout, in the service of a rich zumeendar, began to cut, as fodder for his elephant,

^{*} The following account of the execution of a criminal at Baroda is given in the Bombay journals for 1814. "The man was a slave, and two days before had murdered his master, brother to a native chieftain, named Ameer Sahib. About eleven o'clock, the elephant was brought out, with only the driver on his back, surrounded with natives with bamboos in their hands. The criminal was placed three yards behind on the ground, his legs tied with three ropes, which were fastened to a ring on the right hind leg of the animal. At every step the elephant took, it jerked him forward, and eight or ten steps must have dislocated every limb, for they were loose and broken when the elephant had proceeded five hundred yards. The man, though covered with mud, showed every sign of life, and seemed to be in most

the branches of a butt tree, the property of a man who resisted and abused the mahout—the latter drove his elephant over the unfortunate man, who was "torn to pieces" by the animal.* These cases are of importance, as, where a person is attacked by a crowd of Bengalees, unarmed with cutting weapons, the injuries inflicted are often very similar to those above described. However, a question of this kind could only occur when a body, thus mutilated, was discovered in a very remote part of the country ranged over by wild elephants.

In the *Tiger* wounds which I have seen, either a flap of integument or muscle has been torn down by the blow of the animal's claws, or a mouthful of integument, muscle, and bone, altogether as large as two fists, has been completely bitten away.

In two cases where I have been compelled to amputate the limbs of persons seized by Alligators, the victim has been caught by the leg while bathing; the limb has been marked, at regular intervals on either side, with the punctures of the huge peg-like teeth, giving it much the appearance of one that has been drawn in between wheels with wide cogs; towards the knee, however, there have been evidences of a struggle between the man and his assailant,—the integuments and muscles are torn, but not at all in proportion to the internal injury, the bone being literally crushed into splinters, apparently by a lateral movement of the enormous jaw.

excruciating torments. After having been tortured in this manner about an hour, he was taken to the outside of the town, when the elephant, which was instructed for such purposes, was backed, and placed his foot on the head of the criminal."

Trampling to death by elephants appears to have been a Burmese punishment from the earliest historic periods.

^{*} Police Report, L. P., 1849, p. 7.

WOUNDS INFLICTED BY WEAPONS COMMONLY IN USE.

Notwithstanding the character for mildness of temper which they have gained, from superficial observers, deceived by their manners, and unacquainted with their customs and habits of thought and action, the common people of India are certainly far more apt to conclude their quarrels by severe wounding than are the more impetuous denizens of European countries. This, probably, arises from the circumstance which has been more or less operative in determining nearly every homicide since the first,-the readiness with which an offensive weapon always comes to hand; few Bengalees are without a lathee (bamboo stick), dhao (bill-hook), and perhaps a codalee (adze or large hoe), a hussolee (sickle), a kolharee (axe or hatchet),* and a bullum or sain (spear); and nearly every Hindustanee has his sword, and his iron-bound cudgel. The gurassa or gundrasa-a kind of bill or battle-axe, and the koorpee, or hoe, are common both in the N. W. and in Bengal.

It is of considerable importance that medical men and judicial officers should make themselves acquainted with the appearance and modes of use of the various weapons, tools, &c., employed by the natives,—as questions of considerable moment not unfrequently arise with regard to the weapon with which wounds have been inflicted. Thus a dead body may present numerous gashes, in the neighbourhood of which are observed several deep stabs. An inexperienced Surgeon would, perhaps, assert that two weapons had been used, or that the wounds were inflicted with the edge and point of a sword. It would, probably, be found that a short sickle had been employed, on a *dhao* with a curved and pointed

^{*} Mahommed Jan, one of Moorshad Cooly Khan's police guards, was in the habit of having the bodies of all the thieves whom he caught split in two and hung upon trees by the highway. Hence we are told by Stewart he was nicknamed the Kolhareh.

beak. In a trial at Futtehpore, the Civil Surgeon deposed, that the wounds found upon the bodies of two persons must have been inflicted with three kinds of weapons, one of which must have been pointed like a spear. The prisoner confessed freely that, having heard that his wife and her paramour were together, he proceeded to his house with a hatchet (or koolharee misnamed, as the Judge considered, by the Surgeon, an axe,) which he had in his hand when he heard the news. He slew the adulterer with this hatchet, and afterwards killed his wife with the same weapon. A blood-stained dhotee was found on the person of the prisoner, and he pointed out the koolharee in a gutter. The Sessions Judge considered that the efforts made to prove the act one of culpable homicide, and not murder, failed from the improbabilities of the story, and before the evidence of the Surgeon. There was violent probability, he held, that other persons, well armed, were engaged in the murder, and that the assault was premeditated, and not effected suddenly by one man armed only with a small hatchet for cutting wood. He recommended that capital punishment should be awarded. One of the Judges of the Superior Court was not able to discover anything which could support the opinion of the Sessions Judge, that the prisoner must have had accomplices, or that of the Civil Surgeon that the wounds observed by him on the bodies of the deceased could not possibly have been inflicted with the same weapon. All the circumstances of the case tended directly to show that the prisoner alone perpetrated the acts charged, and that the only weapon he used was that produced in Court. The only conclusion, therefore, to which he could arrive was "that the Civil Surgeon must have been mistaken, which might very easily have happened." The other Judge saw no reason to believe that the prisoner had any accomplices in his crime. He accepted the confessions as they stood—Sentence, imprisonment for life in transportation.*

The description of wound most frequently inflicted in Bengal is the contused scalp wound, produced by a blow with a stout bamboo. When not loaded with metal, or used with a full intention to kill, this instrument is peculiarly well adapted to inflict a broken head, without the accompaniment of a fractured skull. By far the largest number of letters, which pass between the Magistrates and the Civil Surgeons, are relative to injuries of this kind. Scarcely a week elapses, in any large civil station in Bengal, in which one or two cases of this kind do not come under the Surgeon's treatment. Although the bamboo, used with moderate force, seldom proves a deadly weapon, blows from it not unfrequently fracture the arm and collar-bones of aged natives. I have seen some hundreds of these simple scalp wounds, but do not recollect to have met with erysipelas or any other serious result in a single case.

Blows on the head, inflicted even with a light bamboo, may, however, cause death. In 1852, a zumeendaree quarrel occurred at Banda, in which a man was killed by persons armed with bamboos, the heaviest of which weighed a pound and a half and was six feet long—he received a blow on either temple, fell down insensible, and died without being able to give his deposition.†

In 1854, a man of Mymensingh being at his evening meal, observed that there was too much salt in one of the dishes. As his wife was stooping down to help him, he gave her a severe blow, with his open hand, on the right temple; she fell, became senseless, and died shortly after. She was only eleven years old, and had been some time before unwell with fever; and, though she had recovered, she was

^{*} Nizamut Adawlut Reports, N. W. P., April 29, 1852, p. 370. † *Ibid*, 2nd November 1852, p. 1295.

still weak. No examination of the body could be made. The Medical Officer stated (as far as can be gathered from the printed report, which is scarcely intelligible), that fever might have occasioned such a condition of the brain as to render it liable to become easily disorganized by a slight concussion;—in such a case, a severe blow with the open hand might produce a fatal effect.*

The reports to the Superior Courts however, contain a very large proportion of cases in which the skull had been horribly fractured by repeated blows with a heavy weapon. In these cases, either the bamboo is employed with decided intention to destroy life, or an iron-bound lathee, or some weighty instrument used in agriculture or building is brought, or caught up to effect the crime. It is probable that the generality of fractures of the skull inflicted with blunt instruments by natives are fatal. Usually, the destruction of parts (although the fractures are not always compound) is so extensive that recovery is impossible; I have only seen two cases of this kind of fracture in which life was prolonged even for many hours.†

The most frightful injuries are frequently inflicted by the natives of Bengal and Hindustan with the dhao and the

^{*} Nizamut Adawlut Reports, 27th October 1854, p. 520.

[†] One was that of a woman who was struck on the forehead with some small blunt instrument. She survived the injury for about a month. On examination, I found that a nearly circular portion of bone, as large as a shilling, had been completely depressed upon the dura mater, the membrane had become thickened around the edge of the encroaching bone, and the frontal bone presented evident traces of active absorption upon every part of the broken circle;—it was quite evident that, but for an abscess in the substance of the brain, which had destroyed life, the depressed bone would have gradually become detached and been thrown off. In the other instance, a man had been struck on the head by his daughter with a ponderous wooden hammer, used for smoothing turfs. The injury was frightfully extensive, and I found it necessary to remove twelve or fourteen pieces of bone by aid of the trephine and Hey's saw. The man survived this operation about 48 hours. The brain was discovered to be extensively lacerated.

tulwar. An unfortunate will be caught in the act of burglary or theft by the people of the village or by a chowkedar, and will be hacked until the assailant's arm grows weary.* Or several persons will set upon one and cut him almost into shreds.—

It appeared, in a trial at Mirzapore, that one Beney Persaud, whilst lying on his charpoy, was attacked by a party of armed men who inflicted forty-one wounds, twenty-one of which were very severe, from the effects of which he died the same evening.† A few months later, three men of Bareilly were attacked by a number of persons armed with swords, who hacked them almost to pieces. The dead bodies of two were found each to have twenty wounds, and that of the third thirteen, one of which completely severed the head from the body.‡

A rude and savage sense of honor leads the Rajpoot to conceive that,—when he has been grossly insulted, or an injury has been done him,—" Life is no longer of any value" §

^{*} I, not many months since, examined the body of a thief who had been treated in this manner. There was an enormous wound across the back of the skull, not quite penetrating the brain, one humerus was cut through [or rather broken through,—the manner in which a common tulwar divides one of the long bones very much resembles that in which a table-knife can be made to break a marrow-bone] and the elbow joint laid open and splintered. Nearly the whole of the intestines protruded through a wide gash in the abdomen, there were also other wounds—Still the unfortunate man survived these injuries for a short time. See also cases,—Nizamut Adawlut Reports, N. W. P., 2nd June 1852, p. 512. (An unarmed intruder hacked until he died, the head nearly severed from the body). Ibid, 30th June 1853, p. 804, (twelve wounds inflicted by a youth upon a stealer of sursoon (mustard) of which he died in the jail hospital.)

[†] Ibid 27th April 1853, p. 590.

[‡] Ibid, 20th July 1853, p. 896. See also Ibid, 14th August 1852. (A man "hacked to pieces" while lying on his charpoy by two persons) Ibid, 25th August of same year, p. 870. (A man enticed away to a place where several persons were waiting for him who despatched him with twenty sword wounds.)

[§] See Nizamut Adawlut Reports, N. W. P., 22nd July 1853, p. 900.

—his opponent must be destroyed as a matter of course, and then he will be prepared to meet death himself—Numerous instances could be cited in which whole families have, in this way, fallen victims to the vengeance of Up-country natives. The subject will be recurred to in the chapter on Insanity—The following comparatively recent instance will suffice in this place—Here the extreme point of honor was carried out—the offended party, having wreaked his vengeance upon his enemy, devoted himself and his disgraced family to a common destruction.*

In 1853, one Hoolassee, was tried at Hoshungabad. It appeared that Hureeram, malgoozar, of the village took with him a man and four women labourers to the wheat field of Sawunt Chowdhree, the prisoner's father, a cultivator, said to be in balance to the malgoozar. He went unarmed, but with the avowed object of cutting the crop. He was opposed by the old man, his two sons and his wife. An affray ensued, in which the prisoner and the two other men killed the malgoozar by blows on the head with an axe, club and stick. On returning to their own house, Anuntram, the prisoner's brother, stunned his own wife by striking her several severe blows on the head with a club-she, however, recovered. He then attacked his own daughter (three or four years old) and killed her by fracturing her skull, the prisoner suggesting, or at least, aiding the crime,-seizing the unfortunate infant by the leg and throwing her down before her insensate father, and following up the fatal blow. The party then made for the malgoozar's house, and, on the road, met an unarmed man, a servant of their first victim, whom they despatched with axe and club blows. Arrived at their opponent's house, they killed a man with sword or axe

^{*} Stewart mentions that Chukl Kirshom, vakeel of the Nawab of Bengal, (Cir. 1739) being ill-treated, murdered his whole family, and then put an end to his own existence.

wounds, wounded a young child in the face, and despatched the malgoozar's mother by wounds which were described as "very dreadful and extensive." The father then said—"having done for all, we must now, as Rajpoots, die ourselves"—and despatched his son Anuntram by two sword wounds on the neck, nearly decapitating him. He next called on his son Hoolasee, the prisoner, to come forward. He, (craven according to the dreadful standard of courage here exhibited,) swore a solemn oath that he would die after killing his father—who then, failing in an attempt to stab himself, was put to death by the prisoner, who used the sword with both hands, and almost severed the head from the body. The prisoner was soon after seized, fleeing away, with his axe in his hand.*

In many cases, both Up-Country and in Bengal, the tulwar or dhao is snatched up and used with horrible ferocity upon what would appear to be very trivial grounds of provocation.—

One Chittar Singh, of Furruckabad, was sentenced to death, for the murder of a female servant pregnant by his lately deceased brother. He was engaged cooking his dinner when the unfortunate woman put a lota of water within the circle (chouka) where he was sitting, by which his food was defiled. He sprang up, seized his sword, which was lying close by, and inflicted upon her "two deep wounds on the left side of the head, one on the left shoulder, and one on the upper part of the back, which had divided the spine and entered the cavity of the chest."†

Nundram Dhobee, of Sylhet, desired his sister-in-law, who was cooking, to grind down some herbs for him. She objected to doing so, at the moment, lest her vegetables should be spoiled, but asked him to wait awhile. Upon this,

^{*} Nizamut Adawlut Reports, N, W. P., 5th December, 1853, p. 1431, † *Ibid*, 10th February 1853, p. 192.

the prisoner seized a very sharp dhao, weighing two pounds, which lay near, and cut the woman down, inflicting ten wounds about her head, neck and shoulders; she subsequently died of lock-jaw. He then attempted suicide by cutting his own throat very severely. After he heard of the woman's death, he appeared to be seized with remorse and then repeatedly attempted to hang himself.*

Two men of Allahabad had been eating together, one told the other to take away the cooking pots. Upon his replying that he would do so presently, his companion seized a sword and slaughtered him with nineteen wounds.†

A man, excited to madness by jealousy or by galee (foul abuse), seizes a heavy weapon, and, with from five to twenty strokes, literally hews his victim to pieces, proving that the power—

"His foeman's limbs to lop away,
As wood-knife shreds the sapling spray"—

does not require the thews of a Douglas for its exercise. ‡

^{*} Nizamut Adawlut Reports, 3rd August 1854, p. 193.

[†] Nizamut Adawlut Reports, N. W. P., 17th February 1853, p. 249.

[‡] The following is the Civil Surgeon's description of the wounds found upon the bodies of two men at Furruckabad, who were set upon and cut to pieces by several persons armed with swords. "Maharaj Singh had the third, fourth and fifth fingers, and part of the left hand, cut off; the right hand cut off at the wrist, also a deep cut on the right arm below the shoulderjoint; the left leg cut off at the knee-joint, a deep cut on the same leg below the knee, dividing the bone; also a deep cut on the ankle, a superficial wound on the abdomen, and one on the forehead. Heera Lall had a deep cut extending across the chest, laying it open, and wounding the lungs; another on the left side of the face, extending from the lobe of the ear to the corner of the mouth; the left arm cut off near the shoulder-joint, also a deep cut across the palm of the left hand, another, about nine inches long (?) on the back of the left hand, and one about nine inches long on the back of the right shoulder, and another on the top of the same shoulder. He was of opinion that these injuries occasioned immediate death."-Nizamut Adawlut Reports, N. W. P., 5th April 1854, p. 374.

In these cases, the wounds are actually to be measured rather by the foot than by the inch. The skull is generally penetrated in more than one place to the brain; the neck cut to the spine; a shoulder-blade completely divided; a humerus cut through; a hand lopped off; the abdomen gashed and the bowels protruding. It is very remarkable that many of the unfortunates thus treated recover with scarcely a bad symptom. I have known patients recover from each of the above-mentioned injuries, with the exception of the second. In many of these cases the sword is only cast from the hand of the murderer after it has been snapped in two,* or until it has been "bent out of all shape" by striking against the victim's bones.†

Judging by the cases of this kind which I have myself seen, but especially drawing inference from the very numeous accounts of similar instances which I find among the Surgeons' Reports sent into the Calcutta Nizamut Adawlut, I have, not without considerable astonishment, arrived at the conclusion, that these frightful outrages,-which have hitherto been regarded merely as acts committed in a paroxysm of uncontrollable rage, in which the murderer strikes wildly at his victim, with no other purpose than to hack him to pieces in any manner whatever,-are, especially when committed with the dhao, done after a certain definite mode, which can scarcely be supposed to be otherwise than the result of design. In different cases, the direction and number of the wounds given will, of course, vary somewhat, but the gashes inflicted are generally many; and-considering that the victim cannot always be deprived

^{*} Nizamut Adawlut Reports, N. W. P., 12th June 1852, pp. 534, 946 and 1,005 (two swords broken), also 24th May 1853, p. 700, sword broken into three pieces.

[†] Ibid, 27th October 1852, p. 1246. A case in which a wretch inflicted twenty wounds upon a prostitute, which she survived eight days.

of motion by the first blow, and that the assailant is not a practised executioner,—it is very extraordinary how similar are the injuries inflicted in very many of the cases. Thus,blows inflicted upon the upper part of the head are usually vertical; most of the victims receive one or two horizontal strokes across the temple and side (generally the right) of the face; strokes on the back of the head and neck and on the sides of the neck appear to be invariably nearly horizontal; wounds on the shoulders, back and upper part of the chest are nearly as invariably vertical or oblique in their direction; the hands and arms are often cut transversely, but this evidently occurs in the efforts of the assailed to protect his head. It is within the verge of possibility that these marked coincidences are accidental: -it may be that a person, wielding a heavy weapon with all his force, naturally changes the direction of the strokes:still it is difficult to believe that they could occur so frequently, where a weapon like a bill-hook (which is not known to be wielded after any fashion of sword exercise) is grasped by a series of individuals suddenly enraged to madness, and only impelled by an undiscriminating impulse to kill.

It has been humanely ruled that-

"Verbal abuse, which is often of the grossest nature amongst the natives of India, and is extremely offensive, amounts to a high provocation in this country; and it is consonant to the spirit of the English law, as well as to the general principles of justice, to make a distinction of punishment between cases of deliberate murder, and a sudden homicide committed in heat of blood.*

Whether the infliction, in the sudden heat of passion, of a particular kind of wound usually given under similar circumstances, will or will not be regarded by the law as, in a certain degree, an evidence of premeditation, it is not for the medical

^{*} Macnaghten's Reports, vol. i., p. 53.

witness to decide; it is merely his duty to state—that the wound evidences sufficient thought on the part of the prisoner to have led him to select a well-known mode of destroying life—and to prove that the multitude of wounds under which the deceased sank were not inflicted in mere blind and purposeless rage.

HACKING THE NECK.

There is, however, one mode of killing with the dhao or tulwar which is clearly a matter of customary design. Sir Thomas Roe, who visited the court of the Great Mogul in 1614, mentions that, on one occasion, nearly a hundred thieves, by order of the Emperor, "having their hands tied down to their feet, had their necks cut with a sword, but not quite off." Now I find that the nine years' reports to the Calcutta Nizamut contain the details of twenty-seven cases of wounding, in which the principal injuries were as follow: Cuts on the outer side of the neck, generally extending to the vertebræ, 8; wounds across the nape of the neck, usually also reaching to or dividing the spine 12; wounds on the back of the skull, 4; instances of decapitation, 3.

The details of these twenty-seven cases go far to prove that the wounds were, in nearly every instance, inflicted in a deliberate and more or less successful attempt to divide the spine by blows across the back of the neck.

These wounds are nearly always of frightful severity; and, in most of the cases, other parts of the body are hacked.

In only two of the eleven cases where the wound had been inflicted quite across the back of the neck, did the victims escape the hands of their assailants. In one of these, reported by Dr. Ross, of Jessore, the unfortunate man lived several days with (in addition to eight other wounds, two of which were on the back of the head, and two completely through the shoulder-blades,) a wound across the back of the neck so

large that "a child's head might have been put into it." It was discovered, after death, that the bones of the neck had been injured, and that the spinal cord was surrounded with blood. Dr. Ross mentioned that the wound was such that a sudden turn of the head might have caused instantaneous death. The other individual recovered under the treatment of Mr. Scanlan, of Burrisaul, after receiving a severe wound on the upper and back part of the neck, one on the back of the head, and three others.

In another case, subsequently reported, which also occurred under the care of Mr. Scanlan, the wound penetrated to the vertebræ, injuring one of them, so that the spinal marrow only escaped by a very little. The woman had sustained other severe wounds, but, at the trial, was pronounced out of danger.*

In a more recent case, a woman prosecuted her son-in-law who had struck her a very severe blow with a heavy dhao across the back of her neck—a large scar remained.†

In another rather recent case, a woman's life was barely saved from a blow of this kind, by the interposition of her long tresses of hair and her clothes.‡

So common is this practice of striking deadly blows on the back or side of the neck, in the North-Western Provinces, that, in the printed Records of the Agra Nizamut Adawlut, I find no less than thirty-three cases reported in the two years 1852-53.—Instances of complete decapitation being excluded.§

Nizamut Adawlut Reports, 20th February 1855, p. 240.
 † *Ibid*, 24th August 1854, p. 301.

[†] Nizamut Adawlut Reports, N. W. P., 2nd September 1853, p. 1093.

[§] In eighteen of these cases, the provocation was shown to be in some way or other connected with the misconduct of women—(In one of these, a blind man killed his wife when asleep)—nine instances were the result of disputes, zumeendaree feuds, or abuse; one was a case of insanity. In one, a thief or intriguer (for in a large proportion of cases it is found difficult to distinguish

I was, for a time, disposed to believe that, in most of the cases where this mode of killing was adopted, it was selected by the murderers as a kind of judicial punishment—the thief, the adultress, or the trespasser being regarded as a criminal upon whom condign punishment, according to ancient law, ought to be inflicted.*

The prevalence of such an opinion, at least among the Up-country natives, is negatived by the fact, that men of very strong feelings have, in at least two instances before me, voluntarily submitted to be put to death in this manner by their relations, in preference to incurring disgrace.†

Still there are many cases on record in which the infliction of this punishment had rather the character of an execution than of a murder. Thus—it appears to be a generally received popular opinion throughout the country, that those who succeed in apprehending a dacoit or thief in the act, have a right to put him to death while he remains defenceless in their hands. The Government have, for years, endeavoured to put down this barbarous practice, but cases still frequently occur.

the cases) was put to death by the people of the house in which he was caught. And, in one, a brahmin killed his pregnant wife, that her blood might be upon certain persons who had offended him. My notes of the other three cases were mislaid.

^{*} This mode of self-justification is not overlooked by the criminals of India—neither is it ignored by the dispensers of the law. Thus, a man's wife having eloped with another, the husband pursued the guilty pair, and at last discovered the village in which they had taken up their abode. He concealed himself in the jungle, determined, as he avowed, to rush on them at night and kill them both. He failed in doing so, but severely wounded them. The Sessions Judge concurred in the futwa of the law officer, who declared the crime justifiable by the Mahomedan Law, and acquitted the prisoner.—Police Report, L. P., 1845, p. 69.

[†] These cases have already been referred to at p. 235 and p. 268.

One Baronee, of Sarun, stated on trial that, having heard a thief making his way into his house at night, he caught him as he was getting out of the hole in the wall. While the wretch lay half in the hole and half out of it, he tied his arms with a piece of rope, and then struck him several blows over the back of the neck with a kodaul, nearly severing his head from his body.* At about the same time, and in the same district (Sarun), three persons captured a thief who had robbed the house of one of them, and knocked him down; while two of them held him down, the third brought a kodaul from the house and nearly hacked his head off.†

At Goruckpore, in 1852, three persons seized a man, who had made his way into their house, whether for purposes of robbery or of intrigue it appeared doubtful, overpowered him, held him down, and killed him by repeated blows with a *kodaul* on the back of the neck.‡

The converse of the above cases lately appeared in a trial at Bareilly. It appeared, from the confession of one Khyala Singh, that he entered the house of one Hussao Sah with intent to steal, and armed with a sword. The master of the house was aroused, and endeavoured to capture the thief; a struggle ensued, in which the robber cut his opponent on the neck so severely as to cause instant death.

A case of the kind was tried before the Commissioner of the Tenasserim and Martaban Provinces in 1854. Its details are very remarkable, as showing the extension of this mode of punishment into Burmah. A number of Burmese wood-cutters, on the frontier, seized four Shans, on suspicion that they were elephant stealers, tied their

^{*} Nizamut Adawlut Reports, 14th June 1853, p. 796. See a similar case Police Report, L. P., for 1846, p. 14. † *Ibid*, 17th June 1853, p. 810.

[‡] Nizamut Adawlut Reports, N. W. P., 3rd January 1852, p. 4.
§ Ibid, 27th February 1854, p. 234.

hands, and killed them with blows of a dhao on the back of the neck, without completely decapitating them. They all pleaded guilty; and, in consideration of their ignorance and half-civilized state, were sentenced only to a long term of imprisonment.*

We have already seen that, in a very large proportion of the recorded cases, this mode of death has been inflicted as the punishment of Sexual Crime, suspected or discovered. The following is a singular case in point. A Dacca man, suspecting his wife of having an intrigue with another person, had often warned her to break off the intimacy, but to no effect. One day, returning home, he caught them in the act of adultery. They ran off, and the husband went on to the house. Shortly after, the woman came in, when he asked her where she had been. She replied, looking after the cattle in the field. He inquired-were the cattle in the jungle? "If you want to eat, -eat, I will not suffer you to live. I have often told you to break off intercourse with that man, but you have not listened to me." He then tied her right hand and, seizing her by the left, nearly severed her head from her body with a dhao, with which he also inflicted several other blows on her person. He then, with the weapon in his hand, gave himself up freely, confessing the deed.

Mention was made, in Note to page 252, of a case in which a man having been murdered in his house, evidently on account of an intrigue, the body was bound head and feet, carried to some distance, and there left, after having been chopped on the back of the neck. The above instances may throw a light upon the motive which suggested the apparently unnecessary hacking in that and the following case. The body of a man was discovered, in the Almorah district, with the back of the neck and head cut, the throat gashed, and

^{*} Nizamut Adawlut Reports, 27th July 1854, p. 126. † Police Report, L. P., 1849, pp. 42, 43.

the nose and ears cut off. It came out, in the inquiry, that the deceased had intrigued with the wife of one Harkoa, who, it appeared, lay in wait, with three others, for the deceased; seized him, struck him on the back of the neck with an axe and despatched him. They then bound the body to a pole and took it away to a ravine, where they hid it,—but not until the injured husband had cut the throat with a razor, and another had cut off the ears, for the ear-rings. The husband also cut off the nose (the penalty of adultery) and threw it away.*

In the following case, which came under my own notice, this crime was committed upon a defenceless person with most cruel deliberation. In August 1853, the body of an aged man was brought to me, at Howrah, with an enormous wound traversing the back of the neck transversely just above the line of the shoulders, completely dividing the spine, and nearly effecting decapitation. The lower limbs had been in great part devoured by dogs or jackals. I gave it as my opinion that the wound must have been inflicted during life, and at a moment when the deceased was either on his knees, or lying with his face to the ground; and that it caused instantaneous death. I added that the instrument employed was probably a dhao or heavy sword. One Petumber Dass Sewlee, upon being arrested on suspicion, admitted the murder, and named his associates. He produced two dhaos as the instruments used by himself and one of his accomplices in effecting the murder. I found that the longer of the two weapons was singularly calculated to cause such a wound as that observed on the deceased's person.+

In the majority of cases, it would appear that the wounds on the neck are inflicted in the heat of passion, in a struggle or in a chase, where the victim's limbs are perfectly free.

^{*} Nizamut Adawlut Reports, N. W. P., 30th August 1853, p. 1048.
† Nizamut Adawlut Reports, vol. ii., part 1 of 1853, p. 87.

In many instances, the wounds on the neck are the only injuries inflicted. The natives' dexterity in striking the neck may result, among the Bengalees, from their practice of decapitating goats, &c., for food and sacrifice with a single blow; among the Up-country men it may be attributed to more or less acquaintance with the use of the sword.*

Among the cases of hacking the neck published in the Nizamut Reports, are several of considerable importance in a medico-legal point of view-As that of a man in Assam, who struck the child of his sister-in-law, three years old, while she was sleeping. He gave merely one stroke with a dhao, which, however, half cut through the infant's neck, and must have caused instantaneous death. He appears to have been a weak-minded man, but not a lunatic-no cause of ill-feeling could be discovered. He had formerly smoked gunjah, but had entirely left it off. During the preceding six months he had suffered extremely from a disease, apparently of neuralgic character. It became a question whether the murder was committed to effect his own recovery,-to appease the goddess Kalee; or whether the deed was done under the influence of gunjah. There was no proof of insanity. He was sentenced to death.;

Gopal, a Brahmin, acknowledged, on trial, that he had killed his wife in the night, by striking her on the neck with his sword. She woke him up suddenly, he said, and,

^{*} Most of the heroes of Indian history have been remarkable for the force and dexterity with which they could strike with the sword. Thus we read of Bukhtyar's contest with a fighting elephant, in which he put the enraged animal to flight by a blow on the trunk. Of Shere Khan's killing an enormous tiger with one blow of his sabre, and of Shere Afgan's cutting off the trunk of the Emperor's elephant with a single stroke, and finishing his career by cleaving the Subahdar of Bengal in two. Beheading a buffalo with a single blow is a common exploit among the Nepaulese. It appears to be a feat which requires more dexterity than muscular power.

[†] Nizamut Adawlut Reports, 16th October 1855, p. 453.

taking her for a thief, he snatched up his sword and cut her down with two blows. The woman had kansa ornaments on her toes, the sound of which, it was held, he must have heard on the slightest movement. He had left his house stealthily after the deed, throwing his sword down a well, and it was only in the foujdaree depositions that the above defence was made. At the thaunah, it was merely said that he had killed his wife. The crime was regarded as murder, but he was sentenced to transportation for life.*

In the same year Nunha, of Bareilly, asked bread of his mother: she refused it, with an indelicate retort. Enraged at the reply, he took up an axe and killed her with four wounds—"one on the temple cutting through the flesh; another on the face dividing the lips, and breaking two of the front teeth; another just under the neck, cutting through the bone; and a fourth, on the throat, severing the windpipe."†

DECAPITATION.

The practice of Beheading appears to have been, from very early times, equally common among the Hindus and Mussulmauns, but we do not find that it was employed by any of their Governments as the national mode of executing criminals after the manner of the Turks and the Chinese.‡ The Southern Hill Tribes of this Presidency, who are generally regarded as the aborigines of the country,—driven up into

^{*} Nizamut Adawlut Reports, N. W. P., 3rd November 1854, p. 647. † *Ibid*, 17th January 1854, p. 44.

[‡] It is related of the tyrant Muzuffer Shah that, whenever he made prisoners of any rebels, he took pleasure in beheading them himself, and that the number of persons he is said to have put to death in this manner, is incredible. Most of the other Mussulmaun rulers of Bengal also had some of their criminals decapitated. The late native government of Nagpore numbered beheading among their punishments. The Mussulmauns generally took the heads of their enemies slain in battle. Khan Alum, having taken

their narrow territories by the first influx of the Hindus, at a time which is pre-historic, but still retaining many of their original religious usages and distinctive traits of custom,—all these scattered races, the Soorees, Khonds, Koles, Santhals, Garrows, and the various tribes of Kookies, Chuckmas, Reaugs, Mughs, &c., who inhabit the hills from Munneepore to Arracan and Burmah, behead their enemies. This fact, of course, has an important bearing upon many cases of homicide occurring in the border districts of the Bengal Presidency.

It appeared, in a trial at Manbhoom, (bordering upon the Kole and Soorye countries,) that two Hill men, having missed their wives, and suspected that they had gone off with a certain man, made search for them; and, after eight days, found the three sitting together under a tree, eating some jungle fruits. Whereupon, they, without parley, both struck the man with their weapons, an axe and a hatchet, severing his head from his body. They then attacked their wives severally, and cut off their heads by repeated blows. They then took the heads into the village and freely surrendered themselves. At trial, they confessed all with the utmost candour, evidently thinking that they acted justifiably.*

In 1849, an inhabitant of the neighbouring district of Bancoorah, becoming acquainted with his wife's criminality, warned her. His wishes were disregarded. Hearing that

the fortress of Hajypore, and put the governor and most of the garrison to the sword, despatched all the heads to the Emperor, who immediately sent them to Dood Khan as a hint of his own probable fate. Moorshud Cooly Khan, having defeated Rasheed Khan, near Moorshedabad, in 1712, ordered that a pyramid should be erected on the Delhi road, with niches to contain the heads of the enemy, as a monument of his victory.

According to the Mahomedan Law, Decapitation, by a sword or similar weapon, was the prescribed instrument in sentences to *Kisas*, or Retaliation of Death, in cases of murder.

^{*} Nizamut Adawlut Reports, 9th June 1852, p. 941

the meetings took place at a tank whence the woman fetched water—he, early one morning, ascended a tree on the banks of the tank, armed with a tanghy. The woman came, and was met by her paramour; but, other persons coming up, they went away, each returning home. He remained on the tree that day and night, and part of the next day, when the woman came again and her paramour met her. He descended the tree, cut off the man's head, while in the act, then pursued her, cut off her head, and, tying the two heads together, was proceeding to Bancoorah to bring them to the Magistrate, when he was met by some Ghatwals, to whom he delivered himself up. He was acquitted, on the plea of justification.*

In the following year, another Bancoorah man, having had an intrigue with a neighbour's wife who had quitted him for a Brahmin and refused to speak to him, went to her house, and asked her if she persisted in not speaking to him. She replied yes, and abused him, when he caught up a kurari, and cut off her head by repeated blows; he then took up the head and the kurari to go to the Magistrate, but was seized by some Ghatwals, after proceeding openly with them for a short distance. He was sentenced to death.†

In 1844, a party of Hill men made an inroad and killed and decapitated twenty Munneepoorees residing in the Company's territory.

In 1854, two Garrows were sentenced to death for having been parties in an expedition into Assam for the sake of plunder and of procuring heads, in which they took eight lives. [See p. 243]‡

^{*} Police Report, L. P., 1849, p. 57. † *Ibid*, 1850, p. 50.

[‡] Nizamut Adawlut Reports, 19th June 1854, p. 743.

The most ordinary cases of murder by decapitation in the Plains are, as usual, generally the results of some act of Sexual Immorality.

In 1852, one Sobha, of Bareilly, took a sword with which he beheaded his wife and wounded the infant in her arms and then struck his brother. The child appears to have died of starvation and the brother of fever. Sobah said that his brother had intrigued with his wife.*

In a case tried in the Saugor and Nerbudda territory in 1852, a man confessed that a married girl of eighteen or nineteen, who had become pregnant by him, having urged with great pertinacity that he should take her into his house, which he was unwilling to do, lest his reputation should suffer by his connexion with a woman of inferior caste, took her to the river, where he killed her with repeated strokes of an axe, finishing by decapitating her and abandoning her body in the water.†

In the following year, a man of the same district confessed that a married woman with whom he had intrigued for three years, becoming importunate in urging him to elope with her, which he resisted on account of his family and being then married, he cut off her head in the jungle, after a vain attempt to throttle her with his hands.

In 1852, a Mussulmaun, of Delhi, beheaded and almost hacked to pieces a common prostitute, who threatened to discontinue her connexion with him;—a very common incentive to murder in India. §

In 1853, Gandiah Kahalin, of Manbhoom, confessed that,
—her husband having been in the habit of beating, starving
and abusing her, and of associating with another woman,—

^{*} Nizamut Adawlut Reports, N. W. P., 25th March 1852, p. 214.

she, on a certain night, freed herself from a post in the yard to which he had bound her, and, finding her husband asleep in the house, struck him two blows on the neck with a koralee and severed his head. She then dragged the body first to a shed, and afterwards to the bed of a rivulet, and threw the head into a pool. The head was not found, traces of dragging a body were found up to the cow-house, where some spots of blood were seen, smeared over with sand. The place where the body was found was about 160 yards from the house. Sentence—Imprisonment for Life.*

Two men of Nuddea having long co-habited with the same woman, one, assisted by an accomplice, cut off the other's head with a *dhao* and a knife, and threw the body into a tank. The head was not found.

In several recorded cases, this crime has been committed under very extraordinary circumstances. One Bheekaree, of Cawnpore, being in his house with his two children—a girl aged nine or ten years, and an infant eighteen months old, desired the girl to pacify the child. She not complying at once, he was seized with ungovernable rage, seized a hatchet, and severed the neck of his daughter, fairly decapitating her at the second blow. He then threw himself into a well. Sentence—Death.‡

Reference has already been made to the crime of a Hooghly man who, in 1845, had his enemy (who had intrigued with one of his female relations) held down by three persons, and, with a large sacrificial knife, cut off his head with one blow, and, with a second, divided the body at the waist.

In 1852, one Bissonath, also of Hooghly, confessed the murder of his wife's paramour, having concerted his destruction with others. After he had knocked down the man

^{*} Nizamut Adawlut Reports, 10th June 1853, p. 769. † *Ibid*, 25th June 1853, p. 85. ‡ *Ibid*, 3rd August 1853, p. 943.

senseless with a heavy pukkah bamboo, he and his four accomplices took turns with a sharp-cutting vegetable knife, in hacking the neck, until they severed the head from the body. Dr. Ross found several wounds on the shoulder, made with some cutting instrument, and the head had evidently been severed by blows from the trunk.*

In 1848, a Chittagong girl of about sixteen murdered her husband, an old Brahmin of 60, by cutting off his head whilst he was asleep with the large two-handed knife used in sacrifices.†

In 1850, a Dome, of Baraset, in a state of frenzy, without apparent reason, came up to where his brother's wife was standing with other women, and struck off her head with a dhao. The by-standers were too much alarmed to apprehend him; he escaped and was not again heard of.‡

In May 1854, a case was tried, at Agra, which illustrated the deadly certainty with which natives accustomed to the use of the tulwar slay by decapitation. One Rambuksh, a Sepoy, having gone with three of his comrades to witness the religious ceremonies at Gobardhun, suddenly and, as far as could be ascertained, without any provocation, drew his sword and, attacking one of his comrades, severed his head from his body, and immediately went onwards and decapitated three harmless women before he was arrested; which, however, was not effected until his left forearm was severed from his body. His companions declared that they had known him five or six years; that he was a quiet inoffensive man, and was not intoxicated at the time of committing this act, nor was he even suspected of being insane."

^{*} Nizamut Adawlut Reports, 1st January 1852, p. 1.

† Police Report, L. P., 1848, p. 41.

‡ *Ibid*, 1850, p. 63.

[§] Nizamut Adawlut Reports, N. W. P., for May 1854, p. 575.

CUT THROAT.

By far the larger proportion of murders of this kind, which come under judicial and medical investigation in India, are to be traced to feelings of sexual jealousy and injured honor. It would appear from the details of several cases that this mode of destruction is often deliberately selected as the punishment of Adultery and Unchastity, and that the wound in the throat is intended to be viewed as an indication or " Signature" of the crime for which the deceased has suffered. As will be shown in several parts of this Manual, particular punishments are frequently awarded by the people of India to particular crimes, especially in cases of jealousy. In the present instance, however, too much dependence must not be placed upon circumstantial evidence of this kind, as many cases of murder by cutting the throat are recorded in which, the existence of such a motive was not apparent. Still the following cases show that the question broached above deserves attention and investigation.

Hurree was tried at Bareilly for the murder of Urjoon. He stated as follows, in his confession before the Joint Magistrate. I strangled Urjoon, my neighbour. I was asleep under a thatch in my enclosure; my wife was asleep in my apartment. At three o'clock, Urjoon leapt over the wall into the enclosure. I was aroused and called out-who is it? He gave no answer; I, supposing him to be a thief. endeavoured to seize him; he sat down in a corner of the wall; I took a hempen rope and put it as a noose over his neck. I drew it tight, so that the thief fell down, and I quickly got on him and strangled him by means of the rope. When he was dead, I got afraid, and, taking up the deceased on my shoulders, went out and threw the body in the confines of the adjoining village; and, in throwing it down, I, from rage, cut it with a sword, so that the neck was cut through, nearly severed from the trunk. The Judges of both courts

regarded it as probable that the prisoner detected the deceased in a nocturnal visit to his wife, in prosecution of an intrigue, and that he put him to death, well knowing who he was and for what purpose he had come.*

This case has great significance, when taken in connexion with the two other similar instances cited at pages 252 and 276 of this Manual, in which the necks of persons murdered for adultery were hacked after death by the offended parties.

At about the same time, Munrakhund, of Futtehpore, confessed before the Magistrate that, fifteen days previously, he saw one Dabeedeen cohabiting with his wife, but he escaped. Afterwards the man came to his house; a verbal dispute ensued. Dabeedeen poked him with a lattee on the mouth, whereupon he drew him into the vestibule of the house, and, having throttled him, cut his throat with a small blunt hoe or khoorpee. He, of his own accord, then told the police that he had killed the man, and produced from an inner apartment of his house, from a quantity of chaff, a bundle which, on being opened, was found to contain the corpse of the deceased. A purse containing 22 rupees was found about the person of the murdered man. The sessions judge remarked that, by the prisoner's own account, the act of cutting the man's throat did not follow immediately on the provocation, but first he got him down, planted his knee on his breast, and throttled him. + This last point is of some importance, as bearing upon a question which was raised in a trial which took place not long since in one of the Courts of the N. W. Provinces, as to whether the prisoner had not thrown a man down merely with the intention of cutting off his nose,-the usual punishment of adultery,-without premeditation of murder;

^{*} Nizamut Adawlut Reports, N. W. P., 2nd July 1853, p. 812. † *Ibid*, 30th June 1853, p. 806.

but, endangered or enraged by the man's struggles, had cut his throat.*

Ramsuhaee confessed, before the Joint Magistrate of Allahabad, that, finding a man in the act of committing adultery with his wife, he looked about for some weapon with which to kill him. The adulterer, in the mean time, escaped. Finding a razor, he killed his wife and fled. The throat of the unfortunate woman was cut through, her breasts were sliced open, and the belly was ripped across, so that a fœtus of five months was expelled through the wound from the womb.†

Standing alone, this case would merely be regarded as an instance of wild brutality, the almost accidental result of ill-regulated passions unendurably outraged. It, however, gains a terrible significance when its details are compared with those of another case reported by Mr. Wilkie, then of Dinagepore, several years previously; in which the body of a woman was sent in for examination with her throat frightfully cut and several gashes on the breasts, and with both the ears cut off—the latter mutilation, when it appears upon the body of a murdered person, being an almost certain evidence that death has been the penalty of adultery. In neither case then can the crime be viewed merely as an outburst of blind fury;—each murderer, doubtless, acted according to a certain form and precedent of ancient tradition.

The other recorded instances of the commission of this crime, for the same cause, are so numerous that a few of them can only be briefly mentioned. A man confessed that he found his wife in adultery; and, in his rage, went to a near neighbour's house for a razor, with which he cut her throat.‡

^{*} See also Nizamut Adawlut Reports, N. W. P., January 7 1853, p. 32.

[†] Nizamut Adawlut Reports, N. W. P., August 19th 1853, p. 1016. A case somewhat similar to this occurred in the Moorshedabad District in 1845, where a barber was convicted of murdering his wife in the night by cutting her all over the body with a razor.—Police Report, L. P., 1845, p. 59.

[†] Nizamut Adawlut Reports, vol. ii. p. 235.

A person, suspecting his wife of infidelity, after a short dispute, deliberately took a knife, threw her down upon the ground and cut her throat.* A man waylaid one who had intrigued with his wife, knocked him down, and cut his throat from ear to ear.† A person acknowledged that he had cut the throat of one who had intrigued with his wife, and four others confessed that they had been present aiding and abetting; the body, however, was never found,—the prisoners were, therefore, released.‡ Two men cut the throat of their uncle, with a sword, for having abducted their mother, his own sister-in-law.§ A man, suspecting his wife of intrigue, cut her throat and his own with a sword.

* Police Report, L. P., 1846, p. 21. † *Ibid*, 1844, p. 19. ‡ *Ibid*, 1851, p. 56.

§ Nizamut Adawlut Reports, N. W. P., Sept. 1 1853, p. 1088.

| Ibid, Sept. 27th 1853, p. 1199. It may be scarcely out of place to mention here that there are one or two points which appear to render the moral relations of the crime of homicide on account of Sexual Jealousy in India somewhat different from those which lead to the commission of similar violence in more civilized countries. Thus,-the sense of disgrace and of outraged honor is certainly as strong among these morally degraded people as it is with any people in the world. This is shown in the singular fact that the adultress sometimes urges her husband to sacrifice her life, to redress his honor. A man put his wife to death, at her own request, in consequence of her loss of honor from having been violated by several persons.* This is intelligible enough. Occurring many years ago in Bengal, it illustrates the extraordinary statement of Ramsuhaee, a man of the North-West tried in 1853, the prisoner whose case is narrated above at p. 287, to the effect that, an improper intimacy had, within his knowledge and observation, existed for some time previously between a certain man and his wife, "who had frequently spoken to him (the prisoner) on the subject, and urged him to kill her to save the honor of the family." Still there was every reason for believing the prisoner's statement that he found this same man in the act of adultery with his wife, and then put her to death! It may appear singular that so jealous a people should, not unfrequently, be willing to overlook, for a time, the unchastity of their wives-this, however, is probably in a great measure owing to the feeling, so common among natives, that it is the exposure which

^{*} Nizamut Adawlut Reports vol. i., p. 1.

Cases from time to time occur, in which natives inflict wounds upon their own throats, either with a suicidal intention, or with a design to accuse others of the crime. I, some time since, examined the body of a man who, having long suffered from an incurable bowel complaint, was said to have destroyed himself in despair. I found a wound on the throat sufficiently large to account for death, although not involving either carotid: the body was much emaciated, and the bowels showed abundant traces of chronic disease.

In 1839, a woman of Mymensing, when suffering from a paroxysm of pain in her stomach to which she had been

constitutes the disgrace, and in part also to the severity of the punishment generally inflicted by the Courts in nearly all cases of this kind where the guilty parties cannot be proved to have been discovered in the act. Considering how poor, dishonest and morally degraded the generality of the natives are, it is worthy of remark that I have scarcely found in my reading any instance in which it could be fully proved that a Hindu or Mussulmaun husband connived at his own dishonor with a mercenary motive. An apparent exception to this rule occurred in 1854, in the case of one Oseri, of Bareilly. who, becoming nearly blind, was said to have made over his wife to another man, on condition of receiving food and clothing-they all three lived in one house. The result was that, after frequent disputes, he killed the woman with repeated sword cuts and then surrendered to the police with the bloody weapon in his hand. According to Sir John Malcolm, the Sikhs do not punish a man who murders his wife for infidelity. The Chief says, if he were to punish such a husband-all the women in the country would become unfaithful. Ward mentions that, according to the Hindu scriptures, the merits and demerits of husband and wife are transferable to either in the future state: if a wife perform many meritorious works, and the husband die first, he will enjoy heaven as the fruit of his wife's virtuous deeds; and, if the wife be guilty of many wicked actions, and the husband die first, he will suffer for the sins of his wife.

"An adulterous wife casts the guilt on her negligent husband."—Menu Chap. VIII. S. 317.

A man who had killed his unfaithful wife declared, at his trial, that, owing to the disgrace which she had brought upon him, "he was dead before, but that now he was alive again, and quite indifferent as to what was done to him."—Nizamut Adawlut Reports, N. W. P., 3rd November 1852, p. 1299.

for some time subject, took up a sickle and killed her two children, and then endeavoured to cut her own throat.* Further remarks upon this curious subject will be found in the chapters on *Suicide* and *Insanity*.

In certain cases of cut throat, the fingers are found to be injured, thus furnishing most convincing evidence of the fact that homicide has been committed,—as in the following instances:

In January 1852, a Mussulmaun was tried at Mymensing for cutting the throat of his step-mother, and separating the head from the body, with a long knife used for killing animals. The evidence of the Civil Surgeon showed that the body presented fifteen other wounds—six on the back, one on the head, three on the right side of the face and chin, one in the bend of the arm, and the rest on the hands. He stated that his mother-in-law (a woman of notoriously ill-temper) denied him food and a fire when he was suffering from ague, and endeavored to kill him with the knife, which he then turned against herself.†

In the case of a poor child six years old, whose throat was cut from ear to ear and to the spine, by a wretch who stole his ornaments, one slight incised wound was also found on the back of the left hand.

It happens very much more frequently, however, that, although the characters of the wound are such as to render it a matter of certainty that the individual did not perish by suicide, the hands are perfectly free from any trace of injury whatever. This is often accounted for by the fact that, as in the case of Lord W. Russell, who was murdered by Courvoisier in 1840, the victim receives the first

^{*} Police Report, L. P., for 1840, p. 67.

[†] Nizamut Adawlut Reports, vol. ii., part 1, p. 140.

[†] Nizamut Adawlut Reports, N. W. P., 2nd October 1852, p. 1121.

blow while sleeping; * and, should the murderer purpose to repeat it, he refrains from doing so until hæmorrhage has precluded all power of resistance or movement.

Dahoo Joolaha confessed, upon his trial at Behar in 1852, that, his wife having abused him in the evening, he waited until mid-night, and then, deliberately lighting a lamp, cut her throat with the common knife of the house.†

About a year since, I examined the exhumed body of a Mussulmaun girl 14 or 15 years of age. The throat had been severed by enormous wounds, evidently inflicted by repeated chops with a rather blunt instrument (a small but heavy sickle was produced). The vertebræ were completely divided. All that could be clearly ascertained was, that she had gone to rest with her husband, that he had absconded, and her body was found in the above condition. The hands were uninjured.

The records show that this mode of committing murder is of considerable frequency. When the fingers are uncut, and when the nature of the wound is such as to prove that it could not have been self-inflicted, or the murdered person is so young that all suspicion of suicide must be out of the question, it will be necessary to institute minute inquiries, as to whether the deceased was or was not asleep when the fatal blow was struck. When it is probable that the deceased was not asleep or insensible when attacked, the absence of wounds on the hands must afford a strong presumption that the murderer was aided by accomplices, as in a case tried at Bhaugulpore in 1853, where it appeared certain that a discharged servant had enticed his late master's son into a field, and there, aided by three other persons,

^{*} There was, however, a wound on the thumb of Lord W. Russell's right hand, which must have been instinctively raised before the stroke was finished.

[†] Nizamut Adawlut Reports, vol. ii., part 1 for 1852, p. 34.

had cut the child's throat, and stripped the body of its ornaments.*

A man, of Rungpore, having been too intimate with a female in the service of the same employer, and she proving with child, he was afraid that, when the intrigue was discovered, he would be punished. He accordingly inveigled her out one night to a place where two of his friends were ready. They seized her, each holding an arm and leg, and the third cut her throat. They then threw the body into a well, which they filled up.†

In a case tried at Moradabad, in 1852, it appeared that a boy eleven years old, had been murdered by stabs in the throat, apparently inflicted with a knife, which had passed from the right side clean through the throat to the left. The child's great-grand-mother declared that she had seen one man holding him down while the other stabbed him, but the evidence of the chief witnesses was discrepant, and the accused were acquitted.‡

In the following cases, however, a presumption—founded upon the uninjured state of the hands—that the deceased had been held, or had been murdered while sleeping would probably have been erroneous. In February of the previous year, one Shamchand confessed, on trial, as follows: "I had given the deceased rupees six to keep. On the day of the

^{*} Nizamut Adawlut Reports, vol. iii., part 1 1853, p. 152. See also a case in which the throat of a woman was cut by two persons—others holding her. *Ibid*, p. 177. Also Reports of the Nizamut Adawlut, N. W. P., for August 1854, p. 287.

[†] Nizamut Adawlut Reports, N. W. P., 2nd August 1852, p. 773.

[†] The murderers appear to have been tempted to the crime by the poor child's only ornament, a silver huslee, which was worth one rupee, eight annas. The Sessions Judge remarked that his experience told him that the natives of India will murder for even a less valuable article.*

^{*} Nizamut Adawlut Reports, N. W. P., 2nd August 1852, p. 773.

occurrence I called him to my house, and seated him down to smoke; I asked him for the rupees six, and he denied my giving them to him. In a passion, I took a dhao which was in the chopper of the house and, calling him inside, cut him with it as he put his head inside." The Sub-Assistant Surgeon noted different wounds about the neck, and stated that both carotid arteries were cut, and that the wound was as of a drawing cut. It appeared that the dhao was seventeen inches long and very sharp. When it is recollected that a man must enter the low doorway of a native hut with his body at a right angle, and his neck craned forward, the possibility of inflicting a fatal cut upon the throat, as it was advanced, before the hands could be raised to protect it, must be self-evident.

In June 1854, Purshad, a barber, was sentenced capitally for the murder of Bishan, one of his own trade. The deceased having gone into a field, for the purposes of nature, the prisoner, watching his opportunity, rushed on him and cut his throat with a razor. Here the unexpected nature of the attack and, probably, the skill of the criminal in the use of his weapon, would have to be taken into account.*

An important question arose in a trial at Jubbulpore, as to whether death had been caused by a wound on the Throat or an injury to the Head. A young man killed his pregnant wife in the night and disappeared. He afterwards surrendered himself voluntarily. He confessed that, after retiring with his wife, an altercation arose regarding her unfaithful conduct, when he seized an iron bar called khurma, weighing twelve pounds, which lay by, and struck her on the head. She then drew out from a niche in the wall an iron dagger (kuttar,) and inflicted with it a mortal wound on her own throat. The medical testimony showed that death was caused by either or both of two wounds of a

^{*} Nizamut Adawlut Reports, N. W. P., June 1854, p. 653.

mortal nature, the skull was fractured at the vertex, and beaten in upon the brain, and the throat was so severely cut, or stabbed, that the result must have been quickly fatal. It was held by the Sessions Judge that such a blow or blows as produced the fracture observed must, as was declared by the medical officer, have been followed by instant insensibility, making the subsequent act of suicide imputed clearly impossible, even if there were any coloring of circumstantial probability to sustain it. It could only be inferred that the prisoner, in order to make sure of his object, followed up the blow on the head by the wound in the throat. Under any light in which it could be viewed, he considered that the prisoner's feeble effort to soften the extent of his guilt was, in the face of the clear medical proof, wholly idle.*

The reports show that the question "Can an individual, whose windpipe is cut speak intelligibly?" is frequently put to the medical witness. The answer appears generally to have been " No .- Division of the windpipe altogether destroys the power of speech."+ It is certain, however, that this assertion requires to be qualified. Undoubtedly, even partial division of the trachea is often attended with loss of speech. Still, where dressings have been carefully applied, and the wound nearly closed, the divided tube becomes continuous, and whispered speech is possible. Indeed, even where the wound is uncovered, the power of utterance may not be entirely lost. In a case reported by Mr. Davies, of Patna, of a man who was admitted on the 8th of the month with the windpipe nearly cut through, and died on the 15th, having always torn off his dressings, it is mentioned that he "talked incoherently."

^{*} Nizamut Adawlut Reports, N. W. P., 5th May 1853. p. 642. † "When the trachea is divided, the voice is lost"—Taylor, p. 309, 5th Edition.—The above is cited in Baynes's Medical Jurisprudence, p. 66.

Again, in a case of complete division of the throat between the hyoid bone and the thyroid cartilage, Mr. Macnash reported that the patient spoke and was able to make herself understood. Here, however, the vocal apparatus was, probably, nearly uninjured. After the first publication of these remarks, I treated the case of a woman who had cut her throat so extensively, just above the thyroid cartilage, that the arytænoid cartilages were visible. The wound was granulating when I first saw her; when she closed it, by holding down her head, she could speak audibly in whispers.

Survival after wounds of the Carotid Arteries .- Dr. Taylor remarks that, "There are several cases on record which show that wounds involving the common carotid artery and its branches, as well as the internal jugular vein, do not prevent the individual from exercising voluntary power and running a certain distance." * Mr. D. Tyerman, of Colney Hatch Asylum, has, I believe, been so fortunate as to save life in an instant in which the common carotid was divided. Wounds of the external, and even of the internal carotid branches, are by no means certainly fatal. † Every Surgeon who reads the following case, will regret that its details are not more full and explicit; as it stands, it would appear to prove the possibility of survival for some hours after division of the common carotid artery, even where no surgical means have been adopted,-but this is by no means certain. It appeared that a man was aroused in the night by two thieves, who were in the act of stealing in his house. In struggling with them, one of them cut him in the neck, and

^{*} Op. Cit. p. 309.

[†] One of the latest and most demonstrative cases of incised wound of the external carotid, in which hæmorrhage was checked by syncope, and where the common carotid was tied with temporary success, has also been given by Mr. Tyerman, Med. Times and Gazette, October 1854, p. 366. For other cases, see Mr. Guthrie's "Commentaries," p. 240.

they escaped. After receiving the cut, he said that he had seen the prisoners, whom he named, stealing his goor, that he had seized one of them and that the other cut him on the neck with a dhao, or knife, and both made their escape. The accused, not having come with the other neighbours, were sent for and confronted with the wounded man, who accused them as above. The man's brother stated that the occurrence happened "late at night," and that "it was then moonlight." The man died "the following day." The Civil Surgeon's evidence was as follows:-"I found an irregular deep wound on the neck, apparently caused by a sharp pointed instrument; the wound, in my opinion, was not caused by the deceased's own hand; the CAROTID ARTERY was divided, and deceased had bled to death. The wound, from its irregular appearance, seemed to have been inflicted during a struggle, such as you mention between the two parties."

In the Magistrate's court, the accused pleaded that deceased, when asked by them to name the persons who wounded him, gave no answer. They denied their guilt throughout. One was sentenced to be hanged—the other to transportation for life.

Here the question is—was it the External carotid artery or the Common carotid that was wounded? If it was the former, which, however, being merely a branch of the main carotid trunk, is never termed by Surgeons "the Carotid Artery," the statements of the witnesses for the prosecution were possible, supposing that the vessel was rather lacerated than cut through by the point of a bluntish weapon like a dhao. If the Common Carotid artery was the vessel divided, that testimony could only be regarded as just within the extremest limits of possibility. No Surgeon will be prepared to deny that this vessel might become occluded by a temporary clot, if divided by a coarse tearing weapon,—but I can assert, with the utmost confidence, that there is no other known or recorded instance of a person who,—after sustaining

an incised wound, dividing the Common Carotid Trunk, and remaining without surgical aid,—survived long enough to give a distinct account of the transaction, to name his assailants, to have them sent for (irrespective of the distance), and again to accuse them as they stood before him.*

The prisoners should have had the benefit of the doubt—whichever artery was divided.

The Medical Officer does not appear to have been questioned as to the possibility of the statements made by the witnesses for the prosecution.

^{*} Nizamut Adawlut Reports, 1st December 1854, p. 712. There can be little doubt that the Medical Officer's deposition has been erroneously quoted in the printed report, and that it was the External Carotid which had been divided. Still it is only possible to argue upon such cases as they are placed before us.

[†] Several remarkable cases of murder by Cutting the Throat will be found in recent numbers of the Nizamut Reports. In 1852, a man of Saharunpore confessed that, having been reproved by his brother for idleness, while they were lying in their beds beside each other, he became so exasperated that he took a sword from the head of the bed and cut him across the neck and shoulder, causing immediate death. He had never been on bad terms with his brother before this.* In 1853, one Chutter Singh was sentenced to death, for the murder of five persons-his wife, her grandmother, her mother, and two children of the latter by a European gentleman. The bodies were found lying in a heap in the court-yard of the bungalow with their throats cut. A puppy dog lay on the ground beside them with its head cut off. † In 1855, a Mussulmaun woman of Beerbhoom, having had a dispute with her husband, cut the throat of her son, about three years old, in such a manner that death must have been instantaneous; she then inflicted a wound, which caused death two days afterwards, upon the throat of her female infant of nine months. She afterwards cut her own throat-" superficially"-as is usual with this class of murderers in nearly all parts of the world-Sentence. Death. In 1853, one Toolsheea, a Mahratta Brahmin of Cawnpore, went to bathe, and was never afterwards seen alive. One Rikhee, one of a class of men called Gungapootras, a set notorious for their evil courses, saying that

^{*} Nizamut Adawlut Reports, N. W. P., 20th September 1852, p. 1037. † *Ibid*, 25th February 1853, p. 283. ‡ Nizamut Adawlut Reports, 9th February 1855, p. 181.

Violent attempts to tear off the neck rings (hassoolee), worn by native women, frequently produce rather severe wounds, which, however, can rarely occasion any doubt in the mind of the medical man with regard to the cause of injury.

Spear Wounds are of not uncommon occurrence in Bengal, and it is remarkable, although perhaps only as a coincidence, in how many of the recorded cases the Heart has been transfixed with these weapons, sharpened bamboos, &c. It is important, in cases of this kind, to be able to deliver a clear opinion with regard to the amount of force used in the infliction of the fatal blow. In an instance which came under my notice some time since, I very strongly insisted upon the fact that, although a blow with a korrah had, unfortunately, pierced the heart, this instrument could not

he had seen the woman on her way home, suspicion fell upon him. The police searched his house, his brother's, which adjoined it, and another at the back, which it was stated they had bought the day before. premises were of very peculiar construction. They were described by the Joint Magistrate as Mahratta buildings; " of which it would be impossible to give a definite description; they were built on no conceivable plan; their rooms (into which the daylight did not penetrate) were dark and diminutive, and almost inaccessible, and they seemed only contrived for the commission of crime, and the concealment of stolen property." The thannadar, accompanied by the prisoners, after proceeding through two low dark cells, which led to a third, found in the last the body of the unfortunate woman, rolled up in a cloth and despoiled of its ornaments, with the throat cut from ear to ear. The prisoners objected to the search of these premises; and, as the police approached the third cell, they managed to blow out the light, and urged that they had no more oil. Between this house and that of Rikhee's brother, there was a low doorway leading to a well, which was within a dark enclosure, By opening the opposite window, a passage could easily be effected from the brother's house, over the well, into the cell in which the corpse was found. There were still visible traces of somebody having been dragged through one window [?] to the other, and it was believed that the woman had been stifled in the brother's house, and finally murdered in the adjoining house of Rikhee.*

^{*} Nizamut Adawlut Reports, N. W. P., 10th November 1853, p. 1354.

have been wielded by the prisoner with extreme force, otherwise it would have been driven through the chest, whereas the wound was scarcely more than two inches in depth.

In 1854, Mokim Sheikh, of Nuddea, was sentenced to 14 years' imprisonment for having killed his sister's husband, Bedoor Sheikh, with a spear called a *surkee*. Bedoor beat and abused his wife. Her brother resenting this, the two men had a scuffle, when Mokim got a spear from his house and flung it at Bedoor. It pierced the right side of his chest, and he died almost immediately.*

It appeared, from the statements of the witnesses for the prosecution in a trial at Azimgurh, that a man had been seized by the arms from behind by a person named, while another thrust a Spear into his right breast. The accused protested that the man was killed by an Arrow, shot by one of his own party. The Native Doctor who examined the body deposed that he found a deep wound in the right breast, which was the cause of death. It was a Spear wound not an Arrow wound.†

A case has already been cited, at p. 219, in which a man killed his wife by thrusting a spear through her neck, while another held her head.

In 1852, one Dyaram, of Bareilly, confessed that he had gone to the apartment of a woman, while she was asleep, had taken off her ornaments, and then murdered her by stabbing her in the neck three times with the coulter of a plough (phalah.) This was a piece of iron rather thicker than a man's finger, about a foot in length, tapering to a point which seemed to have been broken off just at the end.‡

^{*} Nizamut Adawlut Reports, 28th August 1854, p. 307.

† Nizamut Adawlut Reports, N. W. P., 10th December 1852, p. 1471.

‡ *Ibid*, 16th September 1852, p. 1011.

Some years since, the body of a man was sent to me for inspection, in which I found an incised wound completely traversing the popliteal space, from side to side, under the tendons of the ham-string muscles, and dividing the artery. It was stated, with great probability, that he had been found dead near a large bow, which had been set in the jungle for tigers; he had stepped unknowingly upon the string, and the arrow had transfixed his limb.

The people of India, both Mussulmauns and Hindus, were long remarkable for their skill in the use of the bow.* At present, Arrows are only used by the Hill Tribes. The arrows used by these people in the chase are usually understood to be poisoned with a preparation of the aconitum ferox, but it would appear, from recent accounts of the Santhals, that the arrows which they use in war are not always poisoned. This is supposed to be owing to the circumstance of the process of preparing and applying the poison being somewhat long and tedious.

In 1853, Soneeah, a Hill man, was tried at Moorshedabad for the murder of a man with whose wife, it was probable, he had intrigued. He confessed that they had been drinking together. That deceased abused him on account of his intimacy with the woman, and tried to strangle him. He fled, and the deceased chased him for above a mile; he

^{*} We read of Bukhtyar's invading army, (A. D. 1202-3) being much annoyed by the skill of the Thibetan and Hindu archers. Subsequently to the conquest of Bengal, we find Hindus and Mussulmauns, especially the Mahomedan princes and the Rajas, employing the bow almost up to the time of the commencement of the British rule, although matchlocks were in use at the commencement of the seventeenth century. Long previous to this, the Mussulmauns had plenty of cannon, but found them of little use, except when they got Portuguese gunners to serve them. In 1567, M. Cæsar Frederick found that the King of Pegu had "great ordnance, made of very good metal."

then turned and shot the deceased with a poisoned arrow at a distance of eighty paces. Two witnesses declared that he was a good shot, and could hit an object at that distance. This part of the prisoner's statement was not altogether credited. The deceased was found with an arrow wound on his breast, fresh and bleeding. He never spoke, and died during the night. The Judge remarked that the Hill people (of that neighbourhood) always carry poisoned arrows. The medical officer's evidence showed that the wound was sufficient to cause death, even if the point of the arrow had not been poisoned.*

In the same year, a Hindu, of Manbhoom, being awaked in the night by robbers, went out of his house and was immediately struck in the breast with an arrow, and died shortly afterwards.†

In 1845, some dakoits, probably from the Hills, killed the chowkeedar of a village in Bheerboom, with an arrow. In the same year, a body of Kunjurs, armed with spears and arrows, committed a most daring dakoitee in the bazar of the city of Patna, striking down with their spears all whom they met.‡

In 1843, a Bhaugulpore Hill man, suspecting his wife of witchcraft, took her out and shot her with his bow and arrow.

Another of these men, suspecting his brother-in-law of an incestuous intercourse with his wife, and knowing that her sister had cognizance of it, went out, met the sisterin-law, and shot an arrow at her, which went through the upper part of her arm. She escaped. Falling in with his

^{*} Nizamut Adawlut Reports, N. W. P., 9th August 1853, p. 187.

† *Ibid*, 18th October 1853, p. 654.

‡ Police Report, L. P., 1845, pp. 10, 62 and 89.

§ *Ibid*, for 1843, p. 19.

brother-in-law, he shot him through the heart. He then shot at the man's wife, but she escaped.

Cases of this kind, from time to time, occur in the Upper Provinces.

One Duljeet, of Bussye, in the Dholepore territory, but for some time a refugee in the Agra district, was tried at Agra, for having attacked, at the head of an armed body, two men, one of whom they wounded fatally with an arrow.*

In 1847, a man, of Shahjehanpore, was shot by an arrow which "entered between the sixth and seventh ribs of the left side, and penetrated the lung and apex of the heart."

It will be observed from several of the above cases, that the accuracy with which these people aim at the Heart, is very remarkable.

FRACTURES AND DISLOCATIONS.

Allusion has already been made, at p. 264, to certain medico-legal points in connexion with Injuries to the Head. A not unfrequent mode of homicide in the North-West, and especially in the Saugor and Nerbudda Territories, is Pounding the Face with a Heavy Stone. It appeared in the trial of Hoonah, rajpoot, of Saugor, that he attacked a woman, in a much frequented road, and pounded her face with a stone about half a seer (a pound) in weight. Persons attracted by her cries came up, and the murderer was knocked down and secured. They found the woman still alive, but she expired soon afterwards. So dreadful was the assault, that her face was completely smashed in, and portions of the upper and lower jaw (the latter with teeth at-

Nizamut Adawlut Reports, N. W. P., 4th February 1853, p. 148.
 † Ibid, 18th November 1852, p. 1335.

tached), were found lying separated. The prisoner's naked body was covered with her blood. As the prisoner was being secured, the woman's gold nose-ring fell from his hand. This the courts held, with great reason, to be "one of those cases in which, to use the words of an eminent English Judge, it is so difficult to define the invisible line which divides perfect and partial insanity." He was sentenced to Imprisonment, in irons, for Life.*

Chook Kaie, of Nagode (Saugor), having gone to bring his wife home, probably much against her will, remained some days at her brother's house, and then the pair started on their way homeward. A short time afterwards, the woman ran to a village, saying that thieves had killed her husband. The body was found about seven miles from her brother's house, lying in a nullah, some ten paces off the road. A stone bearing marks of blood lay near the corpse. It was shown that the fatal blow or blows had completely crushed in the skull from the side of the face, taking effect on the forehead, right eye and nose, to all appearance simultaneously. The woman appears to have given three contradictory statements of the manner in which her husband was killed-that she had been struck by him, and had retaliated by striking him on the head with a stonethat he had been killed by thieves, -and that he had fallen while she was absent getting water. The Sessions Judge remarked that no fall of a mere drunken man, carrying only the force of his own weight, unless it occurred from a considerable height, which was, here, not pretended to have been the case, could have caused so complete a fracture of the frontal bone and disfigurement of the features; nor would the injury, so received, have been likely to have taken the direction of the injury under comment, which, in itself, led to the almost necessary inference of its

^{*} Nizamut Adawlut Reports, N. W. P., 30th March 1852, p. 231.

having been inflicted with the blood-stained sharp-angled mass of stone produced, which the prisoner must have exerted some strength even to have uplifted. Sentence—Transportation for Life.*

A young man, of Hoshungabad, in the same territory, having been engaged in a gambling transaction with several persons, they set upon him, some tying his arms and legs, others strangling him with his own turban cloth, and pounding his face and body with stones.†

A Banda man enticed away a boy of ten or twelve, wearing valuable ornaments, cut his throat, and violently pounded him with a heavy stone.‡

In 1852, three persons were sentenced to death, at Bareilly, for murdering a man, by beating him on the face with lattees and an iron coulter. "The bones of the head and face were shattered to pieces, so that even the jaws and teeth were broken into several small pieces.

A woman was sentenced to death, at Bareilly, for the murder of a girl of ten, for the sake of her ornaments. The Civil Surgeon found the poor child's face and head "brutally wounded, beaten into a mass by repeated blows."

A boy, ten or twelve years old, of Bareilly, was found guilty of having enticed away a poor child, nine or ten years old, and of having murdered him for the sake of his ornaments. The child was found in a dry well. The front teeth were broken, the upper lip divided, the inside of the mouth injured. There were fourteen wounds on the cheeks, one cheek bone was fractured, so that part of it came away. There were four wounds on the neck, by two of which the coats

^{*} Nizamut Adawlut Reports, N. W. P., 3rd May 1854, p. 468.

[†] *Ibid*, 28th Jan. 1853, p. 125. ‡ *Ibid*, 8th May 1854, p. 495. § *Ibid*, 30th Oct. 1852, p. 1260. ∥ *Ibid*, 12th Jan. 1853, p. 46.

of the vessels were exposed. The native doctor, who examined the body, thought it probable that these injuries must have been inflicted with some partly pointed instrument, such as a tent peg. The poor child lingered some days, and was said to have stated that the boy and a man were his assailants.*

These cases also occur in Bengal. In 1849, two prisoners were sentenced to imprisonment for life, for having murdered a man in the Bhaugulpore District, by beating him on the head with a stone.†

In 1853, Omrao, of Sarun, killed his wife by pounding her about the head and face with a stone used for grinding curry, &c. It appeared that he had first cut her about the face, and that part of her under lip had been cut off. He was found to be insane.‡

I once examined the body of an unfortunate policeman, whose frontal bone was smashed through the sinuses in various directions, evidently by often repeated blows.

I met with a remarkable case of fracture of the skull about six years since. A Chittagong Kookie brought in the extremely putrid body of his murdered child, a girl five or six years old, whom some person had struck on the head with a club. The scalp had nearly lost all traces of texture, the broken skull moved in it like a smashed cocoanut in a bag. Upon removing the bones of the calvarium, which were broken to pieces and separated at the sutures, I found that, in several very large patches, they exhibited remarkable specimens of that form of nævus which is known as aneurism by anastomosis involving the bone. The parts were sent to the Medical College Museum. This disease had added much to the natural fragility of the

^{*} Nizamut Adawlut Reports, **N. W. P.**, 30th July 1852, p. 750. † Police Report for 1849, p. 17.

[†] Nizamut Adawlut Reports, 18th March 1855, p. 332.

bone; but, as the fatal blow must have been very severe, its existence could not have detracted from the assailant's guilt.

In 1855, a man was sentenced to death, at Hoshungabad, for the murder of a person whom he killed while sleeping, with a single stab on the crown of the head with a *kutar*, or dagger.*

A woman, of Azimgurh, confessed that she had murdered a child, her own nephew, with a packing needle† and a stone pestle. The native doctor deposed that there was a stab over the right eye-brow, which, in its downward passage, had pierced and thrust out the eye. Three of the left ribs had been fractured, and had wounded the spleen. He considered that the iron needle, about seven inches in length, used for sewing up the necks of canvas sacks, was probably the instrument with which the stab was inflicted, and that the stone pestle would have caused fracture of the ribs, if applied with force.‡

A very singular plea was lately raised by a prisoner at Cawnpore. A girl eight years old was missing, she had been last seen with one Mussamut Subjadee, her next-door neighbour. This woman admitted that the child had been with her that morning, but that she had brought her back, and left her at her own door. The child's nurse desired Subjadee to open her door. Upon her refusal, the nurse brought the Police, who found the door locked on the outside, the woman having gone to a neighbour's house. She was brought and the door was forced. Nothing was found in the first and second rooms; and, as they approached the third room, Subjadee blew out the chirag, and seized the clothes of the child's nurse. The lamp being re-lit, the body of the child was found in the third room, pressed down under a

^{*} Nizamut Adawlut Reports, N. W. P., 29th March 1855, p. 425.

^{† &}quot;If death be inflicted with a Packing Needle (misullah) it is wilful homicide,"—Sale's Mahommedan Law, p. 266.

[†] Nizamut Adawlut Reports, N. W. P., 9th Sept. 1853, p. 1145.

board or door, upon which earth had been heaped. marks of violence were, at first, discovered on the body with the exception of a slight abrasion on the temple. In a front kothree, forming part of the burota, near the entrance door, were found a silver balee (the child was found to have seven of these in one ear, and only six in the other) and several fragments of lac bracelet belonging to the prisoner (it is elsewhere said in the report, that those belonged to the child, but this appears to be an error,) which were considered to have been broken by the grasp of the child's hand. There were slight traces of what might have been a sprinkling of blood (although it was considered that very little could have flowed from the wound, and the earth was found trodden and trampled at that spot.) The Civil Surgeon found a small contused wound on the back of the head. It was hidden by the hair, and had bled so little that it was, at first, overlooked. Beneath this was a very extensive fracture of the skull, with effusion of blood or the brain, which, he considered, must have caused immediate death. He believed it to be the result of a heavy blow from some such instrument as a lattee. Certain leading portions of the evidence of the child's nurse were manifestly false. The prisoner declared that, on the day in question, several monkeys had seized and bitten the finger of a niece of one Saadut Khan, and that, when driven from that child, they had come to her house and attacked her, that the nurse of the deceased and another had got on the roof of the house and driven the monkeys inside the house "having the deceased with them, and that, probably, they may have killed the child while inside." She immediately locked her door and went away. "The monkeys killed the child," and the nurse, being afraid, hid the body in her, prisoner's, house, but she was not present at the time. A witness confirmed the statement that the child's nurse had awakened him by

calling out that the monkeys were attacking a child of Saadut Khan, and he got up and drove them away. After this he heard the prisoner call out that the monkeys were attacking her, but he appears to have retired to sleep again. This happened two gurrees before the child was sought for by her nurse. One of the Judges of the Superior Court observed that,—"monkeys attacking a child could never cause severe fracture of the skull, such as was here proved to have been the cause of death." It is not mentioned whether the opinion of the medical officer was consulted upon this point. The child's ornaments were not worth more than eight annas, but it was considered that the prisoner had murdered the child on account of a disagreement between her family and that of the nurse. Sentence—Imprisonment for Life.*

Allusion has already been made to the frequent perpetration of murder in India by Pressing or Trampling upon the Chest. The injuries are not, in themselves, of any peculiar surgical interest; but the opinion of the medical witness may be required as to whether they were merely received in a furious struggle, or were deliberately caused by compression of the chest by weights or bamboos.†

The reports contain many cases of this kind.

In 1842, Dr. Beatson, of Shahabad, reported his examination of the bodies of two individuals who had met with violent deaths at the same time:—"Ajrowal Doosaud was covered with bruises about the head and back of his neck, and all the bones of the chest were broken in by kicks or blows. Gopal Aheer was covered with bruises, and had the bones of his chest all broken in;—these men were killed in a most shameful manner, and by brutal violence."

^{*} Nizamut Adawlut Reports, N. W. P., 16th Sept. 1854, p. 364.

[†] It will be recollected that, in the barbarous infliction of *The Press*, it was considered an act of mercy to heap on suddenly sufficient weight to extinguish life, by crushing in the ribs.

A man of Pubnah had formed a connexion with the younger wife of his neighbour; and, wishing to compel the husband to give her up, applied to the talookdar. The husband was sent for, and ordered to sign an agreement to give up his wife. This he declined to do, and ran home. He was again taken, dragged before the talookdar, severely beaten and fined 50 rupees. He again escaped, was retaken, and was then subjected to such cruel treatment, that he expired almost immediately upon reaching home. His ribs were broken, and his private parts injured.*

It appeared, in a case tried at Rungpore, that a zumeendar's mahout, having began to fish in a ditch belonging to one Shebah, was opposed by the latter, and a quarrel ensued. Shebah, who was lame, was pushed down and, upon rising, struck the mahout with a stick, the other then wrested the stick out of his hand, struck him two or three blows with it and knocked him down. They then both went to the house of the zumeendar, to settle their dispute. The mahout, it was said, pushing Shebah as they went along. The medical officer considered that the violence stated by the witnesses was not sufficient to cause the injuries found on Shebah's body after death. It is not certainly known what followed until he was carried home almost dead by two of the accused. He expired that evening. Mr. Taylor found a contusion on the temple and cheek; the spleen ruptured, four ribs broken and great extravasation of blood. He considered that the injuries appeared to have been inflicted by continued pressure with a heavy weight, or by stamping on the body, or they might have been inflicted by the heel or palms of the hands, as there was no abrasion or contusion of the skin. The superior Court considered that the deceased was barbarously maltreated after he arrived at the zumeendar's house.+

^{*} Police Report, L. P., 1844, p. 31. † Nizamut Adawlut Reports, 8th Nov. 1853, p. 746.

Certain persons, also of Rungpore, having obtained a decree in the moonsiff's court against an old and sickly man, named Khurdee, went with the warrant to apprehend him. He escaped, on their approach, into a neighbour's house; two of the party were ordered to bring him out. After a short time, they came out supporting him by the arms, while his legs were dragged along. In this way he was brought speechless into the outer yard-(he had made no noise when in the hut)-where, on being let go, he rolled over, and blood was seen issuing from his mouth. He soon afterwards expired. The prisoners promising to give up the decree, and to pay rupees 10 for the funeral expenses, and to remove the attachment of the property, the wretched relatives concealed the murder, and the body was buried the same evening. But, these promises not being fulfilled, the deceased's son, six days afterwards, complained; when the body was dug up and examined. It was found that the third rib on either side was broken, the soft parts over the whole of the ribs were contused, the lungs were inflated and congested with blood, and a small quantity of blood was also extravasated into the cavity of the chest. The medical officer was of opinion that these injuries were, most probably, caused by heavy pressure, though it was possible, he believed, that they resulted from blows.*

A man, of Saharunpore, was sentenced by the Sessions Judge for having killed his wife, by striking her on the breast with a heavy stone. The case was thrown out on appeal.†

It is probable that the full truth is seldom revealed in most of these cases; still the following extract from the decision of a Judge of the Higher Court, in the case of a Hindu landlord

^{*} Nizamut Adawlut Reports, 17th Nov. 1854, p. 608. † Nizamut Adawlut Reports, N. W. P., 1st April 1854, p. 362.

who, upon addressing irritating and abusive language to certain defaulters among his Mussulmaun ryots, was set upon by them and killed on the spot, appears to show that such injury may be inflicted without premeditation: "It is clearly proved, in this instance, that the prisoner, Alee Mahomed, seized the deceased by the throat, threw him down, and held him by the throat with both his hands, while he pressed his chest with his knee and the other prisoners kicked and beat him. The injuries inflicted on the body were fracture of all the ribs on both sides, from the second downwards, and of the sternum, the heart and liver being ruptured by the points of the broken ribs. The throat showed that the deceased was also strangled by pressure of the fingers, and the marks of the nails were visible after death."*

It would certainly be worth while to inquire, whether the natives have not several modes of inflicting these frightful injuries.

In further illustration of the extreme violence employed in these murders, I shall cite the following details from reports by Dr. Denham, of Behar, (two cases), Mr. Mahaffy, of Chumparun, and Dr. Macnash, of East Burdwan.

- (1) "A severe punctured wound on the right side of the face; breaking one of the bones of the head" (temporal) "and the lower jaw. Severe bruises on the shoulders and head, five ribs on the right side broken and two on the left. The lungs on both sides greatly congested; a large quantity of blood extravasated within the chest." (February 26th, 1845.)
- (2) "A lacerated wound upon the forehead with a fracture of the skull, six ribs on the left side and five upon the right were broken, together with many contused wounds about the body, inflicted with some blunt instrument or instruments." The deceased was a stout muscular man, between 30 and 40 years old, (August, 1844.)
- (3.) "A wound on the right side of the chest, six inches long and half an inch deep. Another on the same side of the back about three

^{*} Nizamut Adawlut Reports, vol. ii, part 2 of 1852, p. 295.

inches long, besides a severe contusion at the lower part of the chest. The breast-bone and all the ribs on the right side of the chest, except the three inferior, were completely broken. One rib on the left side was also broken. A large quantity of blood was found in the cavity of the chest. The aorta being ruptured." (February 12, 1845.)

(4.) "The second, third and fourth ribs of the right side were fractured. The right side of the chest was nearly filled with blood. There was some effusion of blood on the brain. The injury to the chest must have been caused either by violent blows with some heavy instrument, or by some person trampling on the chest." (March, 1844.)

It will be noticed that the first and third of these cases occurred within a month, under the notice of the late Dr. Denham. The frequent repetition of such crimes would appear to depend upon some definite cause, the nature of which demands careful investigation.

The notes on the practice of Compressing the Chest with Bamboos, or with Heavy Weights, and of Trampling on the Body already given, at pp. 223-24 and 228, should be borne in mind in the investigation of injuries of this kind. It appears highly probable that,—in the case of the old man Khurdee, cited above, in which the third rib only on either side was broken, the victim remaining silent while the fatal injuries were being inflicted,—a lattee pressed across the chest was the means employed.

As the medical officer is frequently called upon to examine fractures many days after the alleged period of their infliction, and as the treatment of fracture of the long bones by many of the Bengalee doctors is often much above the level of the rest of their surgical practice, his utmost tact and caution will be called for in deciding the probable time at which the injury was received.

Where, as occasionally happens, it is observed that, in addition to other severe injuries, Both Legs have been broken,—as happened in the case of a man at Dacca who was stated to have been killed by two persons who caught him in an

attempt to ravish their sister;* and in that of a wretch, at Bhaugulpore, who attempted to steal Mangoes;† or in that of another unfortunate, at Azimgurh, who died in eighteen days after having had both his legs broken by club blows, dealt by thieves who came in the night to steal his Mangoes;†—it may fairly become a question, whether death has not been inflicted with evidences of premeditated cruelty.

In 1848, Dr. Archer, then of Nuddea, reported the case of a man who had suffered Dislocation of both Elbows with fracture of the bones, evidently caused by twisting the arms violently, and then beating them with a stick. The joints, Dr. Archer believed, must have been first dislocated, and the bones afterwards broken both above and below the elbow.

The manner in which, often, a crowd of Bengalees fall upon a victim of their displeasure, and beat and tear him to pieces, with sticks, fists, feet, hands and any weapon which may happen to have been brought or caught up, until the body lies in the midst of them, a mere bloody, featureless, disjointed, broken mass,-is scarcely characteristic of the reputed mildness of the national character. Two recent examples will suffice. In 1853, a Hindu, carrying on mahajunee business in East Burdwan, went to a village to collect some money. Here a crowd of persons, some of whom were his debtors, seized bamboos and a wooden mallet, and beat him to death. Both arms were broken. the left arm and the left leg were broken by the joints being twisted backwards, the end of the thigh bone protruded at the back of the last named joint, all the vessels of that part were torn, and death must have been caused by hæmorrhage. The nose was also beaten in.§

^{*} Nizamut Adawlut Reports, vol. iii. part 1, p. 210. † *Ibid*, vol. ii. part 2, p. 805.

Nizamut Adawlut Reports, N. W. P., 26th December 1854, p. 853.
§ Nizamut Adawlut Reports, 10th Dec. 1853, p. 873.

In 1854, a man, weak in his right foot and left hand, was attacked by a party, led by a person whose service he had lately quitted, and was beaten to death with clubs. In addition to the *mashed* condition of the left arm, already described at p. 232, the Civil Surgeon found that there were marks of very severe beating over the whole body, but more especially about both legs and the back. There were several incised and contused wounds on the front of both legs, and both bones of the right leg were broken to splinters and protruded externally.*

Cases of Gun-shot Wounds are not of very rare occurrence in our civil practice. Small shot is sometimes used, but probably not with homicidal intent. For purposes of attack, the Natives of Bengal generally load with slugs, or roughly cut lumps of lead of greater weight.

In one instance, a man was imprisoned for seven years, for killing another by firing at him a gun loaded with Seed, in which it appeared that a single shot had been mixed,†

One Nunhey, of Chunderee, (Saugor,) confessed that, believing that his brother-in-law had seduced his wife, while yet a virgin, he borrowed a matchlock and practised at a mark to secure a good aim. He approached the man as he lay sleeping on his *charpoy*, and, holding the weapon close to his victim's body, shot him through the heart with two *iron* balls, which were produced in Court.‡

In 1853, one Bhowanee, of Furruckabad, was sentenced to transportation for life for blowing up certain persons with gunpowder. It appeared that, the prisoner having been betrothed to a girl, the marriage was broken off, and she became engaged to another. Failing to get any redress, he purchased four pice worth,—a quarter seer (half a pound),—of

^{*} Nizamut Adawlut Reports, 5th Aug. 1854, p. 222.
† Nizamut Adawlut Reports, vol. v., p. 6.
† Nizamut Adawlut Reports, N. W. P., 31st Dec. 1852, p. 1567.

gunpowder and, entering the girl's house at night, threw it on the *choola* near which she and her mother were sitting. He, as well as they, was severely burned by the explosion. He recovered, but remained much marked with the powder. The two women were so much injured that the younger died five, and the elder fourteen days afterwards.*

Rupture of Internal Organs.—Apart from the various other internal injuries, resulting from mechanical violence, observed in all countries, the cases of Rupture of the Spleen and Liver, which so frequently occur in India, require distinct comment here. In a country where, owing to the almost universal prevalence of miasmatic poison, the Liver and Spleen of nearly every Native of the lower class may be considered liable to become the seat of chronic enlargement at any period of his life, and where also the practice of beating adults,—especially servants by their masters, and wives by their husbands, is everywhere prevalent,—it is only remarkable that cases of rupture of these viscera are not of almost daily occurrence. A very considerable number of instances of the kind do, from time to time, come under judicial investigation here.

The nine years' Medical Reports to the Nizamut contain four cases, in which the Liver had suffered rupture. It is worthy of remark that three of these occurred under the notice of Dr. Davies, of Patna. In two of the cases there were also other traces of severe ill-usage,† in a third, the injury had been caused by the fracture of a rib. Dr. Davies remarked that, in these cases, the injury is sometimes done by a kick or blow; and often, he had reason to think, by forcing the knee or foot into the right side.

^{*} Nizamut Adawlut Reports, N. W. P., 13th April 1853, p. 554.

[†] See also a case in which a healthy Liver was ruptured by severe blows with a heavy bamboo.*

^{*} Nizamut Adawlut Reports, N. W. P., 12th Jan, 1853, p. 40.

In all cases where the Liver becomes so much enlarged as to descend below the ribs, the fragility of its structures is much increased.

Wounds of the Liver are by no means necessarily mortal. Mr. Guthrie mentions that he had known three persons who had been wounded [by gun-shot] through the Liver, and who suffered little subsequent inconvenience.*

Dr. John Macpherson, now of Calcutta, removed a large piece of the Liver of a Hindu who had been wounded by a spear.†

Dr. Taylor considers that wounds of the Liver do not prove very rapidly fatal unless some of the larger trunks are involved. The organ may certainly be torn to a frightful extent without an immediately fatal result ensuing.

^{*} Commentaries, p. 557. See also Cooper's Lectures, p. 224, (Stabs)—A case of arrow wound of the Liver recovered from, by Dr. Goodeve.—Trans. Med. and Phys. Society, vol. v. 1, p. 482.

[†] This case is quoted in the London Med. Gazette for January 1846.

t The following case, not hitherto reported, occurred within my own observation. A stout Brewer's Drayman, about 25 years of age, was brought, on a stretcher, to the Surgery of Guy's Hospital, in the summer of 1840, at between 10 and 11 o'clock in the evening. He was found lying in the road, and his horses had taken the dray home without him. His condition was examined by Dr. - Wilson and my friend Mr. Walter Chapman, of Tooting, (whose notes of the case, with my own, are now before me)-both very careful and accurate observers. There was no mark or evidence of injury; he "was very violent; he swore and endeavoured to strike the bystanders." My notes say that "he walked and moved with the greatest freedom." He was, therefore, considered to be merely intoxicated, and was made over to the police, who took him to the station house. About 6 o'clock the next morning, he was found seated in the water-closet looking very faint and pale; the Surgeon to the station was sent for, but the man was dead before he arrived. A large quantity of blood was found in the peritoneal cavity. The Liver was almost cloven in two by a vertical fissure, seven or eight inches long and, in some places, nearly three in depth,-which had almost separated its two principal lobes. The edges of this fissure were jagged and irregular, but appeared to have been completely coated with a thick layer

Ruptures of the Liver may heal, at least partially.* In the majority of cases, however, death ensues rapidly where the Liver is ruptured by blows.

Extensive rupture of the Kidney is almost inevitably fatal by hæmorrhage, but life is generally protracted for some hours at least, the effusion being sub-peritoneal. In a man æt. 27, who had fallen on a cask, when intoxicated, and who was under treatment in Guy's Hospital for 27 hours, I saw that the left Kidney was completely divided transversely into halves, as if cut in two by a blunt knife.†

Cases of Rupture of the Spleen are certainly of very far more frequent occurrence, but the nine years' Reports contain only seven instances. In four of these there were discovered other evidences of severe maltreatment. In two, there were traces of injury to the brain; in two others the Spleen had been pierced by the ends of fractured ribs. In the remaining three instances, the organ appeared to have been ruptured without very extraordinary violence, when in an enlarged and softened condition. I have met with only two instances in my own Indian practice, both occurring in females struck by their husbands, in which rupture of an enlarged Spleen was the only severe injury discoverable. I find sixteen other cases in which the rupture of diseased Spleens occurred in India, resulting from blows and falls; and many others might, doubt-

of intimately adherent dense coagulum, considerably firmer than the crassamentum of an ordinary clot. Outwardly, the surfaces of this coagulum were not at all irregular, but were smoothly moulded by the pressure of the diaphragm and other surrounding parts. There was no external trace of injury. It was thought probable that he fell from the shaft of his dray and that the wheel had passed over his body.—See somewhat similar cases, Med. Chir. Review for 1831, and Lancet for Dec. 11, 1847.

^{*} Case by Dr. Chisholm, Edinburgh Med. and Surg. Journal, vol. vii. See also Med. Chir. Review, July 1837, p. 270.

[†] See a case, Med. Chir. Review, July 1837, p. 270, in which rupture of the Kidney proved fatal after ten days.

less, be collected. Mr. Heddle, who reported four of these cases,* remarked that—"In all, the subjects had resided in situations which were remarkably unhealthy; in all, the individuals had been subject to intermittent fevers, either at the time of, or shortly previous to their decease; and, in all, that fatal event occurred between the months of August and November, that is, at the termination of the monsoon, the season during which the Native inhabitants of Bombay suffer most severely from fever. The very slight degree of violence which proved sufficient, in all these cases, to produce the serious lesion of the Spleen, cannot fail to be remarked; and this fact will explain instances, of not unfrequent occurrence in this country, wherein death, by misadventure, has followed a trifling blow, either accidentally or intentionally inflicted on the abdomen."

Stick and fist blows seldom, if ever, cause rupture of a healthy Spleen, but the injury may be occasioned by a kick. A case of the kind occurred at sea, in my father's practice. In the case of a bunniah killed by Mahomedan Punjabees in Delhi, the Sub-Assistant Surgeon who examined the body said that some very hard blows indeed must have been inflicted to rupture the deceased's Spleen which, though larger than usual, showed no trace of recent disease.†

Mr. Hutchinson has reported the case of an apparently healthy Native, about twenty-five years of age, who died almost immediately after receiving a blow on the left hypochondrium, with a small piece of brick-bat: "The Spleen could scarcely be said to be enlarged." A few months since, I examined the body of a married girl of twelve, who had died from rupture of this organ. Her husband had struck her on the side with a very slight bamboo bow used in beating out the seeds of cotton. The Spleen was enlarged.

^{*} Transactions of the Medical and Physical Society of Bombay, vol i., p. 304.
† Nizamut Adawlut Reports, N. W. P., 17th Jan. 1852, p. 42.

In giving an opinion of the degree of violence required to produce rupture of the Spleen and—Liver, it is important to bear in mind, that cases of Spontaneous Rupture of the Spleen, in intermittent fever, (probably always during the cold stage,) are upon record.* Dr. Taylor cites cases of Rupture of the Liver caused by the muscular effort employed in avoiding a fall from horse-back, and by the shock of falling on the feet from a considerable height.†

In the investigation of cases of this kind, it will generally be inquired of the Surgeon—How long can a person live after his Spleen has been ruptured? The reply must be—that the period of survival will probably vary much according to the circumstances of each case,—the position and extent of the rupture, the healthy or diseased, the indurated or softened condition of the organ. It would appear that, apart from mere vascular fulness, enlargement of the Spleen, from organic change in its tissues, generally tends to retard hæmorrhage from its ruptured surfaces. Death may result from rupture of the Spleen at any period, from a few minutes to several days. For example,—Professor T. W. Wilson has favored me with his report of the case of Kanla Dome, who received several blows in a scuffle with a Burkundauz. "He died im-

^{*} See cases of a Corporal of Artillery and of a Sepoy, by Messrs. Leckie and Greig, as quoted by Dr. Webb,—Pathologica Indica, p. 144. Also American Journal of Medical Science, for April 1845, p. 524, and for October 1842, p. 369; and Lond. Med. Gazette, vol. xxxv. p. 512.

[&]quot;Occasionally, though seldom, enlargement of the Spleen proves fatal by rupture, in which case death takes place suddenly, either at the commencement of the cold fit of ague, or by even the slightest exertion of the invalid walking, it may be from his own charpoy to that of his comrade." Dr. C. Finch, in Trans. of the M. and P. S. of Calcutta, vol. ix. p. 1, page 29.

Dr. T. W. Wilson suggests, with great reason, the probability that, however softened and congested it may be, the Spleen never ruptures spontaneously except under the action of muscular pressure—while the patient is turning or moving suddenly.

[†] Cruveilhier speaks of rupture of enlarged Livers and Spleens, in children, resulting from palpation, in the course of a medical examination.

mediately." There were no external marks of injury. An immense quantity of blood was found effused into the cavity of the peritoneum. The Spleen was ruptured in two places on its inner, or concave, surface, one rupture was about two inches long, the other about an inch. There were coagula in both splits. The Spleen weighed 121 ounces, and was so friable as to yield easily to the finger, and not to bear handling without falling to pieces. The man was in good condition, and had not previously been ill. Dr. Wilson adds, however, that he was a drunkard, -and that this is a cause of softening of the Spleen. We may contrast this case with that recorded by Dr. Chisholm,* of an artilleryman who, in descending a declivity, fell on a large stone. He suffered so little inconvenience at the time, that he was able to work at the forge that evening, and on the following morning. He was then attacked with symptoms which were altogether of a febrile and acutely inflammatory character. He died nearly five days after the fall. Upon the posterior convex side of the Spleen, there was a rupture through the whole of its substance, at least two inches in length. The edges had a florid appearance in some places, in others something like sphacelus could be perceived. The Spleen itself was of very considerable size; but, in other respects, had no appearance of disease. No mention is made of blood effused into the abdominal cavity. "For a year before, he had been frequently harassed with dangerous attacks of Remittent Fever."

Cases present themselves, from time to time, in which persons in whom rupture of the Spleen or Liver is supposed to have occured recover,—often with recurring attacks of peritoneal inflammation.† Mr. Marcus G. Hill has lately men-

^{*} Edinburgh Medical and Surgical Journal, vol. vii.

[†] Mr. Bennett, of Hailsham, Lancet, 22nd March 1845, and Mr. H. Jackson, of Sheffield, Prov. Med. and Sur. Journal, 10th Dec. 1845, also Guthrie's Commentaries, p. 562.

tioned to me a case, which occurred some time since at St. George's Hospital, in which Mr. B. Hawkins had reason to believe, that a person who had been run over recovered from a rupture of the Spleen. This, however, was not proved to have been the case. The strongest evidence which I can discover of the possibility of recovery from wounds of the Spleen is that given by Mr. Guthrie, who states that he has "seen accidentally, after death, cicatrices in the Spleen corresponding to external marks, indicative of a former wound."*

This, however, cannot be taken as proof that ruptures of the Spleen are otherwise than inevitably mortal.†

* Commentaries in Surgery, p. 561.

† Note.—As these pages may come under the notice of a large proportion of the medical men practising in India, the following practical hint may not be altogether out of place.

Death from rupture of the Spleen is so common an occurrence in this country, (few Civil Surgeons of fourteen years' experience in Bengal, having met with fewer than from eight to twelve cases,) that,—in the absence of any certain facts whatever tending to show that a rupture through the capsule of the Spleen can be recovered from,—it appears right to submit to the judgment of the profession any course of treatment which may appear to afford a chance of life in such cases. Instances are on record, in which considerable portions of the Spleen, protruding through wounds, have been successfully removed. See Fergusson Phil. Trans., vol. xi, 1737-38, p. 425, (three ounces and a half of protruded Spleen ligatured and cut off,) and McDonnel, in Webb's Pathologia Indica, p. 144,—in which a large portion of the Spleen of a native was excised.

There is also on record the case, considered to be authentic by Guthrie and South, in which the Spleen of a man, wounded at Dettingen, was found protruding and covered with dirt,—it was cut off and the patient recovered. See also a second case, J. and C. Bell's Anat. and Phys., 4th Ed. p. 352; and a third by Morgagni, from Fontanus, in which the woman survived five years.

It was clearly proved, by the experiments of Heister and Vallisnieri, that removal of the Spleen in the lower animals, dogs, &c., has been recovered from without evidence of any serious derangement of the vital functions. In any other than a set of cases which are, under other treatment, necessarily and invariably mortal, so severe a course as that about to be advocated would scarcely be sanctioned by the above data; but, here, I consider that the facts adduced justify me in recommending that, in any case where a person having been struck in the situation of the left floating ribs, is found by the Surgeon to

One of those cases of death occurring suddenly from a Blow on the abdomen, from Concussion of the Solar Plexus, independently of discoverable injury to any organ, came under my notice about four years since. It was stated that the deceased had been struck with a thick pole on the right loin, and had expired almost instantaneously. No trace of injury or of grave disease could be discovered on the most careful examination. I, therefore, reported that, as blows inflicted upon the front of the abdomen had been known, in several instances, to cause death by a shock to the nervous system, it was probable that, in this case, like force

be evidently dying from hæmorrhage, an incision should at once be made, a hand introduced into the abdominal cavity, and the Spleen extracted and removed, after deligation of its vessels.

The chief objection to this plan is that heavy blows on the abdomen generally occasion severe collapse, and that, in an anemiated person with diseased Spleen, such collapse could not, at once, be distinguished from that attending hæmorrhage from a ruptured internal organ.

Here it must be remembered, that the symptoms resulting from concussion of the solar plexus (where the injury is not followed by almost instant death) are transient, while those of hæmorrhage into the abdominal cavity rapidly increase in intensity. Still I would not advise any Surgeon to remove the Spleen in a case where he was not confident that the patient was dying from internal hæmorrhage. This could be the only source of very serious fallacy. It might be difficult at once to distinguish a case of severe rupture of the Left Kidney (in which, as is often the case, the evidence of bloody urine was not procurable) from laceration of the Spleen; here, however, the first incision would reveal the presence of a large quantity of blood behind the peritoneum; and the operation, carried only thus far, could scarcely hasten the inevitably fatal issue of the case. Dr. Kinloch Kirk has described cases in which the Left Lobe of the Liver, becoming enlarged, is felt in the usual position of an hypertrophied Spleen. In the possible event of such an organ becoming ruptured, an error in diagnosis would merely lead to unnecessary interference in a case of mortal injury.

The incision should extend just below the last floating rib, from the anterior edge of the quadratus lumborum muscle to rather more than an inch beyond the point of the cartilage of the rib.

After a few experiments upon the dead body, the removal of even an enlarged Spleen through such an opening, will be found to be a matter of little difficulty.

applied to the side of the belly had acted in a similar manner.

In 1849, a case occurred, at Monghir, in which a boy was said to have been killed by two kicks. The medical officer found that the right lung had been diseased for some time. He could discover no sign of violence, and stated that, in his opinion, fever was the cause of death. The Magistrate asked if a kick on the stomach would cause death. He replied that the organs of the abdomen were healthy, but that, if the boy was kicked severely on the stomach, it might cause instantaneous death. The Magistrate, therefore, inferred, that the second kick said to have been given by the prisoner to the deceased fell on the stomach and caused death, he therefore committed the prisoner, to which course the Superintendent of Police seems to have objected.*

The following case of death after a severe blow on the body unattended with any discoverable organic lesion, has great medico-legal importance. Two men of Sewan (Sarun) went to the house of one Lowtoo, to press him as a "begar." He was preparing to smoke, and his daughter, a child of eight, stood close by him, holding his hookah. He said he would go when he had smoked. One of the men then seized him and beat him with an iron-bound lattee, and the other gave him "a violent dig in the ribs" with a long heavy lattee, the blow knocked him down over his child, whose neck is said to have been twisted, and who remained insensible, from that time till nearly the fol-

^{*} Police Report, L. P., 1849, p. 15. In the following case, death very probably resulted from this cause, but the fact was not discovered by dissection. A man being angry with his mistress, the widow of his brother, for speaking to a person of whom he was jealous, struck her two slaps and kicked her violently "under the breast,"—she died immediately.*

^{*} Nizamut Adawlut Reports, N. W. P., 3rd Nov. 1854. p. 532.

lowing morning, when she expired. The above circumstances appear to have been clearly proved, not only by the evidence of five eye-witnesses, but by the account given by the prisoners themselves. Lowtoo was carried inside, and afterwards went, with the support of two persons, to the ticcadar of the village to complain. Returning home, he was ill all night, vomiting violently after drinking water. He expired next day at noon. On the following day, Dr. Fleming found the bodies swollen, from the heat of the weather. He found no marks of injury whatever. The healthy state of the viscera led him to suppose that death might have been caused by some narcotic poison, but he allows that the contents of the stomach might present the same appearance, though no poison had been administered.*

Ruptures and Wounds of the Heart.—It is well known to Medical men that compression of the chest, and blows and falls not unfrequently determine rupture of some portion of the Heart or Thoracic Blood-Vessels—when those organs are in a perfectly healthy condition; and that,—when their tissues have undergone fatty or earthy degeneration, or have become aneurismal,—very slight local injuries, the muscular exertion which attends a struggle, mental emotion, sexual excitement, or sudden exposure to vicissitudes of heat or cold, are liable to occasion lesions resulting in sudden death. This is nearly equally the case in Europe and in India.

Professor T. W. Wilson has favored me with the details of the following most important case of Rupture of the Heart occurring in a scuffle, but evidently from natural causes.

^{*} The last sentence is scarcely intelligible, probably owing to a misprint; but it appears to show that no internal organ was ruptured.—Nizamut Adawlut Reports, 4th Nov. 1854, p. 542.

A Hindu, of Rampore Bauliah, aged 35, an habitual drunkard, feasted with thirty others during the night of the 23rd July 1850, celebrating the Kalee Poojah and drinking freely. After this, he and five others went to drink again, at 10 A. M. A quarrel and scuffle ensued; he fell, and it was supposed that he received a blow. He never spoke again. There was the trace of a bruise on the head, but no other outward mark of injury. A bloody fluid was issuing from the nose, and there was a strong odour of spirits. The brain was in a high state of congestion, but there was no effusion of blood. The lungs were also much congested; and, in the lower lobe of the left, the vessels had given way, forming a sanguineous apoplexy. The pericardium was found distended with from a pound to a pound and a half of fluid blood. This had escaped through a rupture in the right ventricle, close below the semilunar valves. The Heart was natural in size, but the right ventricle was thin and its muscular tissue soft; there was one tear with a small band joining; below this, were two ragged cracks, like chaps, of no great depth. Dr. Wilson justly argued that this was the natural result,—the vascular system being over distended, the lungs becoming engorged during the heat of a breathless struggle, and the structures of the Heart being preternaturally weak.

In cases of this kind, it is of importance to determine whether the muscular tissue of the Heart has become wasted, or has undergone fatty degeneration, since it has been found that direct violence may cause rupture of a healthy Heart.*

^{*} As in a case reported in the *Medical Gazette* a few years since, in which the stroke of a musket ball, probably glancing sideways, ruptured the right ventricle without tearing the pericardium. Similar lesion has also occurred as the result of falls, and of great mechanical violence, where the structure of the heart has been healthy, and no external trace of injury has been perceptible.—As in the cases reported by Mr. Prescott Hewett, in the 1st vol. of the Transactions of the Pathological Society of London, p. 81.

Mr. Prescott Hewett has described a case in which the septum ventriculorum cordis was found ruptured in a boy aged five, over whose chest a heavy cart wheel had passed.* The following somewhat similar case, by Mr. H. J. Carter, of Bombay, deserves notice.

A Parsee, aged about 40 years, temperate and healthy, robust and well formed, was knocked down by the shaft of a four-wheeled vehicle and survived the accident about eight and forty hours. There were several outward bruises and excoriations. None of the bones of the chest were fractured, the lungs were much engorged. The cavities of the Heart were empty. There was an aperture, large enough to receive a small walnut (about three quarters of an inch in diameter), close to the apex of the interventricular partition. Its circumference was soft, shreddy, whitish, and lymphy,—in fact, it was evidently a tear; it formed a direct communication between the ventricles, was of recent occurrence, and, in all probability, had been occasioned by a fall, or by force communicated from without.†

Mr. Carter adds the following note by M. Ollivier—That the seat of rupture of the Heart from external violence is more frequently in the right than in the left cavities, the reverse of this takes place when the rupture occurs from other causes. Out of 11 cases occurring from external violence, the right cavities were torn in 8, and the left in 3; and, in six of these cases, the auricles were ruptured.

Although it was long believed that cardiac affections were among the rarest diseases of India, it is was now well known that they are of by no means unfrequent occurrence here; and subsequent observation has confirmed a statement which I made some years since, to the effect that the habits of Europeans in this country greatly dispose

^{*} Op. Citat.

[†] Trans. of the Bombay Medical and Physical Society for 1845-46, p. 97.

them to suffer from fatty degeneration of the cardiac muscular tissue.* In a valuable memoir recently published, Mr. C. N. Macnamara mentions that, out of 24 men of the 1st European Bengal Fusiliers, who died at Dinapore, between February and September 1855, 3 died from rupture of the great vessels near the Heart, the consequence of fatty degeneration.† In one, the descending cava had given way at its junction with the auricle. In the other two cases, the aorta had given way, in one case within, and in the other just without the pericardium.

It was formerly believed, and may still be the popular opinion, that all wounds of the Heart produce almost instantaneous death.‡ It is now, however, well known by medical men, that the structures of the Heart often sustain severe mechanical injuries, which, by certain adaptations of the parts, are prevented from being fatal, often for hours and days, and sometimes even for weeks.§

Life appears generally to be more or less protracted in cases of injury to the Heart under the following circumstances:—When the injury does not extend beyond the muscular walls; when the wound penetrates the muscular coat obliquely; where it is a mere puncture, or is in the direction of the stronger muscular fibres; or where it is ragged and lacerated, as in the case of gun-shot; where the large blood vessels and the proper arteries and veins of the Heart remain intact; where the instrument remains fixed in the wound.

^{*} Practical Treatise on the Management of Diseases of the Heart, &c., in India, 1851, p. 77.

[†] Indian Annals of Medical Science, Oct. 1855, p. 182. ‡ Taylor, pp. 307, 325.

[§] From a series of cases collected by M. M. Ollivier and Sanson, cited by Dr. Taylor, it would appear that, out of twenty-nine instances of penetrating wounds of the Heart, only two proved fatal within forty-eight hours. In the others, death took place at the varying periods of from four to twenty-

The most remarkable case of survival after injury to the Heart or its great vessels on record, is probably one narrated by Mr William White, of Rangoon. A soldier was wounded in the storming of the Great Pagoda, on the 14th April 1852. The ball entered a little above the anterior fold of the left axilla, taking an oblique direction to the cavity of the chest. At first he appeared to be doing well, and the wound closed. Subsequently, his health declined with feverish symptoms and evidences of pulmonary disease. A few days before his death, it was noticed that "the action of the heart was weak, but natural, its systole and diastole regular and equal." He died worn out and emaciated on the 24th of June.* The ball appeared to have entered the chest between the third and fourth ribs, passing downwards to the left side. There was a circumscribed empyema, the cavity of which extended from the first to the seventh rib, and contained a pint of pus. A small portion of the cloth of the jacket was lying loose at the orifice of a canal situated about the middle of the lung on its convex aspect -this canal, passing forwards and inwards, stopped short close to the union of the pulmonary veins, where all further traces of the passage of the ball were lost. On raising the

eight days after the receipt of the wound. I cannot but believe that these statistics, although, of course, literally true, are altogether deceptive,—i. e. if they are intended to show that, out of twenty-nine persons receiving wounds of the Heart, there is any probability whatever that twenty-seven would survive at least forty-eight hours. The probability rather is that not more than two out of the twenty-nine would survive forty-eight minutes. There can scarcely be a doubt that most of the cases collected by these authors were obtained from books, where they were published as rare instances of injury to the Heart:—the rarity of such cases mainly depending upon the period of survival. No medical man would be likely to consider an ordinary case of wound of the Heart—i. e.,—one in which the wound was simple, and death almost instantaneous,—as worthy of record.

^{*} It appears, in the printed report, that death took place on the 24th of January, but this is evidently a typographical error.

Heart, however, a hard and firmly-impacted substance was felt at its apex; this, on examination, proved to be the ball, in the left ventricle, at its most inferior part, crossed and re-crossed by the cordæ tendineæ and carneæ columnæ which firmly secured it in its position. The Heart was perfect in every part. Mr. White considered that the only conclusion which could be arrived at was, that the ball must have perforated a pulmonary vein, and thus passed into the left auricle, and ultimately into the ventricle. This explanation, however, admits of doubt.*

In cases where the internal viscera are found extensively ruptured, any allusion to the absence of external bruises is generally met by the question:—"Is it possible, that a blow or kick might be inflicted on the abdomen sufficiently severe to rupture one of the viscera or a blood-vessel, and yet no external mark be left?" The answer must be in the affirmative. I have met with more than one instance in which the passage of a wheel over the Belly, causing rupture of the Liver, Kidneys, or Bladder, has not left the faintest discoverable trace externally. Nearly all writers on wounds have recognised this fact. Morgagni illustrated it by the case of an ecclesiastic, whose skull was fractured by a blow which failed to rend his silken cap.

^{*} Fournier gives the case of a Soldier who survived a gun-shot wound of the chest six years, and died from another cause. The ball was found lodged in the right ventricle of the Heart near its apex, enfolded in a great measure in the pericardium, and resting on the septum medium. (Cas Rare; in Dict. des Sciences Médicales, as quoted by South.)

Dr. Carnochan, of New York, has recently published the case of a man who lived twelve days after having been wounded in the chest by a Colt's revolver bullet. There was pericarditis—A bullet, one inch in circumference, was found enveloped in a delicate cyst, and embedded to the depth of a quarter of an inch in the muscular tissue of the Septum of the Ventricles, "The wound had entirely cicatrized" [?] "there was no outward visible sign of its presence" (Amer. Med. Monthly, April 1855; and Ed. Med. Journal for October of that year.) With Dr. White's case, the series is rendered complete by an instance noticed by Plouquet, in which a bullet remained lodged in the right ventricle for years (South.)

Injuries to the Abdominal Viscera are doubtless occasionally inflicted by Bansdollah and similar modes of compression. In 1847, Dr. Irvine, of Patna, reported the case of a Native Policeman whose death was evidently occasioned by pressure upon the Liver and Spleen, the convex surface of the former being inflamed, and there being a round gangrenous depression on the right edge of the Spleen. There had been hæmatemesis previous to death. Dr. Irvine considered that these injuries arose from the waist being very tightly bound with some pliable substance.

MUTILATION.

In common with most other barbarians, the Hindu and Mussulmaun rulers of India seem to have considered the summary Mutilation of a criminal a surer and more economical mode of punishment than the infliction of imprisonment at the expense of the state. This practice appears to have been quite as prevalent in Bengal under Seraj-oodowla and his predecessors as it was, a few years since, in Lahore, under Runjeet Singh.* Ward, the missionary, states that he had been informed that, before the English criminal law was executed at Calcutta, the most bloody scenes were frequently witnessed. "Criminals were brought to the river side, where, with blunt instruments, they cut off the hands of some, the feet of others, and other members of others, and then turned them adrift. Some of these poor wretches fell down on the spot, and lay there until they died; and others, unable to bear the exquisite torture arising from the mangling and amputating of their limbs, plunged into the river, and found a watery grave."

^{*} According to Sale, the penalty to be adjudged, under the Mahomedan Law, on conviction of the crime of theft was, for the first offence, amputation of the right hand, and for the second, amputation of the left foot. Also an ancient Danish custom—as will be shown hereafter. Retaliation for offences against the person, not affecting life, was restricted to wounding

A remarkable case of mutilation occurred at Muthra, in 1853. Lall Doss was tried for the murder of Luchee by attacking him with a sword, cutting off his Hand, which he carried off, and inflicting other wounds. Mohun, uncle of the deceased, mentioned, in the course of his evidence on the trial, that twenty-five years ago, this prisoner also wounded him, (the deponent,) and cut off his Hand. The prisoner since wounding him, had turned byragee, and wandered about but spoke rationally. The prisoner said that "he cut off the hand of Luchee, because the brother of Luchee had stolen his book!" "There was not," the Judge held, "the slightest reason to believe that there was any foundation for this story. It seemed to be a pure hallucination of the prisoner who, under this impression, inflicted on the supposed offender

and maiming in the following instances. 1. For any member of the body severed at the joint; as a hand, arm, foot, or leg. Also for the fingers, and toes, or part of them, if separated at the joint. 2. For an ear, or part of an ear cut off. 3. For the nose, if completely cut away. 4. For the lips, or either of them. 5. For the teeth, or any number of them. For an injury to the eye destroying the sight, without forcing the eye from the socket. The retaliation, in this last case, was to be inflicted by holding a hot iron before the corresponding eye of the offender, till sight became extinguished.

Mutilation also had a prominent place among the penalties enjoined by the ancient Hindu law. "With whatever limb," says Menu, "a thief commits the offence, by any means in this world, as if he break a wall with his hand or foot, even that limb shall the king amputate, for the prevention of similar crime."*

Again, "Of robbers, who break a wall or partition, and commit theft in the night, let the prince order the hands to be lopped off, and themselves to be fixed to a sharp stake." "Two fingers of a cut-purse, the thumb and the index, let him cause to be amputated on his first conviction; on the second, one hand and one foot; on the third, he shall suffer death."†

For stealing more than 50 panas, a hand shall be amputated, S. 324.

For taking things belonging to priests, &c., the offender shall instantly lose half of one foot—325.

^{*} Chap. viii., S. 334.

the ancient native punishment for theft, viz., cutting off his Hand.*

A prisoner was convicted of cutting off his wife's Hand; but no punishment was awarded,—in consequence of the prayer of the injured party that her husband should be released.†

I had, a few years ago, a slave girl of Chittagong under treatment, who, among other frightful injuries,—inflicted upon her person with a dhao by her master's brother who had intrigued with her and had become jealous,—had one hand cut off through the carpal bones, evidently at a single blow. The surface granulated and healed rapidly. It had fortunately happened that she had received aid, at the time, from a retired native doctor.

A man severely wounded five persons with a sword and spear. Two other persons were tried for deliberately cutting off the Hands of this prisoner; but they were released and rewarded, as it was shown that they did so with a view to his apprehension and in self-defence.‡

Mutilation by cutting off the Nose and the Right Hand is still one of the punishments for intrigue practised by the Hindus of Bengal and the N. W. Provinces, So lately as 1850, a man of Baraset, near Calcutta, being jealous of his wife, deliberately cut of her Nose, Lips and Right Hand.

It was reported in a trial at Nursingpore, in 1852, that one Lutkun was disfigured by the loss of his Nose, an act of

^{*} Nizamut Adawlut Reports, N. W. P., 30th May 1853, p. 712. By the English Law "No criminal is to suffer the punishment of mutilation. If a prisoner is sentenced, in conformity with the futwa of the Law Officer, to lose two limbs, instead of being made to undergo such punishment, he is to be imprisoned and kept to hard labour for fourteen years; and, if any prisoner is sentenced to lose one limb, he is, in lieu of such punishment, to be imprisoned and kept in hard labour for seven years." Beaufort, 857.

[†] Nizamut Adawlut Reports, vol, i., p. 344. ‡ *Ibid*, vol. i., p. 310.

[§] Police Report, L. P., 1850.

retaliatory revenge executed by the relatives of a brahminee, whom he seduced. They had also maimed his Right Arm, in an attempt to cut it off.*

A reference to the early pages of Indian history will show that the Tyrants of the East generally put out the Eyes of their brethren, as a safe mode of setting at rest all disputes regarding their succession.

We find, in Macnaghten's Reports, the trial of a man who, having tied the hands and feet of his wife, threw her down, sat upon her breast, and put out her Eyes with a heated iron!

In 1853, certain persons were convicted of having assaulted one Phool Mahomed who, besides other injuries, had a Peg driven into his Eyes, in consequence of which total blindness resulted.

In 1852, one Bahwaneedur, of Allahabad, having some time previously put his wife away, on suspicion of misconduct, and having located her in a hut close by his own, since which time there had been constant quarrelling between them,—murdered her. She was found strangled in the hut. Her left Eye had been wounded by some sharp instrument, and the Surgeon considered that there must have been a great deal of violence exerted in the destruction of its textures, as if there had been an intent to extract

Menu says—" Of a man who through violence forcibly contaminates a damsel, let the king instantly order Two Fingers to be amputated, and order him to pay a fine of 600 panas.*

† Vol. ii., p. 427. A person being jealous of another, had him seized, cut off his Nose and Chin, put out his Eyes with the hooked point of a dhao, and then beat him to death.—Police Report, L. Provinces 1838, p. 71.

^{*} Nizamut Adawlut Reports, N. W. P., 19th March 1852, p. 202. Such, judging by the words of an ancient Danish ballad, were formerly the punishments of Seduction and Adultery in the north of Europe.

[&]quot;They tore away his Eyes so bright,"—

* * * * *

His Left Foot then and his good Right Hand,
They hewed them off at the king's command."

^{*} Chap. viii., p. 367.

it forcibly. The other eye was also punctured. There were the appearances which would result from suffocation. The deceased seemed to have had a great struggle for life, as shown by bruises on the back.*

These atrocious barbarities are also inflicted even upon the Children of the intriguer. At about the same time, a young boy of Bundelkund was found lying dead in a field. The medical officer stated that the skin of the neck was abraded as if by a rope passed twice round it—the Eyes were punctured with some sharp-pointed instrument, and the point of the Nose was cut off. The person tried for the murder said that one Choonta, who had taken away the child's uncle's wife, offered him seven rupees to kill the child, as the child's father was at enmity with him. The boy's father confirmed this latter statement.

It is necessary to observe some caution in giving an opinion upon the condition of the Eyes of persons, whose bodies have been for some time exposed in the fields,—as these parts are generally attacked by birds of prey.

It is a common practice, both in Bengal and in the North-West, to cut off the Ears of Intriguers.

Allusion has been already made to the case of a female who, in addition to various bruises and other injuries, had lost one Ear and a portion of the other; and also to another instance [at p. 287] described by Dr. Wilkie, who found a woman's throat cut, her breasts gashed, and both her Ears cut off. See also p. 276—case of Harkoa.

In February 1854, a man was convicted at Sylhet, upon his own confession, of knocking another down with a heavy club, and then cutting off his Ear. He pleaded that the complainant had enticed away his sister-in-law.‡

Nizamut Adawlut Reports, N. W. P., 17th April 1852, p. 326.
 † Ibid, 23rd Jan. 1852, p. 61.

[‡] Nizamut Adawlut Reports for February 1854, p. 192.

Two men were convicted, at Tipperah, of cutting off the Ear and knocking out the front teeth of a person suspected of having carried on an intrigue with the wife of one of them.*

This is also, not unfrequently, the punishment of Trespassers and Thieves.

The Nawab Meer Jaffir Ally is said to have been betrayed by one whom he had, in his prosperity, cruelly treated, by causing his Ears to be cut off.

A prisoner having cut off the Ear of a man, who had burglariously entered his house during the night, was acquitted,—as no guilt was considered to attach to the act.†

Two very young lads, of Agra, were found guilty of having deliberately cut off the Ear of a neighbour, who would not allow their cattle to remain in his field. An altercation ensued, when they got the man down, one of them assisted in holding him, while the other cut off his Ear with a khoorpa, or spade.‡

A chowkedar was charged by an individual with stealing from his house a sum of money, &c. While the thief was making his escape, a female inmate of the house, cut off one of his Ears. Upon the arrest of the alleged culprit, he stated that he was intimate with the daughter-in-law of the complainant who, in a fit of jealousy, cut off his Ear. The Sessions Judge, finding clear evidence for conviction, sentenced him to 4 years' imprisonment.

In 1855, a woman and her son, inhabitants of Nowa-kallee, murdered the wife of the latter. The male prisoner, displeased with the dinner prepared for him by his wife, a girl 14 years old, struck her on the head with a small bamboo twig. She then began abusing him, his mother,

^{*} Nizamut Adawlut Reports, 3rd Nov. 1854, p. 526.

[†] Nizamut Adawlut Reports, vol. iii, p. 285, as cited by Beaufort.

[†] Nizamut Adawlut Reports, N. W. P., 24th Oct. 1854, p. 604.

and all connected with him. The prisoner, who was peeling some sugar-cane with a *dhao*, went up to the girl and deliberately cut off her *Under-lip*, saying, "I will cut off your mouth for daring to abuse my mother." The mother and son then laid hold of the unhappy girl, dragged her into the cook-room, and despatched her.*

In 1851, a man was found guilty, at Bopal, of cutting off the *Nose* and a portion of the *Upper-lip* and *Cheek* of his wife (sixteen years old), apparently under the influence of groundless jealousy.†

Cutting off the Nose is a common punishment of Sexual Crime, both in Bengal and the North-West. This is evidently a very ancient custom. In one of the fables of the Hitopodesa, a jealous man is described as having bound his wife to a post. A procuress supplies her place; and, while she is in that situation, the suspicious husband cuts off her Nose. The bawd protests that her own husband cut off her nose; while the unchaste wife declares, that her virtue has rendered her proof against razors. Macnaghten's Reports contain a very singular case, where a woman had entered into a formal engagement to allow her husband to cut off her Nose, Hands, and Hair in the event of her behaving improperly. She having forfeited her pledge, her husband convened a punchayet, forced a confession of guilt from the woman and her paramour, read to the assembly his wife's engagement, and, having received their authority to enforce its

^{*} Police Report, L. P., for 1844, p. 44—" A once-born man who insults a twice-born man, with gross invectives, ought to have his Tongue slit." "With whatever member a low-born man shall assault or hurt his superior, even that member of his must be slit or cut, more or less, in proportion to the injury."—Menu, C. v., S. 270-279. Pope Sixtus the Fifth appears to have subscribed to this retaliative system. Having discovered that a miserable joker had pasquinaded his sister, he sentenced the wretch to lose his Hands and his Tongue.

[†] Nizamut Adawlut Reports, vol. i., p. 859.

conditions, deliberately took up a knife and cut off her Nose.*

In 1854, a Rajshahye man confessed that he had abducted the wife of another, dissuading her from returning home by telling her that her husband "would cut off her Nose and Hair;" enraged at her obstinacy, he murdered her. + Choonna, of Meerut, admitted that he had killed a prostitute, with whom he had cohabited for eight years, by stabbing her in the throat with a bichooa, or dagger. They went to a hut near the Ganges, where they drank a bottle of spirit, the prisoner smoked churrus, then both slept; and, waking in the morning, prisoner said he should cut off her Nose and leave her; she said she would then be of no further use, and that he had better kill her, but that he would not escape. He then stabbed her. † One Banee of Moradabad, when on trial in 1852, for the murder of his wife, stated that, on her refusing to admit his embraces, he took a knife and threatened to stab her in the stomach, and to cut off her Nose. She then seized the knife and stabbed herself.§

In another case, a Rajpoot, discovering his uncle's widow with her paramour, cut off their Noses with his sword.

A woman of Tirhoot, having lost her Nose, took oath, first, that one Bheeka cut off the part, whilst her husband held her hands; and afterwards that her husband did it, and that she had implicated Bheeka from motives of enmity. The husband was proved to be the real criminal.

Nizamut Adawlut Reports, vol. i., p. 296.
 † *Ibid*, 30th Nov. 1854, p. 695.

[†] Nizamut Adawlut Reports, N. W. P., 10th April 1852, p. 288. § *Ibid*, July 23rd 1852, p. 723.

^{||} Nizamut Adawlut Reports, vol. i., p. 327.

[¶] Nizamut Adawlut Reports, 16th Dec. 1854, p. 738.

In 1854, Adaree Daiee, of Nuddea, confessed that, waking in the night and finding that his wife had left his side, he took a knife, and discovering her with a man, threw her on the ground, and cut off the tip of her Nose "with the view, he alleged, of spoiling her beauty."*

A rather obscure case, involving a mutilation of this kind, was tried at Sylhet in 1853. Meeaboollah, a discharged Burkandauz, went to the house of a prostitute in the town, and offered to marry her; she objected that she had not seen his house, and they went together for that purpose. She wore her ornaments. She was never again seen alive; but, on the second evening, her body was found, about 200 yards from the prisoner's house, with the throat cut from ear to ear, and the face shockingly mutilated. Her ornaments were gone. One of the persons who first discovered the body declared that, when he saw it, the Nose, with a gold ornament in it, was on the face. Yet, two hours afterwards, when the darogah arrived at the spot, the Nose and Upper-lip were wanting, and he reported that they had been eaten off by jackals. The native doctors who examined the body, deposed on the contrary, that the Nose and Lip had been cut off by a sharp instrument; but this, the Judge remarked, was not mentioned in their written report, and was open to suspicion. †

Ubdaot Singh, of Etawah, having intrigued with his brother's mistress, concluded the affair by cutting off part of her Nose with a sword.

Mussumat Mandarsee, a woman of Banda, who appeared in court in male attire, was found guilty of having, with the assistance of another woman, thrown down her female

^{*} Nizamut Adawlut Reports, 9th Nov. 1854, p. 555. † *Ibid*, 18th March 1853, p. 330.

[‡] Nizamut Adawlut Reports, N. W. P., 11th Oct. 1852, p. 1147

cousin, and nearly cut off her Nose. The quarrel appears to have arisen upon money matters, with mutual charges of dissolute life.*

Nujjuf Khan, of Furruckabad, having been intimate with a woman who had begun to receive the addresses of another, enticed her to remain with him, seized her, sat upon her chest, and cut off her Nose with a knife.†

One Thakoorpershad, of Goruckpore, suspecting his sister-in-law's servant of intriguing with his mistress, turned him out of the house and service. Catching him afterwards concealed in the woman's house, he, with the assistance of three others, (one of whom held the man's feet, and one his hands, while the other sat on his chest,) cut off the man's Nose, and forced water into his mouth, with a view to break his caste. The prisoners declared that the man leaped from the upper story of the house, and, falling on an iron pot, his Nose was cut off. As is usual in such cases, the prisoners spoke of the man as a thief, not as an intriguer. The Judge observed, that "it is not usual among the Natives to punish a thief in this manner; but it is not at all unusual so to punish a person convicted of such criminality as Ramruttun was suspected of.";

Biting off the Nose and Ears—Is by no means a very rare brutality either in Bengal or Up-country. In eighteen months, I saw two cases, at Howrah, in which, part of the Nose had been bitten off, and one in which a segment had been taken out of the upper part of the Ear, evidently by human teeth.

Lulla, of Moradabad, having been left in the house with his cousin's wife, who had only been confined fifteen days pre-

^{*} Nizamut Adawlut Reports, N. W. P., 20th Oct. 1853, p. 1321.

⁺ Ibid, 21st Sept. 1854, p. 413.

[‡] Ibid, 11th March 1853, p. 361.

viously, stabbed her fatally in the abdomen with a knife,* and then endeavoured to bite off her Nose.†

The Ears and Nose are occasionally torn or cut in forcibly removing the rings worn by Native women and children.

Ewaz, of Delhie, was found guilty of having enticed a child to a retired place and there robbed him, cutting the lobe of his Ear to the extent of half an inch, to get one of his ear-rings.

A Meerut man was sentenced for having forcibly torn the nuth from a woman's nose, as she was walking through the town. The Civil Surgeon, who examined the injury which which she had received, confirmed her statement of the occurrence.

Macnaghten's Reports contain the trial of a slave girl, apparently not more than twelve years of age, who was found guilty of deliberately cutting off the Membrum Virile of a man who had purchased her.¶

A prisoner convicted of Castrating a boy with his consent, from which operation death ensued, was sentenced under all the circumstances of the case (the youth and ignorance of the prisoner, the absence of all malice, the express desire of

^{*} It is mentioned as a custom in that part of the country among Hindus, for a woman who has been recently confined, invariably to keep a knife, sword, or other weapon on her bed.

[†] Nizamut Adawlut Reports, N. W. P., 22nd Sept. 1853, p. 1179.

[‡] Three men and a woman were convicted, at Dacca, of having beaten to death a female, who appears to have been a doctress and whom they accused of witchcraft. They also robbed her, forcibly tearing out the rings from her Ears and Nose, which were found lacerated. Nizamut Adawlut Reports, 17th Jan. 1855, p. 65. It must be borne in mind that the Nose-ring (Nuth) usually worn in Bengal is easily removable, but is often forcibly plucked away. The Ear-rings (hurn-oo-phool, balees, &c.,) are frequently soldered, in which case thieves do not hesitate to cut the part.

[§] Nizamut Adawlut Reports, N. W. P., 25th August 1852, p. 877.

| Ibid, 22nd November 1852, p. 1368.

[¶] Vol. ii., p. 29.

the deceased, and the fact that such operation was not unusual among hermaphrodites [?]) to imprisonment for two years.*

In 1852, a youth of 18 or 20, was convicted of an attempt to cut off the Membrum Virile of a lad of 12, with a hussooah, or sickle.†

In 1849, a prisoner confessed, at Purneah, that he and his brother had murdered a man on account of his great reputation as a wizard. They made him drunk, and then, tying him with cords, cut off his Private Parts, and threw him headlong into a well.‡

Early in 1853, a woman of Sylhet was found guilty of murdering a child by cutting off his Private Parts with a clasp knife, and throwing him into a tank.

"A mechanic or servile man," says Menu, "having adulterous connexion with a woman of the twice-born class, shall lose the Part Offending."

In 1853, a man was sentenced in Calcutta to suffer a year's imprisonment for inflicting a severe wound with a hussooah, or sickle, on the Membrum Virile of a person, who intrigued with his wife—Mortification and death ensued.

Cases are upon record¶ which appear to show that the Natives, when avenging disgrace done to females, often kill in a manner which denotes the nature of their victim's of-

^{*} Nizamut Adawlut Reports, vol. iii., p. 17, as cited by Beaufort. See also the "Digest" par. 2818, for the Mussulmann Law relative to the crime of Castrating slaves and others.

[†] Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 130. ‡ Police Reports, L. P., for 1849, p. 19.

[§] Chap. viii, S. 374. According to the Hindu Law, as quoted by Ward, a Brahmin having improper intercourse with a virgin, with his own daughter, or with his son's wife, must become an Eunuch. Also, if a person defile the bed of his mother-in-law, he must put a red-hot piece of stone or iron into his mouth, and become an Eunuch.

Nizamut Adawlut Reports, vol. v., p. 551.

¶ Ibid, vol. iv., pp. 537 and 567.

fence.—Parte in quâ peccatur, in ed etiam punietur.—A man's body was found, at Rajshahye, with one Eye scooped out, and an Ear cut off, and the Testes mangled and partly cut off. In a case at Patna, the body was found horribly mutilated, with the Private Parts cut and lacerated in such a manner as to warrant the inference that the murder was done out of revenge on the deceased, for having disgraced a female.

In 1849, the Sub-Assistant Surgeon of Shajehanpore reported the case of a Mussulmaun who was treated at the dispensary for a wound extending across the root of the Genitals—certain persons attempted to castrate him—one of the testes hung out—but was replaced, and he recovered.

In addition to similar cases alluded to above, we may cite that of a Mussulmaun who, in some trivial squabble, knocked his mistress down, and, while she was insensible, inflicted severe wounds on her *Pudenda* with a razor.*

I have perused some very remarkable notes, collected by my friend Dr. H. Ebden, which show clearly that there at present exists a very extensive system of making and of trading in Eunuchs in the States of Rajpootana and, doubtless, also in Delhi and Lucknow. The operation is performed by Eunuchs-the base of the genitals is encircled by a tight ligature, and the whole genitalia are swept away by a single stroke. Those who retain the penis are but little valued or trusted. The operation is generally performed at a shrine, with many precautions and with some affectation of religious ceremony. There cannot be a doubt that children are bought and stolen for this infamous trade. Many of the Eunuchs are said to be orphans and foundlings, but it is also shown that adults not unfrequently submit voluntarily to the operation. An old Mussulmaun, who had lived for a long time among the Eunuchs, stated that he had only heard of one man having died, out of fully a thousand

^{*} Nizamut Adawlut Reports, vol. ii., part 1, 1852, p. 215

operated upon. Dr. J. B. Wright, then of Jyepore, describes a class of "naturally born" Eunuchs called Khojas. In them "the urine is voided painlessly through a minute aperture just above the symphysis pubis, in the abdominal mesial line. This orifice is, in many cases, surmounted by a small organ similar in appearance and position (?) to the female clitoris or to a miniature penis." Their pelves are described as being very wide. These people are in great request as the custodians of Zenanas. It would appear from the above account that these persons suffer from congenital deficiency of the anterior wall of the bladder and of the symphysis pubis, with more or less imperfect developement of the genitals. In Europe, however, such cases are of very rare occurrence, and it would be difficult to imagine that a class of such unfortunates could be collected, except by a search throughout the whole population of India.*

This subject will again be referred to in the chapter on Unnatural Crime.

It is stated that there is, among the public singers and dancers of this country, a class of gelded and infibulated women. I met with a description of these persons, in an English Medical Journal, many years since; but cannot now refer to the authority. This allusion to the subject may, however, lead to further investigation.†

^{*} Dr. Ebden's notes will appear in the *Indian Annals of Medical Science* for April 1856, I trust that he will pardon my anticipating the publication of facts which the cause of humanity demands should not be hidden.

[†] Nearly all the practices of Mutilation employed by the natives of India have been known in Europe, and even in England, during the last six or seven centuries. There can scarcely be a doubt, if the testimony of Matthew Paris be reliable, that the elder brother of Henry the First was blinded by the application of heat, or by some other means equally effectual. It will be found, in Chamberlayne's Angliæ Notitia, that amputation of the right hand by a cleaver furnished by the king's yeoman of the kitchen, was long the punishment of striking within the precints of the king's court. William Duke of Devonshire barely escaped it, in the reign of James the

Several important questions are not unfrequently proposed to medical witnesses, in cases of wounding, with regard to *The* Relative Position of the Parties, when the wound was inflicted.

Some months since, I was called upon to attend a thief, who had been seized and wounded. From the position and character of his wounds, on the feet, knees, buttocks, and backs of the hands, I at once suggested my conviction that he had been wounded with a sword while lying on the ground, with his hands and feet raised to protect his body.

QUESTION OF POWER TO INFLICT WOUNDS.

There are several cases in the Reports where it was inquired,—whether prisoners whose hands were contracted by leprosy or by cicatrices, were capable of wielding a deadly weapon. This question was generally answered in the affirmative. I find two rather recent cases in the Reports in which Blind Men were found guilty of killing their wives for infidelity. One of these cases has been already cited at p. 289 (note.) The prisoner was completely blind of one eye, the sight of the other was so greatly impaired that he appears to have been incapable of work. He killed the woman by blows on the neck with a sword. Here, of

Second, by the payment of a fine of ten thousand pounds. The loss of the offending hand was formerly the first punishment of an assassin. Damien, Ravilliac, Felton, all suffered this. The practice is still common in Italy. By ancient forest law, the convicted deer-stealer lost a thumb, and thus became a "poltroon," (pollice truncatus.) unfit to carry arms. The cutting off the ears of Prynne, Leighton and Bastwick, after they had been nailed to the pillory, was an event of direful portent in English History. The slitting of a gentleman's nose by order of the Duke of Monmouth, at Whitehall Stairs, gave origin to the Coventry Act. The punishment of Abelard (Cir. 1120) is well known; and it is scarcely necessary to do more than allude to the refinement of cruelty which has generally accompanied the execution of a traitor in England. Castration is said to be still the punishment which the Law awards to a Negro, who is found guilty of a rape in the Slave States of America.

course, it was a matter of importance to ascertain what degree of vision remained. In the other case, the murderer was entirely blind,—according to the evidence of the native doctor and others, he had been so for years. He confessed freely that,—his wife having admitted that a criminal intimacy existed between herself and a man for whom she worked, and who, she said, had asked her to live with him, and not to remain with a blind man,—he, at midnight, killed her, while she was sleeping, with a bill or gurasa, inflicting no less than nine wounds, one of which completely severed the vessels of the neck. The next morning he told the chowkeedar what he had done.*

In one of the Reports we find it questioned, whether a lad, 12 or 13 years of age, was physically capable of cleaving the skull of a person of his own age, and of cutting the side of the neck to the spine. This was answered in the negative, upon consideration of the prisoner's slight muscular development, and the lightness of the weapon. Cases of deliberate murder, by children from 12 to 14 years of age, are, however, not rare in the criminal records of this country.†

In one case, a girl, who appeared not to have reached the age of puberty, and was declared by her parents to be only nine years and a few months old, was found guilty of drowning another child in a rivulet, not a span deep, for the sake of her ornaments.‡

In 1852, a girl "nine years and three months old," was found guilty of murdering her husband's niece, a child of six, by killing her with repeated blows of a heavy stick, scratching her face afterwards with a knife. She was sentenced to imprisonment for life.

A very remarkable case in illustration of this question occurred in Assam, in 1853: A girl, "a mere child of 10 or

^{*} Nizamut Adawlut Reports, N. W. P., 11th July 1853, p. 840.

[†] Macnaghten's Reports, vol. i., pp. 148 and 215; ii., pp. 2 and 471. ‡ *Ibid*, vol. i., p. 213.

[§] Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 45.

11 years," confessed to have taken a recently sharpened dhao in both her hands, and to have struck her husband two blows on the head with it. The deceased, who was a strong healthy man, received two wounds on the head, from which the brain protruded, his little finger had also been severed from his right hand. He died on the following day. The weapon produced was a dhao, one cubit and eleven fingers in length, including the handle, with a blade, two and a half fingers wide, and weighing eleven chittacks, or 22 ounces. The girl was sentenced to 10 years' imprisonment.*

Instances very frequently occur in the records in which mere children are proved to have taken active parts in assisting older criminals in the commission of murderous acts.

In 1852, a woman was convicted, at Akyab, of the murder of her husband. Mr. Mountjoy found three wounds on the head of the deceased, one of which, fracturing the occipital bone, was sufficient to have caused death; the head had also been nearly severed from the body by repeated blows, and the back was one mass of shocking wounds, such as might have been caused by the dhao produced, which weighed about two pounds and a half. The Commissioner remarked that it might appear surprising, and almost incredible, that a small and apparently weak female, such as the prisoner, should be capable of inflicting the deep and deadly wounds described by the Civil Surgeon. But the women in the villages of Arracan are generally employed in cutting up fire-wood for domestic use, and they thereby acquire a great facility in using the dhao, or long heavy knife. The habit of pounding paddy with a heavy pestle, in a large wooden mortar, also gives them considerable strength in the arm.†

^{*} Nizamut Adawlut Reports, vol. iii., part 2, p. 57. See also the case of a girl, 10 or 12 years old,—who had certainly not reached the age of puberty, who killed her husband by blows on the head with a dhao.—Ibid, October 16th 1854, p. 467.

[†] Ibid, vol. ii., part 1 of 1852, 329.

BLOOD MARKS.

Natives wounded in affrays, &c., are always careful to bring all the clothes which have become stained with their Blood, as evidence of the severity of the injuries which they have received. It is generally suspected that, in many of these cases, the Blood of a fowl is used to enhance appearances. I do not know, however, that such has been proved to be the fact in any instance. Since the tests for distinguishing the Blood of a human being from that of one of the lower animals,—as those proposed by M. M. Barruel, Taddei and others,—cannot avail in evidence upon criminal cases, it must, of course, rest with the police to show, as far as possible, whence Blood-stains to be subjected to examination have been derived. The Chemical Examiner can only be expected to state whether the matter found on a weapon, garment, or other object, is Blood or not; and he may, in certain cases, also be able to suggest whether the effusion has taken place before or after death.* It may be worthy of remark that it would appear that, in the generality of cases occurring in the North-West where the tulwar or other cutting weapon with which a murder has been committed has been missing, it has been at length found in a neighbouring Well. In Bengal, the readiest place of concealment is either a Tank or the Thatch of a hut. In a case tried in the North-West Provinces where a person had evidently been killed by sword wounds, it was held by the Sessions Judge to be a strong additional cause of suspicion against certain of the accused parties that no sword was found

^{*} Mr. Baynes mentions that great weight is attached by the natives of this country to the evidence of Blood Stains. A washerman is brought forward who deposes in the most confident manner that "the stain on that cloth is from blood;" if it has even been imperfectly washed, he is equally positive; if any trace remain, he can tell "it is blood."—Hints on Medical Jurisprudence, p. 48.

upon any of them, except one, who was wearing his; -seeing that a murderer always (?) takes the first opportunity of hiding the weapon which he has used.* In some of the recorded cases of wounding in India, it is distinctly stated that the culprit cleaned the bloody weapon after committing the crime. In many other instances, the bill-hook or sickle has been thrown into a tank or buried. In many, however, stains are found upon the blade or handle of a suspicious weapon, and are sent to the Chemical Examiner for analysis. I only find three instances among the records of that gentleman's office, in which it was satisfactorily proved that the marks on articles sent for examination were those of Blood. In two of these, the stains were found on the blades and within the scabbards of tulwars. It is easy to perceive that stains upon a sheathed weapon would be better preserved and more readily detected than upon almost any other. The following cautions should be observed in sending in weapons and garments supposed to be stained with Blood for chemical analysis. In all cases means should be taken for ascertaining the Identity of the weapon, garment, or other article.† A careful inspection of the weapon will sometimes at once lead to the deduction of important evidence. In the case where five persons of one household were found murdered at Baitool, cited at p. 297 (note), one sword was found in an out-of-the-way well, it was notched and bent and was believed to have been that with which the crime was committed. Another tulwar was found in some brushwood near the house,-it had Blood-stains on the handle, as if bloody fingers had grasped it, but its blade was clean and with a scabbard ;-it was, therefore, concluded that the prisoner had placed it there himself. The article (if dry) should be sent precisely in the condition in which it is found, care

^{*} Nizamut Adawlut Reports, N. W. P., Sept. 22nd 1852, p. 1047. † Taylor, Ed. Cit. p. 901.

being merely taken to remove any living insects which may be upon it, or within its crevices or folds; it should first be enveloped in white paper and then secured in tin. If wet, it should be placed or spread upon white paper over a perfectly clean dish or plank, isolated in such a manner that ants and other insects may not approach it, and dried gradually but completely, not in the sun, but in a room where a brisk draught enters. Should the paper receive any stains, it should also be folded and sent in a separate packet. India, several insects, and especially the small red ant. speedily fix upon any cloth or other object stained with animal matter, which they rapidly devour, often removing, in a few hours, not only the stains, but the portions of cloth which they occupied. In the case of Blood-stains, it is especially necessary to guard against this, as the removal of the fibrinous portion of a stain by insects will always obscure the inquiry as to whether the hæmorrhage occurred before or after death. As a rude test, however, of the difference between recent Blood-stains and certain other mineral and vegetable stains, exposure of the surface to red ants may, in some degree, aid investigation. It is probable, however, that the stains of sweet fruits, such as of mulberries and oranges, would be equally attacked by insects. Where a suspicious weapon has been found sheathed, care should always be taken to send the scabbard: this should be split open, previous to its dispatch, in the presence of the medical officer; or, in his absence, of the magistrate, who should carefully observe whether the stains within appear to be of old or recent date. To enable the Chemical Examiner to judge fairly whether the hæmorrhage occurred before or after death, and whether it was arterial or venous, stained garments should be sent entire, small strips of stained cloth are rarely sufficient. The principal stains which are liable to be mistaken for Blood in this country are, Iron Mould, Citrate of Iron Stains, Fruit Stains, such as those of the Mulberry and Sorel, or meesta, &c., the marks of Huli Powder, (Ábir)* and Ochre, and of the Catechu in Pán. In a trial at Futtehpore, the prisoner alleged that certain small, but suspicious stains on his clothes were from chewing Betel. Dr. Warneford, however, examined them chemically and proved that they were of Blood.†

In a case tried before Mr. Baynes, a knife which had been found in the house of a confessing murderer bore two or three dark reddish spots, which every body supposed to be Blood; no one credited the prisoner who declared that the murder had been committed not with that, but with another weapon. On examination under a microscope, these spots proved to be small masses of some red-colored leaf which had adhered to the blade, and had there become partially decomposed.‡

DEATHS FROM BEATING.§

Besides the kinds of punishment already noticed, various modes of Beating are practised by the people of India,—of these the chief are, beating with a Shoe, with a Kora, or Whip, (an instrument which appears scarcely ever to have been out of the sight of the Mussulmaun Rulers of India in olden times,) or with a Lathee, or Office Ruler; the last mentioned is, of course, a formidable weapon; it is much in use, and very severe beatings (sometimes involving fractures) are often inflicted with it.

^{*} The coloring matter of this is the powder of the Cæsalpinia Sappan which, according to O'Shaughnessy, contains a principle much resembling Hæmatin.

[†] Nizamut Adawlut Reports, N. W, P., 8th May 1852, p. 424. ‡ Op. Cit. p. 48.

[§] If a person be killed by successive blows with a whip or stick, retaliation for murder is not due, according to the opinion of Aboo Huneefah. Other Mahomedan authorities seem to hold that homicide by these means incurs Kisas—Sale.

It would appear, from the Madras Report on Torture, that a Belt of thick leather worn by chuprassies, is often used with much severity in that part of the country. The peons' Belts in Bengal, are usually made of softer materials. Flogging with Switches, as of the Bambu or Tamarind Tree, or with the stinging Bichattee, (Tragia Involucrata,) is a not unfrequent practice; but, in the present day, the latter appears generally to be considered as a punishment for school boys, commonly in use by the masters of the more remote Patshallas, or hedge schools, of Bengal. In the last century, however, it was regarded by Burke in a much more serious light.*

Beating with the heavy Shoes worn by Mussulmauns is usually considered merely as a sharp punishment involving great disgrace. One of these Shoes, wielded by a powerful and enraged man, is, however, a very dangerous weapon, and fatal injuries must, not unfrequently, have been inflicted with it.†

In a case tried in 1817, it was proved that a police darogah had caused his dhanuk to strike an aged man three or four times with a Shoe. It was also stated, but not proved, that the prisoner had struck the deceased on the head with a mukh, or pin, as thick as a man's wrist. The man died seven days afterwards. The darogah was, consequently, dismissed from office, and sentenced to a year's imprisonment.

In 1853, one Kadir Buksh, of Tirhoot, having preferred a complaint against persons who had grazed their cattle in his

^{* &}quot;For others, exploring with a searching and inquisitive malice, stimulated by an insatiate rapacity, all the devious paths of nature for whatever is most unfriendly to man, they made rods of a plant highly caustic and poisonous, called *Bechettea*, every wound of which festers and gangrenes, adds double and treble to the present torture, leaves a crust of leprous sores upon the body, and often ends in the destruction of life itself."

[†] Allusions to "Beating with Slippers" will be found in the Madras Report on Torture, Append. C., No. 15, p. clxiv.

oat field, a punchayet was convened by the gomasthas of the estate. The punchayet found him guilty of false complaint. Upon this, the gomasthas ordered two men to tie his hands and give him twenty blows with a Shoe on the back of the neck and head. This they did, after taking off his turban. Upon seeing this, his friends called out dohaee!-on which the executioners decamped. He then tried to make his way to the thanna; he was overtaken, and beaten and dragged along, and poked with lattees until he became senseless. He expired early the following morning. Dr. Kinsey found that death had ensued from congestion of the brain, the result of a beating about the head, neck, and back. There was a contusion on the chest, apparently from a lattee blow, the lungs were also in a state of great congestion, and the heart full of blood. There were no marks about the head; but, from the above appearances, it was, he considered, evident that the man died struggling for breath, in consequence of exhaustion of all nervous energy, resulting from great efforts to free himself.*

In 1849, Dr. Ross, then of Hooghly, reported upon the case of a woman whose death was alleged, as he considered with probability, to have been caused by beating with Shoes. He found that blood had been effused into the chest and

^{*} Nizamut Adawlut Reports, October 18th 1853, p. 649. In the same year certain men of Lohardugga (Chota Nagpore,) who were parties in a feud of very long standing, were tried for the murder of one Beegna, their opponent's servant. A witness stated that, the deceased and another having been seized by the prisoners, one of the latter ordered that "Mungra should be beaten sixty stripes and Beegna twenty-five stripes with a Shoe, and one Aubuck began to beat Beegna, upon which Bhoopnath said, 'What, is he your father, that you beat him so gently?' and Bhoopnath himself then began to beat him with a shoe. Beegna then seized Bhoopnath's arm, whereupon Samsoonder got up in a rage and knocked him down, with an iron-bound club." It was said that he died from the effects of this blow, and that his body was thrown into a disused well in Bhoopnath's garden. The case was not considered to be proven.—Nizamut Adawlut Reports, Jan. 12th 1853, p. 52.

abdomen, and that inflammation to some extent had supervened. There were marks of very extensive bruises over the chest and abdomen. Otherwise, the body presented no traces of disease.

The practice of Beating Thieves to Death, is fearfully common both in Bengal and in the North-West Provinces. There is little to be said with regard to the Medico-Legal bearings of these cases, except that the blows are inflicted with most unrelenting severity, evidently with a conviction that the offender's life is a forfeit, and that mercy is altogether out of the question.*

It is to be trusted that the following is a somewhat extreme instance. In 1853 several persons, attendants of the Nawab of Moorshedabad, were tried for the murder of

^{*} See Macnaghten's Reports, vol. ii., pp. 262, 322 and 423. N. A. Reports, vol. ii., part 1 of 1852, pp. 407, 515, 683, and several other cases in later volumes. Also Nizamut Adawlut Reports, N. W. P., March 10, 1853, pp. 356 and 357, (distinct cases.) &c. Several of the Mahomedan Law authorities appear to have sanctioned great severity in the treatment of thieves. According to Sale, it is stated in the Hidayah that, "if a person come in the night to a stranger and carry off his goods by theft, and the owner of the goods follow and slay him, nothing whatever is incurred; the prophet having said 'Ye may kill in preservation of your property." It is to be observed, however, that this is only where the owner cannot recover his property but by killing the thief. The three following cases are cited in the Humadeeyah. 1. If the owner of the house see a thief breaking into it, he may kill the thief, or throw a stone or shoot an arrow at him. It is not requisite to warn him first, according to Aboo Huneefah: though Aboo Yoosuf says that warning should be first given to the thief; and, if he do not then run away, he may be shot. 2. But, if a thief enter your house, and you apprehend him, he may be armed and will attack you, in this case you may shoot him; and it is not necessary to warn him. 3. Aboo Yoosuf further says, that if an unarmed thief enter a house, and if the owner, though strong enough to seize him, apprehend that he would run away and escape with some of the effects; it is lawful, in such case, to strike or kill the thief .- So also the Mosaic Law-" If a thief be found breaking up, and be smitten that he die, there shall be no blood shed for him."-Exodus xxii, 2.

two men, suspected of theft, by torturing and beating them. The cruelties to which these wretches were subjected extended over the interval between the 31st of March and the 5th and 6th of April. A list only can be given of the punishments inflicted upon them while they were being hurried about to the different spots where they declared that the property was secreted, with a vain hope of gaining respite from their sufferings. They were beaten with a corah, with a cutcha beyt (babool tree) with thorns on it "and a mehter's jharoo and a bamboo; sharp wedges were driven between their fingers, their hands being tied—the feet and hands were tied to separate tent pins. They were tied up to the tent poles with their heads downwards, and beaten with the beyt*-one of them had his chest trampled on-and they were both severely scorched. The bodies were buried, and were not afterwards found; but it appeared clearly from the evidence of eye-witnesses, among whom was the Nawab's European coachman, that one of the men had his hands and feet torn by tent pins, was burnt all over his left arm and shoulders, and from the knees to the feet. The left hand of the other was broken, the skin of both feet torn off. There were marks of burning on one hand. He was raw from the knee to the foot, and in parts from

^{*} In the oration already cited, Burke described that—"the ryots were tied two and two by the legs together; and their tormentors, throwing them with their heads downwards over a bar, beat them on the soles of the feet with ratans, until the nails fell from the toes; and then attacking them at their heads, as they hang downwards, as before at their feet, they beat them with sticks and other instruments of blind fury, until the blood gushed out at their eyes, mouths, and noses—Not thinking that the ordinary whips and cudgels, even so administered, were sufficient, to others (and often also to the same, who had suffered as I have stated) they applied, instead of the ratan and bamboo, whips made of the branches of the Bale tree—a tree full of sharp and strong thorns, which tear the skin, and lacerate the flesh far worse than ordinary scourges."

the neck to below the waist. The skin was off and the body much swollen. One of the witnesses described the bodies of the men as being "quite raw and coloured from the beating, and the fingers without skin on: the eyes only escaped." Latterly, the tormentors appear to have made attempts to save their victims' lives, by having in a native doctor, who applied poultices, &c. It was stated that the men died of Cholera; and they were buried with some show of care. Several of the prisoners were found guilty of culpable homicide and were transported.*

Medical Officers are very frequently called upon to ascertain the cause of death in bodies, regarding which the

^{*} Nizamut Adawlut Reports, 5th October 1853, p. 581. Several remarkable cases of murder by Beating may be found in the recent Reports of the Courts of Nizamut Adawlut. Among others, the following :- In 1853, a Cuttack man was openly attacked at his own house by several persons led on by his younger brother with whom he had long been at feud, was violently beaten on the body, had a rope fastened under his arms, by which he was dragged along, while several persons continued to strike at him with bamboo clubs, the marks of which covered his whole body, until at length he received a blow on the head which proved fatal. (Nizamut Adawlut Reports, 5th October 1853, p. 568.) Several persons, natives of the Kossya Hills, were convicted, in Assam, of having beaten to death with a heavy club, a man whom they believed to be a wizard. They confessed freely, saying that he destroyed their wives and daughters by witchcraft. One of them was his wife's brother -they found out that he was a sorcerer by breaking an egg! (Nizamut Adawlut Reports, 11th December 1854, p. 737.) Again, so lately as 1855, three men and a woman from the northern part of the Dacca Division, where a great deal of superstition prevails, went to the hut of a reputed witch, intending, they said, to make her discontinue her enchantments. One of the men threw her down on her charpoy and, pressing her down by rolling her hair round his foot, beat her with his fists, while another, sitting on her loins, beat her in like manner with his fists until they left her dying; they then tore off the ornaments from her nose, ears, and body and plundered the house. She appears to have been in the habit of prescribing medicines for children, which seems to have given rise to reports of her practising magic.-Nizamut Adawlut Reports, 17th January 1855, p. 65.

note "Reported to have been beaten some days since" is all the guiding information that can be afforded. In some few of these cases, it will be found that severe injuries, such as fracture of the ribs, &c. &c., have actually been inflicted. In a second class of cases, there will be found traces of internal disease, which will leave the surgeon in some incertitude as to whether their developement was or was not determined by external injuries. Thus, in two cases, occurring within a few months of each other, I found extensive pneumonia in the bodies of persons who were stated to have been beaten severely with lattees. In a third class of instances, either with or without the traces of blows, death is found to have occurred from natural causes. In certain cases of this and of the preceding kind, it is often difficult to convince ourselves that our reports should not contain a hint that an intentionally false charge has been preferred. When, however, we recollect that the Bengalee, ill-fed and living in an atmosphere saturated with poisonous miasmata, with vitiated fluids and faulty or actually degenerated organs of secretion and elimination, is liable to have the balance upon which his defective functions act deranged by any unusual vicissitude of pain, or fear, or uncontrollable rage-we shall not be unwilling to admit that a quarrel, a struggle, or a beating, in itself of no very grave severity, may actually determine the onset of fatal cerebral, thoracic, or abdominal disease. Still again, in a fourth class of cases, the appearances discovered may be such as to justify the Medical Officer in suggesting that the report of beating or other violence, appears to have been intentionally false. This step, however, should always be taken with considerable reserve. Not many months since I reported that a child, whose death was alleged to have resulted from ill-usage, had died of cholera; that the appearances presented by the contents of the stomach and upper bowels were such as to lead me to suspect

very strongly that she had taken native remedies for that disease; and that, consequently, there existed strong presumption that those about her must have been well acquainted with the real cause of her death.

The always important questions which may arise regarding the Causes of Death at various periods after the infliction of Injuries, are often of great interest and of some complexity in India. It may be taken as a general rule that, wherever individuals suffering from grave and progressive disease of any of the principal viscera are attacked with severe disorder,—whether occurring spontaneously, as in fever or dysentery, or resulting from any mechanical violence or injury, as a beating or a fall,—their lives become seriously imperilled; the faulty state of their viscera, being likely to interfere materially with all reparative processes in their systems.

About ten years since, I went carefully over the whole of the records, at Guy's Hospital, of cases in which Injuries and Surgical Operations, not in themselves of an essentially fatal character, had been followed by death at periods of a few hours or days, -during a period of 15 years. The results were that, out of 153 such cases which had occurred in the hospital, death had resulted from inflammation of internal organs or secreting surfaces (excluding the liver and spleen) in 143 instances. In the remaining 19, the patients died from other causes, such as tetanus, sloughing, hæmorrhage, suppuration, gangrene, erysipelas, diarrhœa, and total deficiency of reparative action in the wound. In one only, the precise cause of death was not ascertained. Out of these 153 cases, there was marked disease of the Spleen, Liver and Kidneys in 93 cases. In the 143 cases of death from internal inflammations, there was also superadded marked disease of the Spleen, Liver, or Kidneys, or of all these organs at once, in 90 instances.

In commencing his search for the cause of death in any case where the operation of violence is suspected, the Surgeon must determine to satisfy himself upon three points;—
(1). Whether the injury was, in itself, essentially and necessarily mortal;—(2). Whether the deceased had previously suffered from organic disease of any important organ; and (3). Whether the appearances are such as to lead to a belief that death resulted from the Injury or the Disease, or from both of these together, each acting upon and aggravating the other.

It is generally well known that, in Europe, intemperate persons suffering from organic disease of the abdominal depurative viscera are, in an unusual degree, liable to suffer from Uncontrollable Hæmorrhage, in consequence of comparatively slight operations and injuries, as well as after childbirth and during salivation. I have met with several instances which have convinced me that this predisposition is much increased in India, doubtless in consequence of the operation here of marsh poison as an additional cause of cachæmia. One illustration of this fact will suffice. 1853, I was called upon to examine the body of a European, who had died under suspicious circumstances. He was a stout and well-made person, about 36 years of age. His habits had been notoriously intemperate, and the Magistrate of Howrah had, on that account, removed him from the place of a police constable some time previously. I found several small wounds and scratches on one side of the face and forehead. The most considerable of these was a narrow ragged puncture on the temple, which reached the periosteum, but into which I found that I could not succeed, by the most careful dissection, in tracing any branch of the temporal artery. Still the entire body was so completely blanched, that death must certainly have resulted from hæmorrhage. The liver was enlarged and probably fatty,

the kidneys were mottled in a remarkable degree. His native servant stated that he had shut himself into his room with a large supply of ardent spirits; that, on the day preceding his death, he had fallen from his bed on a bottle which, in breaking, had wounded him; still that they had been afraid to disturb him, and that he had continued to drink spirits and to bleed until he sank. This statement was confirmed by the appearance of the floor and bed, which were almost covered with blood. The fragments of a quart bottle were found by the bed-side. I had no hesitation in testifying that, judging by the account of his habits which I had received, and by the state of his organs, he had probably died from hæmorrhage in the manner alleged.

It is unnecessary to dwell upon the well-known fact that Hepatic and Splenic diseases are extremely rife among the lower classes of natives; and, when we observe the frequency of intemperance among them,* and their continual exposure to great atmospheric vicissitudes, it is not surprising that they should be often afflicted with Renal disorders.†

Young and healthy natives generally recover well and quickly from the effects of severe bodily injuries. This has been ascribed to the temperance and simplicity of their mode of life, and to the very sparing quantities of azotized food

^{*} A native is never a tippler: when addicted to spirits, he always drinks with a determination to make himself drunk as speedily and as completely as possible. He can generally state the precise quantity of liquor that will produce this effect,—as half a bottle, (perhaps the average dose,) a bottle, a bottle and a half, or two bottles.

[†] Dr. Morehead collected 31 cases of Bright's disease in the Jamsetjee Jejeebhoy Hospital, Bombay. (Transactions of the Medical and Physical Society of Bombay, No. X.) and Dr. Edward Goodeve was, I believe, one of the first who ascertained that this lesion is not unfrequent among natives in the Bengal Presidency.—Dr. Joseph Ewart has published some interesting remarks upon "The Causes, Pathology, and treatment of Granular Kidney" as observed in the Ajmere Jail.—Indian Annals of Medical Science, April 1855, p. 539.

which they consume.* I have certainly often seen numerous and enormous wounds, on the persons of natives, heal without occasioning a single bad symptom; and there is generally a quietude and absence of irritability about natives which render them in a remarkable degree capable of preserving that rest and those restrained positions which favor the healing of wounds. Still I have never seen or heard of anything which would lead me to conclude that the people, of Bengal at least, have greater soundness and reparative power of constitution than is to be found generally among healthy Europeans: and I feel convinced that the constitutional vigour of these people has been much over-rated. True, the Bengalee lives upon a plain diet in which a very small proportion of azotized material is contained, but his food is often scanty in quantity, and probably consists of the worst kinds of rice, fish, and lentils; he works hard, he is badly lodged and badly clothed; he is greatly exposed to severe vicissitudes of temperature; he is perhaps an opium-eater or gunjah smoker, and is probably a drunkard, consuming the worst of all spirituous liquors in large quantities; his internal organs have suffered more or less in structure from the above causes. His body is lean and anemiated, he has been habituated to sexual excess from his boyhood; and, if the inhabitant of a town, he has probably suffered from syphilis and from the use of mercury employed with the most reckless carelessness. This is by no means an unfair description of a considerable proportion of those who seek relief at our dispensaries. In such constitutions manifestations of great reparative power are

^{*} Mr. Baynes says that—"From some peculiarly either in the constitution or mode of life of the natives of this country, wounds not immediately fatal more frequently and more readily heal than in the European subject; so that if the constitution survive the first shock it is apparently in less danger from attacks of fever, inflammation, erysipelas, &c., which, in other climates, are so frequently the secondary causes of death.

scarcely to be looked for. It is very remarkable how distinctly the disorders which are consecutive to injuries and operations in Bengal carry with them the evidences of miasmatic influence. In place of the Irritative Fever, Erysipelas, and tedious Suppuration so common after wounds among the diseased and ill-lodged poor of Europe, we have, here Symptomatic Fever of true Intermittent character, Gangrene, Diarrhæa and Dysentery,* while cases of Traumatic Tetanus are very much indeed more frequent in India than in Europe, although scarcely so inevitably destructive to life.

In the cases of those who die in Hospital from the effects of wounds inflicted with malicious intent, it appears to be generally conceded, as a matter of course, by the judicial authorities that life has been sacrificed, despite of the employment of the most judicious medical and surgical treatment attainable.+ In cases, however, where severe wounds have been evidently mismanaged by native practitioners (as in an instance where, some of the ribs having been cut through, cow-dung was applied and oozed into the pleural cavity,) it is generally inquired whether the patient might not have recovered under proper treatment, and whether his death was not attributable rather to mismanagement than to the injury? This is well answered by Taylor-"The true distinction in all such cases is that, if the death was evidently occasioned by grossly erroneous medical treatment, the original author of the violence will not be answerable; but, if it arise from the want merely of the higher skill which can only be com-

^{*} In the Records, I find eight cases in which fatal Diarrhœa or Dysentery supervened in cases of wound and only one case of Erysipelas.

[†] In one case only do I find it inquired of a Sub-Assistant Surgeon whether every attention was paid to the dressing of a patient's wounds during his stay in hospital, and whether maggets attacked any of his wounds before death. The replies to these questions appear to have been satisfactory.

manded in great towns, he will be responsible, because he has wilfully exposed the deceased to a risk from which he has, practically, no means of escaping." Again, Baron Platt is reported to have observed, in 1845, that,—"If a man inflicted a wound likely to produce death, and the wounded party should fall into the hands of an unskilful practitioner, whereby death was hastened, the aggressor would still be responsible for the result. If the wound had not been likely to produce death, but by unskilful treatment death ensued, then that would not be murder.*

Mr. Baynes observes,-"The culprit must take what may be called the consequences of his country. A native of India can, clearly, have no right to complain if he be punished for inflicting a wound which proves mortal, under the comparatively unskilful treatment which it will probably receive, merely because, had it been inflicted within the reach of European skill, it would, most probably, not have proved so; but, on the other hand, he has a right and claim to all the mitigating considerations which may arise from the fact of unusual means having been resorted to in order to its cure: or from the wounded party neglecting to resort to the usual means; or from the fatal effect being clearly traceable to the state of constitution of the deceased at the time; and the court will, in all cases, put to itself the question, was the amount of injury inflicted apparently sufficient to cause death in a person of ordinary health and vigour."+

Dr. Kenneth Mackinnon has very justly insisted upon the danger which attends the practice of sending all wounded persons to the Sudder Stations—quite irrespectively of the length of the journey and of the severity of the hurt.

^{*} Op. Citat. p. 274.

[†] Op. Citat. p. 56,

This, doubtless, often causes death in cases not otherwise likely to prove fatal, and must thus also tend to enhance the severity of punishment. Many illustrations might be cited;-thus a man of Backergunge quarrelled with the widow of his deceased brother and hacked her severely with a dhao, dividing the collar bone and inflicting several other injuries. The darogah found her tossing about, very restless, and unable to speak. The next day, he sent her into the station, but she died on the way.* About a year since, I was called to see an aged woman who had come to my door, walking very actively. Upon my inquiring what ailed her, she raised her head, which had been sunk upon her breast, and disclosed a frightful gash, without any covering whatever, between the thyroid and the hyoid bone. She had been brought in from a considerable distance, the wound was partially healed, and she, fortunately, did well. It is to be trusted that, whenever the plan of attaching native doctors to each thannah can be effected, it will go far towards obviating this evil.+

BITES OF VENOMOUS SERPENTS.

Cases of alleged death by Snake Bite are of such frequent occurrence in this country, that it is singular they should not become more frequently the subjects of medico-legal investigation. Some years since, it was stated, by the magistrate of Midnapore, that the deaths from this cause in that zillah alone amounted to 402, in twenty-one months; and it

^{*} Nizamut Adawlut Reports, 17th October 1854, p. 473.

[†] A singular error regarding the Colour of Cicatrices has found its way into more than one recent work on Medical Jurisprudence. Taylor says that—
"The tissue of which a cicatrix is formed is different from that of the skin; it is harder, and less vascular, and is destitute of rete mucosum, so that its whiteness, which is particularly remarkable on the cicatrised skin of a negro

was recently asserted, in the public prints, that 50 had thus perished, in Delhi, during the rainy season of 1853.*

By the kindness of Dr. Theodore Cantor, I am enabled to give the following list of Venomous Snakes found in Bengal.

- Hooded spectacle-serpent, and its varieties, Cobra Capello.
 Naja lutescens, Laurenti,—Coluber Naja, Linné.—
 Russell I., Pl. 5 and 6. Beng. Nag, Naga, Gomun, Gokroo, Peddoo, Kaowtiah.
- 2. Gigantic hooded serpent.

Hamadryas ophiophagus, Cantor .- Beng. Sunkr-choar

3. Yellow and black ringed Bungarus.

Bungarus fasciatus, (Schneider.)—Russell I., Pl. 3, Bungarum Pamah,—Beng. Bungarus.

4. Black and white ringed Bungarus.

Bungarus candidus, (Linné.)—Russell I., Pl. 1, Paragoodoo.—Beng. Saukunnee.—Cobra monil of the Portuguese.

is retained through life."* This statement is repeated in Mr. Baynes's work with some emphasis.† In negroes and in the Natives of this country a recently-formed cicatrix is always white; but, in course of time, at a longer or shorter period, according to the extent of the wound, and the degree of injury inflicted upon the surrounding parts, the cicatrix gradually receives a deposit of black pigment until, ultimately, it becomes in a marked degree darker than the adjacent skin. Mr. Lawrence long since showed that the opinion that cicatrices in negroes remain white, was altogether without ground. After the application of a blister to a native's skin, the coloring matter entirely disappears for a time. Mr. Bedford has shown, in an interesting series of observations which he has published on the subject, that the average period required for the restoration of the colour of the skin, in natives, is from 14 to 21 days. The cuticle and coloring matter begin to re-appear between the 5th and 8th day. In almost every case, the colour of the blistered parts becomes a shade darker than the neighbouring skin.‡

* Med. Times and Gazette for January 1854, from the Delhi Gazette.

^{*} Fifth Edition p. 303. † Page 61.

[‡] Bengal Hurkaru, Medical and Scientific Gazette, 26th April 1851.

5. Russellian Viper.

Vipera russelli, (Shaw.)—Russell I., Pl. 7, Katuka Rekula Poda, and II., Pl. 32.—Beng. Bora, Chittee-Bora.

6. Green hatchet-headed serpent.

Trigonocephalus gramineus (Shaw.)—Russell I., Pl. 9, Bodroo Pam, and II., Pl. 20.

The first five kinds are of common occurrence in Bengal. The sixth is very rarely seen in the plains, and its venom appears to be less deleterious than that of the preceding serpents.* Different kinds of Venomous Sea Serpents are very common in the estuaries of the Ganges.

Dr. Cantor has shown that six species of the Genus Hydrophis inhabit the Bay of Bengal, viz., H. schistosa, striata, nigrocincta, gracilis, pelamis, and pelamoides. Out of this number, he has observed the H. schistosa and striata to be most common, and the H. gracilis comparatively rare in the northern part of the Bay, and the estuaries of the Ganges. All the Pelagic Serpents are Venomous. Dr. Cantor has disproved the accuracy of M. Schlegel's opinion that the pelagic serpents are of a more peaceable disposition than the greater number of terrestrial Venomous Snakes,-showing, from his own experience, that those species which inhabit the Bay of Bengal and the estuaries of the Ganges are of very ferocious habits, as well in as out of water. He refers to the record, in the Asiatic Researches, of a number of accidents, at Madras, caused by the venom of these Serpents; and also to an instance, which took place in 1837 on board H. M. Brig Algerine, while in Madras Roads, where the person bitten expired within four hours of the infliction of the wound.+

† Transactions of the Zoological Society of London, vol. ii., p. 303.

^{*} Mr. Hodgson has seen a man wounded by this species—the only venomous one known to inhabit Nipal—suffering fearfully from pain and swelling; but he never heard of a fatal case.—Trans. Zoological S. Lond., vol. ii., p. 309.

It is strongly believed by several experienced Officers, Missionaries and others, well acquainted with the country and its people, that a vast amount of undiscovered crime is concealed (at least in Bengal) under the always plausible and not generally controvertible report of " Died by Snake Bite." At present, the matter only rests upon strong suspicion. Nevertheless, it appears to call for close and frequent investigation by Magistrates and Civil Surgeons. It would be very desirable that, from time to time, Magistrates should direct that, during a stated period, all bodies of persons reported to the police as having died from Snake Bite, within a moderate distance of the Zillah station, should be at once sent in for inquest, and for examination by the Civil Surgeon. Whether instances of discovery occurred or not, the frequent repetition of such an order would evidently have a direct tendency to place a check upon the perpetration of secret crime under this disguise.*

As a noticeable contrast to the above statistics of deaths from Snake Bite in Delhi and Midnapore, I may mention that I now have before me documents which show that, during the rains of 1845, no case of Snake Bite was admitted either to the General, Medical College, or Native Hospital of Calcutta. Dr. Jackson reported that cases of Snake Bite were very rarely brought to the Native Hospital, and Dr. Nicolson stated he was not aware of a single case of Snake Bite being admitted to the General Hospital during the preceding 30 years.—Still, venomous Snakes are by no means very rare in and around Calcutta.

^{*} It was enacted, in the ancient Mussulmaun Law, that, "If a person bring another into his house, and put a wild be ast into the room with him; and shut the door upon them; and the beast kill the man; neither Kisas nor Diyut is incurred. And it is the same if a Snake or Scorpion be put into the house with a man; or if they were there before, and sting him to death. But, if the sufferer be a child, the price of blood is payable." Had there not formerly existed frequent practices of this kind, it is almost needless to say that a special law would not have been enacted to curb them. Where we see such an enormous loss of life from Snake Bite in a stronghold of Mussulmaun tradition like Delhi, we may be justified in inquiring,—are such crimes still practised?

In cases where persons are bitten by the Cobra in full venom, and where a proper ligature is not speedily applied above the punctures, and the stimulating treatment, by ammonia, brandy, &c., is not had recourse to, the symptoms usually set in within an hour, and destroy life with great rapidity.

The following case, by Dr. Burder, affords one of the fullest descriptions on record of the action of Cobra Poison, when altogether unchecked by treatment.

A keeper at the Regent's Park Zoological Gardens, aged 31, of rather intemperate habits, was bitten, while partially intoxicated, on the upper part of his nose, by an Indian Cobra. For a short time after the receipt of the wound, there appear to have been no striking symptoms, apart from his agitation and alarm at the occurrence: and he was able to walk and talk without difficulty. After twenty minutes, however, he began to stagger in walking, and ceased to speak intelligibly. At the same time, movements, apparently convulsive, of the mouth and of the limbs were observed. He made no special complaint. He was brought to the hospital about 35 minutes after the accident. He was then unable to speak, and consciousness was nearly or quite abolished. He moaned, grasped his throat with some eagerness of action, tossed his head from side to side, and moved his arms and legs in an uneasy restless manner, not apparently convulsive. When asked, in a loud voice, if he felt pain, he made no reply, nor gave any indication of intelligence, beyond the action of placing his fingers on his throat. He was unable to support himself in a sitting posture. His face generally was slightly livid, his eyes fixed, the pupils rather large, acting sluggishly to light; the skin was of natural temperature and moisture: pulse 120, regular in rythm, but unequal in force, most of the beats, however, being tolerably full and strong. On the

upper part of the nose were a number of small punctured wounds, from one or more of which a small quantity of blood had flowed. The eyelids of the right eyes, especially the upper, were swollen and livid, the lividity extending to the right side of the nose. The eyelids of the left eye were not thus affected. There appeared to be no swelling of the tongue. Within five minutes, movements of the extremities had entirely ceased, the respiration was 20 per minute, very shallow, without stertor, and free from any sound indicating laryngeal or tracheal obstruction. lividity of the face had very markedly increased, a free perspiration had occurred over the body generally. The pulse continued tolerably good. In two minutes more (about 40 minutes after the infliction of the bite) natural respiration had ceased (?), and, but for the continuance of the pulse, the man might have been pronounced dead. pulse at this time was 32 per minute, remarkably regular both in rythm and in force, some of the beats being strikingly full and bounding. Artificial respiration and the application of galvanism were now employed and continued for 50 minutes, at the end of which time all the muscular action ceased.

On examination, there was found, immediately above the middle of the nose, on either side of its centre, a horizontal row of small punctures; on the left side four, (the three next the centre being, however, mere scratches), on the right side two, larger than those on the left. Half an inch above these, was another row of punctures, of somewhat greater size,—on the left side two, on the right side one, that on the right side being again the largest. A quarter of an inch higher still, on the right side of the nose, was the largest wound of all, transverse in its direction (as were also such of the others as had any appreciable dimensions) measuring in diameter

about a sixth of an inch, and in depth extending apparently through the substance of the skin. From this wound, a little blood was oozing; the others were closed by coagula. Two hours and a half after the man's death, a mouse was inoculated with the blood that flowed from the wound. No effect was produced upon the animal.

The post mortem examination was made 30 hours after death. A considerable quantity of frothy blood had issued from the mouth and nostrils. There was livid discoloration of the neck, face, and upper part of the chest, also of the dependent parts generally, except at the points where the pressure of the body had fallen; here the skin was pale. There was no swelling of any part, except the right eyelids, and these were less swollen than during life. Rigor mortis was strongly marked in the lower extremities; less so in the upper.

Bloody fluid had continued to exude from the highest wound on the nose. On dissecting back the skin, it was found that the three highest punctures on the right side had penetrated into the cellular tissue, which was infiltrated with dark blood.

In the Brain and Spinal Cord scarcely anything abnormal was discovered. There was little, if any, unnatural congestion, either of the nervous centres themselves or of the meninges. The lateral ventricles of the brain were filled with transparent fluid. The spinal cord, at its lower part, was softer than usual. The lungs appeared less collapsed than usual; their posterior parts were excessively gorged with blood, being almost black on section, and exuding copiously a blackish fluid mixed with some air. The air-tubes, large and small, throughout both lungs, were filled with a black frothy fluid, and the lining membrane was generally stained of a very dark blackish colour.

The Heart was healthy in structure. The left cavities were contracted and empty; the right were filled with dark

fluid blood, amongst which was a small quantity of very loose coagulum. There were no clots in the great vessels.*

There was no swelling about the tongue or fauces; the cosophagus was healthy; the Stomach presented patches of pale colour, alternating with patches of red, the latter formed by the aggregation of pale red spots. The Intestines were natural.

The Liver was of dark colour externally, and darker than natural on section; otherwise the organ was healthy.

The Spleen was enormously congested, of very dark colour externally and, on section, almost black; the substance was very soft, and from it exuded abundantly very dark blood.

The Kidneys were of very dark colour, both externally and internally, and the cut surfaces yielded, on pressure, dark-coloured blood; otherwise the organs were healthy.†

This case appears to establish the facts, that,—the bite of a full-venomed Cobra will, if not interfered with, produce severe symptoms in about 20 minutes, and death in about 50; but, as the state of intoxication appears to be in great measure antidotal to the operation of Snake Poison,‡ it is probable that the fatal symptoms will generally set in and close more speedily. That the Cobra Poison acts more ra-

^{*} The reporter in the "Lancet" says, "The blood was altogether dark, alkaline, fluid," (this was 30 hours after death in the month of October) "and it emitted a peculiar sour and sickly smell, quite different from the odour commonly known to pervade the dead-house."

[†] Medical Times and Gazette and Ranking's Retrospect, vol. xvi., p. 134.

[‡] That is to say—Lieut. Woodruff and Dr. Blackburn have found the administration of strong whisky, in almost unlimited quantities, (a practice known as the Western Remedy) of very great efficacy in cases of rattle-snake bite. Dr. Gilman considers that alcohol, if brought in contact with the venom is, to a certain extent, an antidote.—American Journal of Medical Sciences, January 1853 and Ranking's Retrospect, vol. xvii., p. 295; American Lancet and Ranking, vol. xix., p. 114. St. Louis Medical and Surgical Journal, quoted in the Lancet, February Sth, 1854. Dr. Jeter, of

pidly than any other poison known to be in use among the natives of India, with the exception of the nux vomica; but that the operation of this snake poison is not attended with any convulsive motions which could be mistaken for the opisthotonic spasms under which life fails in poisoning by nux vomica. That decomposition is not unusually rapid; and that the rigor mortis is not altogether absent after death by this kind of Snake Bite. That the blood is found unusually fluid, but not altogether without coagula.

There are several reasons which would lead us to dissent from the opinion, which now appears to be generally received, that snake poison acts by destroying the vitality of the blood.* Still a Microscopical and Chemical Examination of the fresh blood from Snake Bites, as well as of the circulating blood of frogs and other animals bitten by poisonous snakes might lead to some very important results.

The following facts, relative to the chemical properties of the venom of Indian Snakes, have been adduced by Dr.

Quincy, has administered to a girl between three and four years of age, who had been bitten; a pint and a half of fourth proof brandy without any signs of intoxication ensuing. He considers the application of sinapisms over the whole body to be the next most reliable means of averting collapse.

^{*} Dr. Gilman, one of the most recent authorities on this subject, has arrived at the conclusion "that the venom of serpents destroys all kinds of organised life, vegetable as well as animal," and "that the blood of small animals destroyed by the venom of serpents bears a close resemblance to that of animals destroyed by lightning or hydrocyanic acid; it loses its power of coagulation, and cannot be kept long from putrifaction." It must be observed, however, that powerful stimulants of nearly all kinds, not only keep off the symptoms of poisoning, when had recourse to early, but appear to have, in some instances, the power of restoring vital action after the pulse has become imperceptible,—when, according to the above theory, the blood should have become disintegrated and unfit to serve the purposes of circulation and nutrition. See the very remarkable cases by Dr. Chalmers, late of the H. E. I. C., Glasgow Medical Journal, April 1853, and Ranking, vol. xvii.; and Dr. Macrae's (of Chittagong) narrative of his own

Cantor and Mr. Laidlay. The latter has given the following memorandum relative to the venom of Naja lutescens, (Laurenti):-" The venom was carefully obtained, so as to avoid any admixture of saliva, by compressing the venomous glands. It issued from the lower aperture of the fangs in viscid drops of a syrupy consistency, and was received as it fell from the fangs in platina capsules. The serpents operated upon were an adult Cobra de Capello, and one of its varieties Naja Kaouthia, (apud Belanger). In every instance, the venom readily changed the blue of litmus to red, and restored the bright yellow of turmeric paper that had been reddened by the application of caustic alkali: an unequivocal proof of acidity. When left to spontaneous evaporation, it dried into a varnish resembling mucilage or the glare of an egg, cracking in all directions; and, on being heated, it deposited an abundant coagulum, apparently albuminous. In either instance, when re-dissolved, it retained its acid property. What the nature of this acid may be, it is impossible to determine from the small quantity operated upon; nor am I prepared to say that the poison itself is an acid, although, if it be not so, it is certainly associated with one. Most probably, from the rapid disappearance of its properties by keeping, the poison itself consists of some exceedingly unstable compound, which would be totally disorganized under any attempt at isolation by chemical means."*

Long previous to this, Dr. Cantor described the fresh poison of the Hamadryas as a pellucid tasteless fluid, in con-

case, Ranking, vol. xvi., p. 138. The *final* effect of Snake Poison is, doubtless, to destroy the vitality of the blood; but I think that, in our attempts to restore those bitten, we should be encouraged by the belief that, although a strong poison is circulating in the blood, that fluid retains its essential chemical and vital conditions up to, and *even after*, the moment of apparent death.

^{*} Catalogue of Reptiles inhabiting the Malayan Peninsula and Islands, by Theodore Cantor, M. D., Journal of Asiatic Society, vol. xvi., p. 1040.

sistence like a thin solution of gum arabic in water; and as slightly reddening litmus paper, which is also the case with the fresh poison of the Cophias viridis, Vipera elegans, Naja tripudians, Bungarus annularis, and Bungarus cœruleus. The same is the case with the poison of Elaps bivirgatus. In these observations the assertion of M. Schlegel* that the venom is neither acid nor alkaline is refuted. Dr. Cantor accounts for the mistake by supposing that M. Schlegel himself never had an opportunity of testing the poison of a living serpent; for, besides the five abovementioned genera of Indian venomous serpents, he found the fresh poison of different species of marine serpents (Hudrus) to possess the property of turning litmus paper red. The same fact with the Crotalus is noticed by Dr. Harlan, who says .- "The poison of the living Crotalus, tested in numerous instances with litmus paper, &c., invariably displayed acid properties."+

I am informed, by my friend the Revd. Thomas Smith, of a fact which is, at least, curious,—viz. that the snake catchers of Bengal appear to be all Opium Eaters; and that it is a popular belief among the natives that an habitual opium eater may handle venomous snakes with impunity. The point, of course, needs investigation; it, however, appears to have some significance when taken together with the fact, noticed by Dr. T. Anderson,‡ that several of the commoner narcotics have a kind of antidotal action upon each other.

^{*} Schlegel's erroneous observation is generally cited it will be found quoted in Taylor on Poisons page 574.

[†] Cantor, as quoted in the Penny Cyclopædia, article Naja.

[‡] Indian Annals of Medical Science for April 1855, p. 735.

ASPHYXIA.

STRANGULATION.

The practice of Thuggee, although now almost entirely suppressed by the active exertions of Government, could scarcely have been operative for so many centuries throughout the length and breadth of all India without leaving strong traces of its marked atrocities upon the criminal habits of the people.

The fighting Bishop of Bayeux, who preferred the mace to the sword, was scarcely more chary in the shedding of blood than is the Bengalee, when merely prompted by a calm intention to take life for his own advantage, without being goaded on by any urgent promptings of revenge or terror of detection. That is to say, he will rather use his hands or his cloth than his hussooah—unless he believes that the latter will be more effectual.

It is considered that Thuggee has prevailed in all parts of India ever since the first irruption of the Mussulmauns. The practice has been clearly described by most of the European travellers who visited this country during the seventeenth century, especially by Thevenot and Dr. John Fryer.* The

^{*} M. Thevenot's description of Thuggee, as practised on the road between Agra and Delhi in 1666, has been frequently cited. Fryer, who came to the country six years later, makes a very distinct allusion to Thuggee, at Surat, in the following passage. "They were fifteen, all of a gang, who used to lurk under hedges in narrow lanes; and, as they found opportunity, by a device of a weight tied to a cotton [?] bowstring made of guts (with which they tew cotton) of some length, they used to throw it upon passengers so that, winding it about their necks, they pulled them from their beasts, and dragging them to the ground, strangled them, and possessed themselves of what they had. One of them was an old man with his two sons, the youngest not fourteen. This being their practice, they were sentenced, according to the lex talionis, to be hanged; wherefore, being delivered to the Cutwal, or Sheriff's men, they led them two miles with ropes

first definite and full account of the Indian Stranglers was given, in 1820, by Dr. Richard Crozier Sherwood, a Madras Surgeon,* and the subject was taken up, at about the same time, by Mr. Shakespear, then Superintendent of Police for the Western Provinces. Subsequently, the investigations of Colonel Sleeman led to the exposure of the whole system, and to its almost entire suppression. The three most recent trials, for Thuggee, in Bengal, were held-one at Midnapore in September, 1852+—this, however, was merely supplementary to a trial held in 1838, and ended in the conviction of an aged Thug Jemadar of two murders committed many years previously,-another at Dacca in May 1854, where a man was found guilty of participation in two acts of thuggee about twenty years previously, t and the third at the same place in December of that year. The crime for which the prisoners were sentenced, was committed 14 years before. It was lately stated that, during the year 1854, only two

about their necks to some wild date trees. In their way thither they were cheerful, and went singing and smoking tobacco, the Banyans giving them sweetmeats. They being as jolly as if going to a wedding; and the young lad now ready to be tied up, boasted, that though he were not fourteen years of age, he had killed his fifteen men; wherefore the old man, as he had been the leader of these two, was first made an example for his villany, and then the two striplings were advanced, all as the rest were, half a foot from the ground; and then, cutting their legs off that the blood might flow from them, they left them miserable spectacles, hanging till they dropped of their own accord."

By the Mussulmaun Law, a person Strangling another, was not liable to suffer death, according to the doctrine of Aboo Huneefah, (though he was, in the opinion of the two disciples) unless he be notorious, for committing this offence; in which case [i. e., evidently of systematic Thuggee,] if he have not shown signs of repentance before he is apprehended, he should be punished with death as an example.—Sale, p. 269. So, also, a Strangler confessing his crime, or detected with the usual implements of strangling and stolen property, may be sentenced by the Imam to be beheaded and crucified, p. 328.

^{*} Asiatic Researches, vol. xiii, p. 250.

[†] Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 581.

[‡] Nizamut Adawlut Reports, vol. iv., p. 621.

cases of Thuggee occurred in the Punjaub.* The last conviction for Thuggee in the North-West Provinces, to which I find reference, was on the 11th June 1852, for a crime committed several years ago. It has already been shown, however, that the practice of *Thuggee by Poison* is still very generally prevalent nearly in all India.

It appears, from the accounts given by the above authorities, that, in Madras, two Phansigars (or Stranglers) were considered to be indispensable to effect the murder of every victim, and commonly three were engaged. The most frequent mode of perpetrating the act was by one of them suddenly putting the cloth round the neck of the victim and holding it, while the other end was seized by his accomplice; the ligature, crossed behind the neck, was drawn tight, the two Phansigars pressing the head forwards, while the third villain, crouching in readiness behind the traveller, seized his legs and threw him forward upon the ground. In this situation, he could make little resistance, and the man holding his legs kicked him until life was extinct. They generally buried the body, with its face downwards, in a sandy place or dry water-course, where the soil is dug with facility [at present, as we have already seen, by no means a rare mode of concealing the bodies of murdered persons in Bengal]. They often made deep gashes in the bodies, from the shoulders to the hands and to the feet, laying open the abdomen and dividing the tendon of the heel; wounds were also made between the ribs into the chest; and sometimes, if the hole was short, the knees were disjointed and the legs turned back upon the body. These precautions were taken to expedite the dissolution of the body, as well as to prevent its inflation which, by raising or causing fissures in the superincumbent sand, might attract jackals, and lead to the exposure of the corpse. When the body could not be readily

^{*} Friend of India, 23rd August 1855.

interred, it was tied in a sack and hidden, or was thrown into a tank or well. Forbes states that, during 1808 and 1809, no less than 67 bodies were taken out of wells in the single district of Etawah.

On account of the peculiar appearances presented by many bodies in India during the advance of decomposition, there is frequently some danger of the medical officer's assuming that the aspect of the corpse affords presumption of death by Strangulation,* and there certainly do appear to be one or two cases in the records in which it might be questionable whether an error of this kind had not been committed. Where the corpse is found in an attitude which seems to denote that death has come upon it by surprise,-with its arms thrown out and its fingers spread, its lower limbs widely separated and partially drawn up, its head lying back, its neck projecting and turgid with dark fluid blood, the mucous membrane of the larynx of a dirty red colour, the tongue protruded, bloody froth escaping from the mouth and nose, and bloody fluid from the eyes and ears, the eyes starting from the head, the scalp puffy and appearing, when cut into, almost like a bloody sponge,-it is not singular that the idea of Strangulation should first present itself in the Surgeon's mind. Standing alone, however, these signs go for nothing, when putrefaction has much advanced. They are merely the ordinary appearances in a rapidly decomposed full-blooded body, the head and shoulders of which have not been kept raised.

^{*} Especially if he bear in memory Shakspear's description of a strangled person.

His face is black, and full of blood;
His eye-balls further out than when he lived,
Staring full ghastly, like a strangled man:
His hair upreared, his nostrils stretch'd with struggling;
His hands abroad display'd, as one that grasp'd
And tugg'd for life, and was by strength subdued.

KING HENEY VI., PART II., ACT 3.

These appearances may be advantageously compared with those observed by Dr. James Anderson in the body of a strong, healthy young man, who was believed to have been strangled by two other muscular able-bodied men. The body was doubled up, the knees drawn up to the chest, there were numerous excoriations on the neck and chin, and deep broad marks round the neck. Ecchymosis was observed in several places under the skin covering the fore part of the chest. The vessels of the head were turgid with blood; a bloody froth was in the mouth and nostrils, the tongue was protruded, the lungs and right side of the heart filled with fluid black blood, and much ecchymosis was found in the cellular tissue in front of the neck. There was no mark of a rope round the neck, and no water in the trachea or stomach. Death was ascribed to Strangulation.

In 1825, Dr. Fuller, of Nuddea, reported his examination of the body of a Mussulmann woman. The eyes were somewhat protruded and very blood-shot; the lips swollen and darker than natural; the tongue slightly protruding between the teeth, and froth issuing from the nostrils. There was a mark behind the right ear, probably from the pressure of a person's knuckles. There were also three marks, apparently caused by the pressure of the ends of the fingers or knuckles on the right side of the neck; a similar mark on the right cheek, and two others on the left cheek, on a line with the lower jaw. Below these again, there were two similar marks, one very distinct, on the left side of the neck. There were several marks of scratches in front of the right shoulder, above the right breast; the pectoral muscle under this part was discolored, and blood was extravasated. This, he considered, might have been caused by a blow; or the pressure of a person kneeling on the part. The whole of the integuments of the head, face, neck and chest were darker than natural, and discolored underneath, particularly the scalp.

The brain was suffused by dark blood, the lungs gorged and dark, the bowels of a dusky red color. Hence Dr. Fuller inferred that the woman had met her death from Strangulation.

It is, of course, a matter of primary importance that the surgeon should be able to distinguish between Strangulation—(which is not often self-inflicted, and which very rarely occurs accidentally,—and then nearly always under circumstances which explain themselves)—and suicidal hanging. Our first step in obtaining this information is to become acquainted with the modes in which Strangulation is usually effected. The commonest modes of strangling now adopted in India appear to be as follow:—

Compressing the Throat with the Hands or with the assistance of the Knee or Foot.—Strangling with the Hands appears to be one of the most prevailing modes of killing children, with a view to stealing their ornaments, practised in Bengal. In a good many instances, as we have seen, the throat is cut, or the skull is fractured, or the victim is thrown into a well,—but the last appears to be practised more frequently towards Hindustan, where reservoirs of this kind are more common than in the south.

In very young infants, pressure with the hands is, of course, sufficient to effect the deadly purpose. The following illustrative case is selected from many:

In 1853, a woman confessed to having squeezed the throat of an infant four months old, which had been left in her charge by its mother; the child was found in the prisoner's arms injured about the neck, which was swollen and scratched, and had apparently been squeezed. The prisoner acknowledged that she was to blame, and that it was her fate to destroy the child,—which died in four hours. The Civil Surgeon declared that death was caused by pressure of some kind applied to the throat. It was decided by the Court that the

prisoner had probably intended merely to do such hurt to the child as would seriously alarm the mother.* In older children, however, a greater amount of power is generally employed; thus, in 1853, a woman confessed, at Cuttack, that two other women having stripped a child seven years old of her ornaments, and twisted her cloth round her mouth and tied her hands behind her, she upon compulsion, laid hold of the left hand of the deceased, while she held her own infant in her left, and one of her companions sat on the deceased's chest, while the other squeezed her throat with both her Hands, and she groaned and died.†

In 1805, one Sona Ghazee confessed that he had killed his mistress by seizing her by the throat, and holding her tight for nearly an hour.‡

Two men of Hurda, confessed that they jointly throttled to death with their Hands a person who had intrigued with the wife of one of them.

The following case appears to show that a single individual may be capable of inflicting the utmost degree of violence upon the throat of an adult, occasioning instantaneous death. In 1852, a man of 32 was convicted of attacking an old woman, seizing her by the hair, dragging her into a house, throwing her down, and stamping upon her throat, and violently wrenching and breaking her neck.

^{*} Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 222. See also another case in which a child of five months was throttled by its mother. N. A. R., N. W. P., May 6th 1853, p. 646.

[†] Ibid, vol. iii., part 1 1853, p. 227.

[‡] Macnaghten's Reports, vol. i., p. 60.—See also *Ibid*, 139, and vol. ii., p. 355. See also Nizamut Adawlut Reports, N. W. P., April 9th 1853, p. 519, and Nizamut Adawlut Reports, October 11th 1854, p. 441.

[§] Nizamut Adawlut Reports, N. W. P., December 9th 1853, p. 1467. See also these Reports for July 16th 1853, p. 866—(Three persons found guilty of throttling a man.)

Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 935.

In 1852, a man of Furruckabad, 18 years of age, confessed that, having discovered that his wife was unfaithful, he had murdered her by striking her on the face and neck with a koorpa. The Civil Surgeon found several incised wounds on the face. The windpipe and soft parts about the throat were also ruptured, and the Spine fractured a little below the head.*

I have met with only one suspicious case of fractured cervical vertebræ in this country. The injury was terribly severe, but the body was too much decomposed to admit of an opinion regarding the manner in which it had been inflicted.

One Dalla, of Bareilly, confessed, at the thannah, that he murdered a child of six by compressing his neck with his Feet. On trial, he declared that the boy was lying close to a wall, when he (prisoner) leapt down from the wall, and his foot fell on the neck of the child who died.† A boy of 14 was convicted, at Cuttack, as an accomplice in the wilful murder of a child of eleven. He said that he saw a person, whom he named, squeezing deceased's throat with both his Big Toes.‡ A woman of Jounpore confessed that she had killed a child eighteen months old, by placing her Foot on its throat.§

Dr. Duncan Stewart mentioned to me the particulars of a case which he was engaged in investigating several years since. An aged woman was found dead on her bed; suspicion arose; there was scarcely any external trace of injury, but it was found that one of the wings of the ossified thyroid cartilage had been broken and forced inwards, causing suffocation.

Nizamut Adawlut Reports, N. W. P., December 21st 1852, p. 1536.
 † Ibid, March 3rd 1855, p. 298.

[‡] Nizamut Adawlut Reports, October 18th 1853, p. 660.
§ Nizamut Adawlut Reports, N. W. P., March 29th 1855, p. 439.

It would not appear, from the records, that those very severe injuries to the neck, such as laceration of the muscles of the throat, rupture of the tracheal rings, &c. &c., occasionally observed in European cases of Strangling, are frequent in similar instances in India. I have more than once found traces of very severe contusion of the muscles of the throat; and the appearance of coagula in the trachea, in Dr. Leckie's case, will have been remarked. Still, whether owing to the employment of several accessories in these cases, or to the use of long soft cloths, which form a part of nearly every native's dress-or to a theoretical acquaintance with the practices of the Phansigars which must exist among all classes in India-it is certain that the rule which maintains that-"In Strangling, a much greater degree of violence is commonly employed than is necessary to cause Asphyxia,"*-will be found to have very numerous exceptions in this country.

Compression of the Throat with Sticks or other Solid Bodies.
—Allusion has already been made to this practice, which appears to be somewhat frequent in Bengal. In 1838, a Hooghly man, after having endeavoured to break off a criminal connexion between a person and his wife, discovered them together in an equivocal posture. On which he threw the lover on the ground, on his back, and then, placing a Stick across his throat, strangled him to death. Three days afterwards, he killed his wife, by placing his Foot on her throat, and threw her body before the police, who had come to arrest him for the murder of her lover.† In 1841, Mr. Dickson, of Gyah, gave evidence in a case where it was stated that murder had been committed by pressing the man's neck between two Lattees. Mr. Dickson thought that a mark

^{*} Taylor, page 661. † Police Report, L. P., 1838, p. 133.

found on the throat of the deceased was such as would have been produced by the pressure of a cord, in strangulation; but, the body being in an advanced state of decomposition, he considered that a mark caused by Lattees would not be different from that observed.

At the trial of certain ryots for the murder of a gomashta at Midnapore, in 1853, two of the prisoners confessed that they and others suddenly seized the deceased, threw him on the ground, beat him, and squeezed his neck between two Pieces of Stick, which caused his mmediate death. One of these Sticks was a split bamboo, three feet long and weighing about three pounds, the other was a close-grained-stick, three feet long, weighing about two pounds.*

In 1841, Dr. Duncan, of Chittagong, gave evidence in a case where it appeared probable that death had resulted from compression of the throat with a broad flat Stick, but the details are not sufficiently full to lead to any practical inference.

In 1846, the inhabitants of a village in the same district disturbing a stranger in the act of thieving, killed him by pressing a Bamboo on his neck. There were no external marks of violence.†

Two years later, three persons, of Chumparun, caught a man in the act of stealing two buffaloes, and tied him to a post, with the alleged intent of taking him to the thannah; but two of them, being enraged with him on account of previous acts of theft and intrigue, took him into a field, and there strangled him by compressing his neck between two Bamboos.‡

It appeared, at a trial at Tirhoot in 1853, that, a widow having become pregnant, several of her relatives took her and a woman who lived with her into a remote place

^{*} Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 12.
† Police Report, L. P, 1846, p. 3.
‡ *Ibid* 1848, p. 6.

whither two witnesses declared that they were attracted by hearing screams and saw both the deceased on the ground, each held down by three men, who strangled them by pressing Lattees across their throats.*

A similar crime was committed at Shahjehanpore (N. W. P.) at about the same time. The relations of a young woman, suspecting her of frailty, took her at midnight to the banks of a nuddee, where a man who had been guarding his field declared that he saw her lying on the ground, and each of two persons named pressing on different ends of a Stick placed across her throat.†

One of the murderers of a child of five, at Bareilly, confessed that he had pulled at the *Huslee* (silver ring) round the child's neck. Elsewhere he stated that he had filled his victim's mouth with earth and made compression on the throat with his fingers.‡

A girl of thirteen was found strangled in a field. The Civil Surgeon deposed that he found a mark extending round the neck, as if it had been tightly bound with a cord. The front part of the neck was much bruised, and the windpipe and parts within the throat were ruptured. One Mohun appears to have committed the murder for the sake of a silver Huslee which the girl wore on her neck. The injuries described certainly appear to have been such as might have been produced by compressing the girl's throat with the narrow edge of her Neck Ring.

In 1853, two persons were convicted at Behar, of strangling a youth of 14, for the sake of his ornaments, and of then dismembering and concealing the body. It appeared that one of the prisoners, a powerful man, was seen pressing the

^{*} Nizamut Adawlut Reports, 27th August 1853, p. 316.

[†] Nizamut Adawlut Reports, N. W. P., 17th January 1853, p. 63.

[‡] Ibid, 3rd March 1853, p. 311.

[§] Ibid, 13th January 1855, p. 42.

deceased upon the ground with the step of a ladder on his throat, while the other prisoner held him by the feet.*

Compressing or Tying the Throat with a Cord, Cloth or Stalk.
—In 1849 Mr. F. Henderson, then of Moorshedabad, examined the body of a Mussulman which was tied, head and knees together. There was also a thinner cord passed tightly round the throat, leaving its mark impressed on the skin. The face was livid and swollen; a little blood had oozed from the nostrils. The general appearance was that of a person who had died from Strangulation or Choking. There were no external wounds, or marks of beating.

Again, in 1846, Dr. Greig examined, also at Moorshedabad, the bodies of a woman and girl, in both of which there was a mark round the neck of a thin rope tied tightly in such a manner as to cause death by Strangulation. The rope still remained on the neck of the girl. There appear to have been no other outward traces of violence.† Five convicts of Midnapore Jail went out to work in charge of a Burkundauz. They attacked their guard in a lonely spot, tied his feet together, and his hands behind his back, and then strangled him by knotting round his throat old pieces of cloth and 'newar,' which they had used to support their irons. He was a powerful man and appeared to have resisted violently.

^{*} Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 54.

[†] Strangulation with a cord, Macnaghten's Reports, vol. i., p. 75.—See also a case in which a Hindu confessed to having Strangled a child with a cloth for the sake of his ornaments.—Ibid, vol. i., p. 41. A man of Shahje-hanpore was sentenced capitally for murdering a boy seven years old by tying a handkerchief tightly round his neck. He then threw the body into a well.* A man of Rajshahye having become jealous, apparently without just cause, of his wife, a girl of thirteen, knocked her down and Strangled her with a cord.† A lad of thirteen was murdered at Furruckabad for the sake of his

^{*} Nizamut Adawlut Reports, N. W. P., May 3rd 1853, p. 634.
† Nizamut Adawlut Reports, April 6th 1854, p. 449.

It was considered that the prisoners, who were much weaker men, attacked him when he had fallen asleep.*

In July 1854 one Bhowanee was capitally sentenced at Furruckabad for having, as he himself confessed, strangled his sister-in-law, aged 55 years, with a flexible twig tow from a dhak tree. The twisted stick was found on the neck of the corpse. He was supposed to have been aided by accomplices.†

The stalks of the *Urhur* dhal (what is called "pea mast" in England) appear frequently to afford a ready instrument for Strangulation in the North-West.

In 1854, a boy of seven was murdered at Shajehanpore, for the sake of his ornaments. The body was found in a field of *Urhur*, with a stalk bound tightly round the neck.‡

A boy of Jounpore was murdered in a precisely similar manner about two months subsequently.§

There is a distinct and very important class of cases in which the victim is Strangled after having been rendered insensible by Blows on the Head or by other means.

In 1841 Dr. Leckie, then of Bhaugulpore, examined the body of one Poorun. There existed extravasation of blood over the left side of the scalp. The left temple was considerably bruised externally, the inner surface of the scalp was generally of a red colour, and the blood-vessels were turgid. Marks of compression were observed on the front

ornaments. The body was found in a deep well with a tight cord wound twice round the neck.* A man of Cawnpore confessed that he and four others strangled a person by tying a handkerchief round his neck. The body was found in a well with a roomal tied round the neck.†

^{*} Nizamut Adawlut Reports, Novr. 24th 1854, p. 655.

† Nizamut Adawlut Reports, N. W. P., for July 1854, p. 105.

‡ Ibid, March 21st 1854, p. 301.

§ Ibid, May 6th, p. 478.

Nizamut Adawlut Reports, N. W. P., March 29th 1852, p. 226.
 † Ibid, Novr. 15th 1853, p. 1371.

of the neck, attended with slight extravasation of blood on the left side. The trachea internally was also injected, and contained a few loose clots of blood. Several bruises existed upon both arms, and were further marked by effused blood being found in the cellular tissue. Dr. Leckie was disposed to attribute death to the effects of Strangulation and the injuries above detailed.

The following case, by Mr. Alexander Grant, then of Bhaugulpore, affords a very demonstrative illustration. In 1845 Mr. Grant examined the body of a female, apparently 18 or 19 years of age, who was reported to have met with a violent death on the previous evening. The body was fresh, and lay in the cot in which it had been brought. The features were composed, the eyes half open, the lips livid, the jaws firmly closed, and the mouth contained a bloody saliva. The only mark of external violence was a dark horizontal line around the middle of the neck, as if a cord or bow-string had been tightly applied there. The lungs were crepitant, and of a reddish brown colour. When cut into, they were found filled with blood and froth. heart was healthy and its cavities filled with dark fluid blood. On making pressure on the lungs, a frothy mucus issued from the nostrils. The abdominal viscera were much congested, but their structures were healthy. The stomach contained a plentiful meal of undigested rice, which gave out no particular smell, as of opium or of alcohol; the mucous coat was injected equally with that of the intestinal canal and the womb. In the vagina was a copious purulent discharge. The bladder was empty. Upon removing the scalp, a broad circular patch of effused blood was observed over the right vertex, and a smaller one over the left vertex, while there was a similar patch over the upper and left side of the forehead. There was no fracture of the bones, but the contusions must have been inflicted with some blunt

instrument before life was extinct. The vessels of the brain were loaded with dark blood, but there was no great engorgement of this organ, the substance of which was healthy. The absence of any appearances of natural death, the evidence of her having taken a hearty meal a short time previous to death, the line round the neck, the marks of injury on the head, the condition of the lungs and other viscera, appeared to Mr. Grant sufficiently positive proofs of death from violence; and he was disposed to venture the opinion, that deceased was first stunned by the blows on the head, and then strangled by the application of a cord round the neck, and pressure by the hand on the mouth and nostrils. He was of opinion that, had not previous insensibility been produced, there would have been some external marks on her body to indicate her struggles. Any doubt as to suicide seemed removed by the contusions on the head, which could not, by any probability, have been self-inflicted, while the evidences of intoxication or narcotism were not present.

The details of the above case carry with them, in the most demonstrative manner, indications of the various points of inquiry which should be thoroughly made out by the Surgeon in every examination of this kind—viz. the evidences of death by Strangulation—the presence or absence of signs of drugging or intoxication—the existence or non-existence of traces of a struggle for life—and the appearance or non-appearance of injuries to the head sufficient to have caused insensibility.

A Mussulmaun of Dacca, having hired a boat, took a prostitute with her property on board, under pretence of taking an excursion. During the night, he made her drunk, strangled her, and threw the body overboard.*

^{*} Police Report, L. P., 1843, p. 40.

For cases illustrative of the crime of Strangling Persons while under the Influence of Drugs or Intoxicating Liquors,—See pages 101 and 139 of this Manual.

There occurs, in this country, still another very important and difficult class of instances, viz. those in which the individual having been Strangled, whether in a state of insensibility or otherwise, is Suspended by the Neck either immediately or after the lapse of an interval.

In 1852, a Hindu confessed, at Backergunge, that he and three others had committed the murder, by Strangulation, of a man, who had an illicit connexion with his sister, and of a woman who had given her medicine to produce abortion, and had published her disgrace. He avowed that they had thrown the man down, placed a bamboo across his throat, and pressed it down with their feet on each side until he died, one of them holding down the feet and legs, and another holding down his head by the hair; -they had afterwards killed the woman in the same way. That, having despatched both, they hung their bodies by ropes upon a mangoe tree, (where they were found next morning), that it might be thought that they hanged themselves. When discovered, the body of the man hung with the feet raised above the ground, the woman's feet touched the earth and were bent or doubled in consequence. When the Civil Surgeon examined the bodies, the circumstances of the case were not known. He appears to have reported that there was a mark all round the neck of each body, and a protrusion of the tongue, as if death had been caused by strangulation. This mark he considered, or at all events was understood to consider, was that of the rope, and he was of opinion that, in neither case, was this mark produced before life was quite extinct. If so, it was concluded, the woman must have been too far gone to rally, as her feet rested on the ground. One of the Sudder Judges remarked, that the

Medical Officer's opinion, if correct, would belie the confessions, and quoted Dr. Taylor's statement,* that ecchymosed marks may be produced on the neck of a dead body suspended soon after death, and the assertion of Merzdorff that it would be in the highest degree difficult, if not impossible, to determine medically, from an inspection of the body, whether a man had been hanged while living, or whether he had been first suffocated and hanged up immediately after death. He further quoted Beck, on the same subject, who holds, (page 628), that the ecchymosed mark is a decided proof of suspension during life, but, at the same time, quotes Orfila as unequivocally stating that, in twelve experiments on the dead body, some immediately after death, some after 6, 8, and 18 hours, the depression made by the cord and the skin under it, as well as the sub-cutaneous cellular tissue, presented precisely the same appearances as they do from suspension before death. From this he inferred that the appearance noted all round the neck was not inconsistent with the statements of the prisoners that they strangled the deceased first and then suspended them.

It does not appear evident that the Medical Officer's deposition belied the confessions of the prisoners, nor does any real discrepancy exist between the opinion of Beck, and that held by Orfila, Taylor, Devergie and Merzdorff. In comparing homicidal cases of Strangulation and Hanging with the results of experiment, a broad distinction must be drawn between real and apparent death. A person strangled, stunned, suffocated, or poisoned may remain physiologically alive for a considerable time, after all outward evidences of life have ceased. Indeed, physiologically, life is not absolutely extinct until the cessation of cadaveric rigidity, often at a period of many hours after the occurrence of apparent

^{*} Page 744. Fifth Edition.

death.* It is therefore probable that, all other circumstances being equal, the appearances of vital disturbance produced in the structures of the necks of persons strangled or hanged previous to death, and of bodies suspended at periods from five minutes up to the cessation of rigidity several hours after apparent death, would merely present a series of vascular changes gradually receding from the strongest to the least marked.

In 1853, a Hindu of Dacca, was found guilty of strangling his wife, and of suspending her body to a mangoe tree at the back of her father's house.

A man, of Mymensing, having intrigued with a widow, and not giving her sufficient means for her support, she complained to the village Punchayet, who decided that both parties should be beaten. The man was seized by his father and was struck several blows, but the woman managed to escape. The paramour, enraged at having been summoned and beaten before the Punchayet, pursued her with three of his relatives. On coming up with her, they Strangled her; and, Hanging her body on a tree hard by, reported that she had committed suicide.‡

In the same year, the father and brothers of a girl of Tipperah, finding her in company with a man with whom she was intriguing, seized the man and, holding him down by the neck, arms and legs, Strangled him. They then Hung up the corpse, and reported that he had destroyed himself.

^{*} This distinction is of very great importance, and full validity in a large proportion of medico-legal investigations involving an examination of the body—but any attempt to make use of it in cases of *Disputed Survivorship* would be evidently irrational and vexatious.

[†] Nizamut Adawlut Reports, vol. iii., part 2 of 1853, p. 107. ‡ Police Report, L. P., 1848, p. 33. § *Ibid*, p. 37.

A man of Serajgunge, having failed to persuade a woman with whom he had a liason, to break off the connexion, murdered her. There were several discrepancies in his own confessions, and in the statements of the only eye-witness—a boy of twelve—but it appeared probable that he had first compressed the woman's throat with his hands, until life was nearly extinct, and that he then Suspended the body to a tree.*

In 1854, a man of Jessore, after having brutally injured his young wife, Strangled her, and then Suspended her body by the neck to a tamarind tree.†

One of these cases occurred a few years since at Shah-jehanpore in the N. W. Provinces. Some persons having been employed by a spirit seller to pull down the shop of a rival dealer, knocked down the unfortunate Abkar, got on him, pressed his neck and Strangled him, and then Suspended him by the neck to a burgol tree close by. The evidence was, however, not thought sufficiently reliable to justify conviction.‡

Two men of Bareilly, confessed on apprehension, and before the Joint Magistrate, that they laid a plan to murder a person who appears to have intrigued with the wife of one of them. They threw him down, Strangled him with a rope, and then Suspended his body to a tree.

One Mohumda, of Dehra Doon, having been too intimate with the wife of a fakeer, but failing to persuade her to go to his house, Strangled her husband, probably with the woman's assistance, and Suspended his body to a beam in the house.

^{*} Nizamut Adawlut Reports, 22nd August 1854, p. 283. † *Ibid*, July 31st, 1854, p. 158.—Already cited at page 219. ‡ Nizamut Adawlut Reports, **N. W. P.,** 21st June 1853, p. 784. § *Ibid*, 6th July 1852, p. 635. || *Ibid*, 24th November 1852, p. 1371.

HANGING.

In India, as elsewhere, the Medical Jurist's opinion is especially called for, (1) in cases where bodies have been suspended after violent death; (2) in instances of suicide, and of (3) murder by Hanging; and (4) in cases of apparent drowning, &c. where it is questionable whether death has not resulted from homicidal Hanging.

- 1. Aware of the great prevalence of suicide by Hanging, the criminals of this country not unfrequently destroy their victims by blows, &c. and suspend them, with a hope that their deaths will be attributed to self-destruction. The foregoing remarks will show that the detection of such cases cannot always be easily accomplished. From time to time, however, collateral circumstances, the revelations of eyewitnesses, or the confessions of the criminals, have furnished us with nearly demonstrative instances of each description of crime.
- I. Hanging with a view to conceal Murder.—In January 1852, the body of one Hossein Buksh, was found hanging on a tamarind tree, just outside the garden wall of a person named Sheikh Mohasun, at Hooghly, the defendant in the trial which ensued. It was made out in evidence, with great clearness, that the deceased, led either by an intention to steal, or by a desire for revenge on account of an illicit connexion which existed between his wife and the prisoner,-made his way, late on the fatal night, into an upper room of the prisoner's house, armed with a hatchet. He struck at and slightly wounded his wife first, and then the prisoner, who, however, struggled with him and, aided by three of his servants, threw him down, and tied his hands with a rope. Nothing further was distinctly known until the body was found hanging, on the following morning, by the darogah, who had come to inspect the

premises, upon the prisoner's information that the deceased had entered his house with an intention to steal, and had, after wounding him, run away. Dr. Ross deposed that he saw the body hanging. The rope was tied to a lower and upper branch. [It appears that these two branches were more than three feet apart.] It could not have been adjusted by him in any other manner than by standing on the wall, from which he was too far. [The tree stood off three feet from the wall.] The place where the rope was tied to the two branches was inclining away from the wall, and away shortly from the trunk of the tree; the distance and the [intervening position of the] trunk of the tree rendered it impossible that the deceased could have tied the ropes himself. The only way that the hanging could have been effected was by others, either on the wall and tree, or on the tree only. There was a quantity of blood between the wall and the tree. Dr. Ross examined the body, and was of opinion, that death was caused by his being stunned or stupified by blows on the head, giving rise to profuse hæmorrhage, and by his being hung by the neck, while in that state of insensibility or stupor, until life was extinct. The marks on the neck showed that he was not lifeless when he was first suspended, but he must have been very near it, as the mark on the neck had not the perfect characteristic parchment-like appearance which invariably exists when death has occurred from hanging exclusively. The lungs and heart also did not exhibit the morbid signs which are the results of Hanging-there was no gorged state of the vessels of the lungs, and the heart was completely empty of blood. There were various marks, scratches and abrasions on the surface of the body, more particularly on the arms; the outer skin of the right wrist had been scraped off by some means, either by having been tied by a rope, or dragged over a rough surface.

The two first fingers of the right hand had been removed some years ago. The remaining stumps of the fingers were permanently bent towards the palm, and prevented the perfect antagonism between the thumb and the remaining fingers, so that he would be more easily overpowered by his assailants, and the same mutilation would prevent him from adjusting the rope with which he was hung with the accuracy observed.* The blanched state of the brain, the tongue and the gums, went far to prove that he was in too weak a state, from loss of blood, to have hung himself. The weapon which was probably employed was of a bluntish nature (if at all of a cutting character), as the wounds were much contused.†

^{*} A case which in some measure meets this particular point is cited by Taylor. A woman was found dead in her bed at the Hotel Dieu. with her head hanging out, and with a silk handkerchief carried twice round the neck, and then tied in front. In this instance, in which there could be no doubt of suicidal strangulation, the deceased had lost four fingers of her right hand, so that the member had been, from a very early period, of but little service to her; "Nevertheless," remarks Dr. Taylor, "She contrived to tie the cravat round her neck with great firmness and dexterity. It is easy to conceive that, had her body been found in a suspicious locality, a plausible opinion of homicidal strangulation might have been formed from the maimed condition of her hand. This case then," he adds, "will serve to teach us a proper caution in drawing our inferences as to what persons, labouring under any corporeal infirmity, are capable of doing, when they make attempts on their own lives," p. 750. See also the case of the Prince de Condé who, it was alleged, could not have hanged himself-on account of a defect in one hand which it was thought prevented him from tying the knots, (p. 740.)

[†] Nizamut Adawlut Reports, vol. ii., part 1 of 1852, p. 18. In the following case, there was certainly reason to suspect that the deceased was hung by others, but the decomposed state of the body rendered the proof of this defective. In 1843, Dr. Murray, of Beerbhoom, examined the body of a man in which he found great swelling of the temple and cheek extending to the ear, and very well marked behind the ear, over a space at least three inches long and about two inches broad. These parts were gorged with blood, which, in some places, was coagulated. The state of the brain was so altered as to

A man of Sylhet struck his wife with a piece of split bamboo about the body, for eating more than her share of pawn, until she died. He than Hanged her body on a tree.*

A man of Dinagepore, who had been in the habit of maltreating his wife, was stated by two witnesses to have shown them her dead body in his house, and then, with their assistance, to have carried it to the jungle and suspended it to a tree. He was acquitted.†

It appeared, in a trial at Moorshedabad, that a person was chased by others into a house, and that, immediately after their departure, he was found suspended by the neck to a beam with his toes touching the ground. The medical officer discovered no marks of violence, but stated that death resulted from strangulated hernia. The prisoners were found guilty of culpable homicide.‡

The wife of a man living in the 24-Pergunnahs, having a criminal intrigue with another Hindu, she and her paramour enticed the unfortunate man out of his house at night, killed him or rendered him insensible, (it would seem by severe blows,) and suspended his body to a tree.§

It appeared, in a trial at Cuttack, that a Hindu, charging another with theft, beat him to death. The man's body was

preclude an opinion as to whether it had or had not been injured. There was the mark of a rope round the neck. This, Dr. Murray believed, had been produced after death, because the skin was merely corrugated, and there was no injury to the superficial blood-vessels, soft parts, or windpipe nor any luxation of the spine. The tongue was [protruded?] between the teeth, but there was no swelling either above or below the mark on the neck, neither was there any congestion in any part of the head, except on those spots first alluded to as bearing marks of violence.

Police Report, L. P., 1838, p. 76.
 † *Ibid*, 1849, p. 29.

[‡] Nizamut Adawlut Reports, October 20th 1853, p. 684, already cited at page 221,—Note.

[§] Ibid, Novr. 18th 1853, p. 772.

afterwards found suspended, with marks of violence upon it, in such a position, as to render it evident that he had not hanged himself.*

I do not meet with the record of any instance in which a native was proved to have been Poisoned and afterwards Hanged, although this crime has been much spoken of (perhaps erroneously) and has been suspected in cases like the following:-In May 1854, Mr. Stuart, of Azimghur, reported that he had examined the body of one Soobhao, Chumar, and had found a mark round the neck; it was, however, only superficial, and he believed that the string was put on after death. The sub-cellular tissues on either side of the neck were perfectly natural. There was, indeed, no sign of strangulation, but the stomach and intestines. especially the inner coat of the former, were much congested and inflamed, as if he had died of poisoning. The stomach contained some dark fluid, which was forwarded to Calcutta for examination, but no poison could be discovered. I have more than once had opportunity of verifying Dr. Yeolly's observation, that the mucous membrane of the stomach is liable to be found much congested in death from hanging. Doubtless microscopical examination would enable us to distinguish this from the lesions produced by corrosive poisoning, and from the effects of decomposition.+

^{*} Nizamut Adawlut Reports, June 7th 1854, p. 697.

[†] A very singular case occurred at Burdwan in 1851. The wife of a Police Burkundauz was discovered hanging in a cow-house, but nothing could be elicited from any person. The Civil Surgeon deposed most positively that the deceased did not die, and could not have died, from hanging; but was unable to assign any cause of death. She was a young and healthy woman; the stomach was sent to Calcutta for analysis, but no traces of poison could be discovered. The father of the woman, who was in the house at the time, deposed that she had hanged herself. While the examination of the witnesses at the Magistrate's Court was pending, the body of the woman's father was found hanging in an out-house belonging to his son-in-

II. Suicidal Hanging.—This mode of self-destruction is very prevalent among the natives of Bengal. Of 21 cases of suicide in Calcutta investigated by Dr. Woodford, in his capacity of Police Surgeon, during the year 1850, ten were effected by Hanging.* Dr. Woodford remarked that, in suicide, the passion or rather the mania with natives is in favor of Hanging.†

In most cases of suicidal Hanging, by natives, very few marks of violence are discoverable. The only appearance worthy of remark, which I have noticed in any case of the kind, was an abrasion on the left side of the cheek and forehead, evidently caused by attrition against the perpendicular portion of the cord, which I observed in a young mallee (gardener) who had hanged himself, and which, at first sight, appeared like the trace of a blow. Dr. Woodford has remarked upon the determined manner in which these people often suspend themselves at no great height above the ground. I, some years since, found one of the Chittagong hill-men hanging by his dotee, the ends of which he had fixed, standing on tiptoe, to a bar above him; and had then

law the burkundauz. No one could or would say anything about him, except that he was found hanging and quite dead. The Civil Surgeon again deposed that death could not have been caused by hanging or strangulation. No traces of poison were found in the stomach,—and thus the matter remained. The husband had ill-treated his wife. It was conjectured that the man administered some vegetable poison to his wife, and then, with the assistance of her father, suspended her corpse; and, subsequently, when the case was coming on, fearing that the father might reveal the crime, he treated him in the same manner. Police Report, L. P., 1851, p. 61.

^{*} Bengal Hurkaru Medical and Scientific Gazette, June 14th 1851. It is not mentioned, however, whether the whole of these cases occurred in Natives.

[†] The Abbe Dubois, whose experience of native customs was chiefly gained in the Madras Presidency, says that it is the women chiefly who resort to selfslaughter in moments of despair, almost always brought on by the harsh and tyrannical manner in which they are treated. They put an end to their lives by hanging themselves, or plunging into a pond or river.

accomplished the act by bending his knees and falling a little to one side.

III. Murder by Hanging.—The perpetration of this crime is often suspected, but I cannot discover any instance where it has been clearly brought home to a prisoner in India. In the following case, however, there can scarcely be a doubt that it was actually committed. In 1826 a married female, from 12 to 14 years old, but arrived at the age of puberty, was found in her house, tied by a rope round her neck to one of the beams of the roof, with her feet upon the ground. One Abhursa was seen running from the house shortly before, out of breath, and much flurried. On the neck of the deceased were observed the marks of fingers, and of the nails also having been violently applied; and the witnesses deposed that from the appearance of the body, they had no doubt a rape had been committed. The prisoner contented himself by a simple denial of the accusation. It was decided, however, that the single circumstance established against the prisoner was insufficient to prove his guilt.*

A woman residing in the 24-Pergunnahs, was reported to have murdered her husband, with the aid of three men, by hanging him, in revenge for having beaten her and her paramour some days previously.

A notoriously bad character of Poorneah, discovering that his wife had intrigued with his nephew while he was in jail, taxed her with her crime, and deliberately hanged her.‡

IV. Cases of apparent Drowning. &c., where it is questionable whether death has not resulted from Homicidal Hanging.—Experience of criminal cases in all countries tends to show that the murderer is never satisfied with his work.

^{*} Macnaghten's Reports, vol. ii., p. 460. † Police Report, L. P., 1840, p. 121. ‡ *Ibid*, 1844, p. 22.

He can never boldly leave matters to themselves, in defiance of suspicion, but must do something, and generally does it with a marked singularity which attracts attention, and at once fixes the brand of criminality upon his act. He will not bury the body, lest the earth should burst or sink, or the grass should wither, or grow greener there than on other spots, or lest wild animals should burrow into it, or tear it up, or lest a train of insects should guide the avengers of blood to it,* or a torrent should descend and lay it bare. The cover of the thickest jungle will not conceal its stench from the birds and animals which will gather round it. † Every reservoir far and near, will be searched for it, weights will not keep it down in water; fish will collect and struggle above it, the next dry season may bring it to light; an eddy will mark where it lies sunk on the bed of the deepest stream. † A fatal blow has been struck,-he cannot throw open his doors courageously, and say-This man came to rob and wound me, or to outrage my feelings, and I struck him dead in self-defence or in sudden rage; -but he must take the body forth at night and hang it before his door, with the stamp of murder upon it; or he must try to burn it piece-meal in a stove or furnace, although he knows, professionally, that it would take cart-loads of wood to consume a human body,-and that with an odour which must tell the tale to every passer-by. He is not content to strangle his victim, and to cast his body forth where it would be doubtful upon whom suspicion ought to rest-but he must separate it limb from limb, and place each fragment where it must certainly be

^{*} See Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 228, already cited at p. 61,—Note.

[†] See p. 63.

[‡] The ideas alluded to here exist in the "Folk Lore" of most nations, and many of them are founded on correct observation.

discovered, and tell its own history. He knows that, when his cow or his goat dies in the fields, the jackals, and crows and vultures speedily devour it,—he, therefore, exposes his victim, in like manner,—when the wild creatures either avoid it or leave its wounds untouched. He deliberately murders in a manner which would make it appear that death was suicidal, and then hastens to undo his work, and to leave the evidences of murder clear and unmistakeable.

In the following case, although the prisoner was acquitted in the absence of certain proof, there could scarcely be a doubt that murder by Hanging had been committed, and that the body had subsequently been exposed with an intent to make it appear that death had occurred in some other manner.

In 1824 the body of a married girl, only 14 years old, was found on the bank of a pond, a short distance from her husband's house, "with the mark of a cord having been fastened round her neck, and with other marks of violence." Her husband, on being first apprehended, declared that his wife had eloped, and that he did not know what had become of her. He afterwards stated that the woman had hung herself in his house, and that he and his father, from fear of being brought into difficulty, concealed the circumstance and removed the body to the place where it was found the following day. It was proved that the deceased had been in the habit of leaving her husband's house and returning to that of her father and mother. This circumstance, it appeared, created great discontent towards her on the part of the husband and his father.* The judges of the Nizamut were

^{*} This is a very frequent cause of quarrels in native families, and has often led to murder. See the case in which a man slaughtered his wife, aged only 13 years, with a *dhao*, for going to her mother's house in contempt of his orders, (N. A. Reports, vol. iii., part 1 of 1853, page 393); and an instance in which the victim was 15 or 16 years of age, (vol. iii., part 1 of 1853, p. 64).

divided in their opinions upon this case; one of them confirmed the sentence awarded by the law officer of the Court of Circuit, but two others agreed with the Circuit Judge in acquitting the prisoner.*

It is not unfrequently inquired of medical officers in this country—whether persons, whose bodies have been discovered in tanks or ponds, have not been Hanged previous to submersion. A question of this kind was put to me by the Magistrate of Howrah last year. Decomposition in water, however, tends greatly to obscure the appearances in such cases.

Also a case of homicide arising from this cause,-Ibid, October 18th, 1853. p. 652. These cases are of very frequent occurrence in the N. W. Provinces, See Nizamut Reports of those Provinces, August 28th 1852, p. 936; October 30th 1852, p. 1269; March 5th 1853, p. 339; March 16th, p. 368; August 11th, p. 977; August 17th, p. 1002; September 9th, p. 1155 and 15th, p. 1162; and December 7th, p. 1145; July 1854, p. 99, and many other instances. The Abbe Dubois has explained the cause of these tragedies. He describes that, the marriage festival being over, the young wife is taken back to her father's house, which continues to be her principal abode until she has grown up into a state fit to discharge all the duties of matrimony. It is then notified that the girl has become a woman and is qualified to live with her husband, Then, after completing the ceremonies to which this occasion gives rise, she is conducted in triumph to the house of her father-in law, where she is detained for a while to accustom her to the society of her husband; and, after a month or two, her own parents return and take her home with them. The residence of the young woman is thus, for the first and even the second year, divided between the house of her husband and that of her father. This is accounted a mark of good understanding subsisting among them. Its concord is most probably soon dissolved, when the young wife, beaten by her husband, and harassed by her mother-in-law, who treats her as a slave, finds no remedy for ill-usage, but in flying to her father's house. She will be recalled by fair promises of kind treatment. They will break their word; and she will have recourse to the same remedy. But, at last, the children which she brings into the world, and other circumstances, will compel her to do her best, by remaining in her husband's house, with the show of being contented with her lot.

^{*} Macnaghten's Reports, vol. ii., page 350.

Signs of Death by Hanging.—I have carefully examined the bodies of seven persons who were known to have been Hanged, and about the same number of those found Hanging. Not having kept notes of these cases, I can only speak from the strong and distinct impression which they have left upon my mind. Under these circumstances, however, I cannot attempt to decide authoritatively upon the subject; the following remarks are, therefore, merely intended to suggest further investigation in a question of exceeding importance, nearly every detail of which still remains debateable.

It must be premised that all my experience in this subject results from the examination of the bodies of Natives who have died by Hanging. In these cases, three great drawbacks are frequently operative—(1.) There is rarely, in the ill-fed, spare-bodied, and generally more or less anemiated low-class native, that plethora and tendency to active hæmorrhage which so frequently determine the appearance of marked lesions from Hanging in the bodies of Europeans. (2.) The darkness of the native's skin in great measure conceals those delicate appearances of congestion, ecchymosis and abrasion in the track of the ligature and elsewhere, which often become useful guides in Europe. (3.) The bodies are frequently brought in an advanced state of putrefaction—a condition which nearly or quite destroys every known sign of Hanging.

It will be proper to notice the chief evidences of Hanging, seriatim.

Congestion of the Face and Scalp.—This is a very uncertain sign, will rarely be marked where the subject has not been exceedingly plethoric, and is often not distinguishable—especially, (as is generally the case) when the cord has been removed immediately upon discovery of the body—or where attempts have been made to resuscitate. In many instances of Hanging, where the noose is open, all return of

blood by the veins is not prevented; and, in cases where strangulation is complete, supply by the carotids is intercepted, and that by the vertebrals must speedily cease.

Meningeal and Cerebral Congestion and Effusion.—There is, probably, no pathologist in existence who can safely measure the degree of congestion presented by any brain in which neither inflammation nor sanguineous extravasation is present. The meningeal vessels of men and animals destroyed by hæmorrhage are not empty; and, in all cases of natural death, where the head is not kept raised, (which it never is in bodies brought in for inspection here), these veins will be found turgid. It is certainly unsafe to give an opinion, which may involve the life of an accused party, upon the authority of a mere guess. Dr. Taylor observes that the venous congestion of the cerebral vessels is rarely greater in Hanging than in other cases of Asphyxia. It has often been said of morbid anatomists that they never examine a body in which they do not find "the vascular points in the centra ovalia unusually numerous." Where the entire surface of the brain presents a decided pinkish hue, or blood has actually become extravasated, the evidence is of value-but these appearances are but rarely found as our guides in cases of Hanging. Romer (cited by Taylor) found apoplectic extravasation of blood only once in a hundred and one cases. Sir B. Brodie refers to two cases: Casper did not observe a single instance in a hundred and six cases.*

^{*} Dr. Kenneth Mackinnon has mentioned to me the particulars of a very singular case, in which there could not be a doubt that, quite unintentionally, stranglers saved their victim's life by cutting his throat! In 1835 a man travelling through Tirhoot fell in with a gang of Thugs, who strangled him. He became unconscious. Upon recovering his senses, he found that his throat had been cut, and that a fellow traveller lay strangled to death by his side. Mr. Charles Mackinnon met him on his way to Mozufferpore, attended to the wound in his throat, and recovered him in six weeks. He was able to give a description of the gang which subsequently led to their apprehension. Four of them

Protrusion of the Tongue and Eyes.—These appearances, when they are present, are, of course, merely due to congestion. I have never noticed marked protrusion of the eyes, and have never seen the tongue protruded, except where putrefraction was far advanced.* Where the tongue has been lacerated by the teeth, it affords safer evidence. Dr. Riecke noticed this in several instances.

Mark of the Cord .- In nearly all cases of Hanging, this mark is very distinct; but, unfortunately, it presents nearly the same characters when the body has been suspended shortly after death as it does after execution, or suicide by Hanging. It has already been noticed that, in this country, the mark is often attacked by ants. I lately found it very distinct in a woman who had attempted suicide; the line was perfectly defined, dry and condensed, slightly depressed, much darker than the adjacent skin, and harsh and branny to the touch, but there was no appearance of ecchymosis or exudation of blood from the surface. While the first edition of this sheet was going through the press, I examined what was alleged to be the trace of a thin cord by which a young female was suspended seven days previously. The line was very oblique, (corresponding with a noose, the knot of which touched the occiput,) and was clearly defined by the separation of the cuticle throughout its entire length, as if by the application of a blistering substance. A guarded opinion was given. I have since seen a similar line on the neck of a man who stated that he had been suspended for a short time. It has already been noticed that

were sentenced to death. It can scarcely be doubted that the violent measure of cutting the man's throat effectually relieved the vessels of his brain of any undue congestion which the throttling may have produced. The case is also detailed in the Bengal Police Report for 1836, p. 34.

^{*} Devergie found that there was protrusion of this organ in eleven cases out of twenty-seven.

this mark may be found clearly defined, with the cuticle adhering to it, after decomposition has advanced considerably. See page 19. Neither in suicidal Hanging, nor after execution, have I been able to detect any ecchymosis in the cutis or in the integuments along the course of this line. I have, however, seen the skin cracked in one or two places with a few points of bloody exudation. The beads worn by Hindus sometimes leave very distinct marks on the neck after death.

Ecchymosis of the Muscles.—This is frequently absent in cases when death is known to have resulted from Hanging, but I have occasionally met with it. Where the ecchymosis has been found excessive and out of the way of the cord, as near the chin or towards the clavicles, it has created suspicion of foul play. Still it is possible that, in suicidal Hanging, ecchymosis might be produced in any part of the neck by the shock of the fall and over-stretching of the parts. There are certainly many known exceptions to the rule,—still it obtains generally, and particularly in India,—that suicides effect their purpose with as little violence as possible.

I have never found any appearance of injury to the vertebræ or their ligaments in cases of Hanging.

Neither have I ever found any portion of the air passage ruptured, considerably displaced, or ecchymosed. The base of the tongue and glottis are usually livid in a marked degree, being almost of a violet hue (some stress should probably be laid upon this appearance, which deserves further investigation). The mucous membrane of the larynx and trachea is generally somewhat congested, but much less so than that of the glottis. The trachea very frequently, but not always, contains a small quantity of pinkish or brownish froth, made up of extremely minute air bubbles. Dr. Taylor thinks that this is only likely to be met with in cases where the obstruction to respiration has been incom-

plete. It has always appeared to me to be due to a few spasmodic efforts to carry on respiration below a nearly complete impediment. There is an appearance which I have never failed to notice in cases where the individual has been Hanged with a rope. This is an exudation of clear mucus from all the muciparous follicles of the larynx and upper part of the trachea. If the tube be slit up at the back and carefully opened, while any fluid that it may contain is allowed to flow downwards, the position of every follicle will be observed to be marked by a semi-globule, nearly as large as the head of a small pin. Hence the surface has nearly the appearance of the clearer kinds of white shagreen used for sword grips. This appearance was not perceptible in the air passage of a man who hung himself with a thick cloth. I am not able to state whether it is found after death from other modes of pressure on the neck. I have remarked it five or six times, in unmistakable cases of Hanging, and should be glad to learn that it had been further investigated.*

The uncertain character of the evidences of Asphyxia, as displayed in the thoracic organs, will be noticed under the head of *Drowning*.

In the present state of our knowledge, the most satisfactory evidences of Suicidal Death by Hanging in an ablebodied person are,—the presence of the characteristic oblique line and of one or more of the laryngeal and tracheal lesions noticed above, without any traces of stunning blows on the head, or marks upon the body of violent resistance, or evidences of the presence of poison or alcohol in the stomach. Extreme ecchymosis of the muscles of the neck is always suspicious; and fracture or lateral dislocation of the vertebral bones ap-

^{*} In a case like that of Governor Wall, in whom the trachea was inflexibly ossified, this appearance could not be expected to exist.

pears to afford certain evidence of homicide.* In addition to these, thoracic and cerebral evidences of Asphyxia, when existing in a very marked degree previous to the commencement of putrefaction, are of considerable, but secondary importance. Decided traces of cerebral hæmorrhage, when unattended with marks of blows on the head, or with evidences of any greater amount of injury about the neck than the cord would be likely to inflict, although rarely found, afford strong additional evidence of death by Hanging.

In all cases where it is alleged that a body has been found Hanging, or apparently strangled, with a rope, cloth, &c. around its throat, the police should be expected to send in the ligature with the body, for examination by the Medical Officer. Should the police find the body putrid, with the ligature still on, they should, on no account, disturb it. there be any reason to believe that life has not departed, the loop should be cut through, and the cord or cloth sent in, as removed, not doubled together or unfolded, but coiled in a covered earthen vessel, that the shape which it took upon the neck may be preserved, if possible. Except in sudden emergency, the knot should not be untied. Where the ligature has been taken off previous to the arrival of the police, those who have removed it should be expected to produce it. The darogah should also describe clearly, in his sooruthal, the manner in which the rope or cloth was attached to the neck, and (in cases of Hanging) how it was found or described to be fixed to the beam, branch, &c. Examination of the cord may often be attended with as important results as inspection of the body, -sometimes even more

^{*} Devergie, as quoted by Taylor, found the ligaments between the first and second cervical vertebræ ruptured once in 52 cases of Suicidal Hanging. M. Ansiaux found the posterior ligament of the spine ruptured, and the transverse ligament of the atlas stretched in the body of a female who had Hanged herself.

so. A person may have been strangled by a rope or cloth not sufficiently strong to suspend his body, or a ligature used in strangling-as a handkerchief, or short rope with ends which have evidently not been recently divided may be produced as the instrument with which Hanging was effected. Or a small cord may be produced in a case where the neck presents a broad depression, or vice versa. Or the rope or cloth may be sufficiently long and strong, but bear evidences of not having been used in suspending a body, (that part of the loop of a rope used in Hanging which has touched the skin is generally observed to be marked with a brownish line, corresponding with that on the neck, which would probably be found to be caused by imbibition of serum and perspiration, and by the adherence of portions of epidermis.) Observance of the following rules will generally afford us some aid in arriving at a correct conclusion in cases of Hanging and Strangulation.

The ligature and the mark on the neck should first be carefully examined and compared.

Search should then be made, by external examination and by dissection, for the traces of any injuries, apart from Strangulation or Hanging, not apparently self-inflicted, which may have been sufficient in themselves either to destroy life, to cause extreme weakness, or to occasion insensibility,—especially for traces of blows or wounds on the head or chest, or severe bruises on the back or limbs, or evidences of a mortal struggle with a powerful opponent.

It should then be carefully weighed whether any injuries which may be discovered may not have been self-inflicted; for example, small punctured wounds on the chest or abdomen, or slight or even very considerable wounds on the throat may, and not improbably have been inflicted with suicidal intent. A considerable incised wound on the throat of a person found hanged would generally afford

strong evidence that the individual had destroyed himself, as it would rarely happen that a murderer failing to accomplish his first purpose, would resort to another mode attended with greater difficulty. To this latter rule, however, the case already cited in which a man was first Strangled and then had his throat cut, must be regarded as showing the possibility of an exception.*

The evidences of poisoning, narcotism or intoxication should then be sought for. Here probability may be our only guide. The deceased may have been in the habit of eating opium, or may have been drugged and then Strangled or Hanged while in a state of insensibility; or, being distressed and impatient under the slow and painful operation of an irritant poison, he may have Hanged himself. It is, however, very improbable that a criminal having administered an irritant poison, should be unwilling to allow it to work out its effects, and should proceed to Hang his victim while living, to Strangle him or to destroy him by other violence. Taylor cites a case, by Foderé, in which it was discovered that the death of a person found Hanging was occasioned by poison. It is not mentioned, however, whether the poison used in this case was narcotic or irritant, or whether the death was believed to result from suicide or murder. Neither is it easy, in a body found Hanged, to decide that death resulted from poisoning. It is evidently just at the time when the agony produced by the action of a strong irritant poison had become most intense, (when all the appearances of inflammatory action would have become fully developed in the stomach), that a person bent upon suicide would be likely

^{*} See also a case in which a woman's throat was cut, she having first been rendered senseless by strangulation—Police Report, L. P., 1849, p. 35.

[†] Perhaps the only recorded exception to this is found in the well-known case of the Marchioness de Ganges.

to Hang himself. The body of a person so poisoned may, however, be suspended after death.

Search should then be made for marks of Strangulation, should these be distinct and be attended by bruises, stabs or incisions on the body, the question lies between suicide and homicide; where, however, there are traces of stunning blows on the head, the case is probably one of homicide.

The body of a person accidentally Strangled may, however, present scratches and other marks of attempts to extricate himself; but these are not likely to be very severe as, in most cases of accidental Strangling, consciousness must be destroyed suddenly.

Where distinct evidences of Strangulation and Hanging are found together, the case must have been homicidal.

SUFFOCATION AND SMOTHERING.

A case involving more than one important medico-legal point with reference to the investigation of death by suffocation, was tried at Moradabad, in 1854. One Mulhooa was tried for the murder of his wife. It appeared that the woman was loose in her conduct, and had been detected by her husband in an intrigue shortly before her death. He took her to her parents, and on the night of his return home with her, a verbal altercation occurred between the couple, on the following day the woman died. Nothing whatever was known of the circumstances attending her death,-she and the man were alone. Her husband reported at the thannah that she had died of cholera. As deaths by cholera are not usually reported, the report excited suspicions, which led to the apprehension of the prisoner. In the Judge's Court the man changed his statement, and asserted that his wife died by poisoning by opium; the evidence of the Sub-Assistant Surgeon who examined the body was positive that death was not caused by cholera, dysentery, diarrhœa, or poison, and that all the appearances on the post-mortem examination denoted death by Suffocation. The Judges of the Superior Court remarked, that the medical testimony (upon which almost exclusively the prisoner's conviction had been found by the Sessions Judge.) could not be considered perfectly conclusive as to the cause of death, though it, doubtless, pointed strongly at extinction of life by Suffocation. The Sub-Assistant Surgeon was certain, from the appearances which he observed in examining the body, that death was not caused by cholera, and "strongly suspected" that it was caused by Smothering. The internal organs, lungs, stomach, &c., were in a healthy state, but congested. There was no external mark to denote Suffocation, which, it was conjectured, might have been effected by pressure over the mouth. It did not appear that the Brain had been examined at all, which would appear to have been a rather material omission. The Civil Assistant Surgeon, (whose opinion on this evidence was called for by the Court,) deposed that assuming the correctness of the Sub-Assistant Surgeon's description of symptoms, he could attribute death to no other cause than Suffocation, but was unable to say "with certainty" that death was so caused. The Judges noticed that if death were caused by homicidal Suffocation at the hands of the prisoner, it would most probably have occurred at the time of the ill-treatment, and not after the lapse of a considerable interval; whereas all the witnesses referred to the quarrel of the evening before, and the woman's death to the following day. They believed it to be certain that most individuals would have it in their power, (unless greatly incapacitated by disease or intoxication, and this young woman was declared to have been in full health and strength,) to offer to such a mode of attack a degree of active resistance likely to leave on their persons undoubted evidence of murderous violence having been resorted to.

When asked if he found any indication of poisoning either by a mineral or vegetable substance, the Sub-Assistant Surgeon answered (referring to the stomach and its contents,) in the negative. He stated his perfect conviction that she did not die from any poison; "there was no inflammation or ulceration of the coats of the stomach or intestines." It was, however, they remarked, observable that some of the appearances mentioned, viz. the right cavities of the heart filled with dark fluid blood, the left side empty, lividity of skin, internal organs congested, though healthy in structure—seemed to be very similar to the post-mortem appearances of death from opium as described in Taylor's Medical Jurisprudence.*

In not a few cases, the Medical Officer being convinced with regard to the cause of death omits to examine the intestinal canal. I could cite more than one instance of this kind, in which the question—was death caused or accelerated by Cholera, has tended to unsettle the medical evidence, and to shield a criminal who could scarcely have hoped to escape punishment under this often-repeated plea.

A case illustrative of this point was tried at Goruckpore, in 1854. It appeared, from the statements of three witnesses to the fact, and of the accused herself, that she kicked a child, aged ten, once in the side or stomach—that she did not lay her hands on the child, and that the child did not fall on receiving the kick. The father of the child deposed that his daughter came home to him at the time stated, and, after telling him that the prisoner had beaten her, fell down and died. The sooruthal, bearing the date of the child's death, describes a black mark, or bruise, on the right side, which

^{*} Nizamut Adawlut Reports, N. W. P., 27th May 1854, p. 586. See also an interesting article by Mr. H. J. Carter, of Bombay, on The Remarkable Pulmonary Congestion attending Poisoning by Opium. Trans. Medical and Phys. Society of Bombay, 1848, p. 25.

the witnesses to that document verified in the Foujdaree Court; though, at the Sessions trial, they professed to think it was only a mark caused by the dhotee. The Civil Surgeon, however, stated that there were marks of Strangulation on the neck and throat, but no marks of kicks; that congestion of the brain had been caused by Strangulation; that death from Suffocation must have been immediate; but, if caused by a kick, some internal injury of the spleen or other organ would have been visible, which was not the case; but that, in either case, the deceased would not have been able to get up and walk [?] It was mentioned by the Superior Court, that it would have been more satisfactory had the Civil Surgeon been interrogated as to the actual appearance of the throat, with reference to the marks of Strangling, as he spoke only of injuries about the throat, gullet and neck. The Judges of both Courts believed that the child had not been killed by a kick, and that the story of the sudden blow had been trumped up to turn aside the legal inquiries regarding the cause of her violent death.*

Many cases will be found in the criminal records—especially in those of the North-West Provinces, in which death was caused by forcing Cloths, Earth, &c. into the Mouth. In some instances, at least, this would appear to be done with an intention to stifle the victim's cries;—still, where death results from so cruel and reckless a form of violence, it is doubtful whether this plea should be held as mitigatory.

One Ramchurrun, of Goruckpore, was found guilty of rape upon a girl of eight. The child, who appeared to understand the obligation of an oath, declared that the prisoner threw her down, and filled her mouth with Sand.†

A boy, apparently only twelve years of age, but shrewd

^{*} Nizamut Adawlut Reports, N. W. P., 23rd November 1854, p. 743. † *Ibid*, 20th October 1853, p. 1318.

and intelligent beyond his years, was convicted of having robbed a child of four of her ornaments, after having filled her mouth with Mud and nearly strangled her. The child was found in a field, with her mouth filled with Earth and with the marks of fingers on her neck. She afterwards said that the prisoner had thus maltreated her.*

A very young man of Mirzapore was sentenced to death for murdering a boy of twelve for his ornaments, by filling his mouth with Mud. The Civil Surgeon deposed that the cause of death was, in his opinion, Suffocation and consequent congestion of the brain, produced by the mouth and air passages of the deceased having been filled with Mud, whilst he was alive.†

A lad from thirteen to fifteen years of age, was sentenced, at Agra, to transportation for life for having robbed a girl of four, his near relative, of her ornaments after having filled her mouth with *Bhoosa*. The Civil Surgeon deposed that death had been caused by Suffocation, consequent upon the mouth of the deceased being filled with *Bhoosa*.‡

One Bhageeruttee, of Goruckpore, was sentenced to death for the murder of a boy of nine for his ornaments. He confessed before the Deputy Magistrate that he put a Cloth in the child's mouth, and, seizing his throat, had choked him.

An old woman of Tirhoot finding a little girl of six, digging up some grain from her field, felled the child with a heavy clod, and then Suffocated her by pressing her Clothes against her mouth until she ceased to breathe. She then stripped off the clothes and ornaments and buried the corpse.

^{*} Nizamut Adawlut Reports, N. W. P., 24th May 1853, p. 697.

[†] Ibid, 15th September 1852, p. 999.

[‡] Ibid, 23rd January 1852, p. 51.

[§] Ibid, 11th February 1853, p. 208.

^{||} Police Report, L. P., 1843, p. 8.

A Bustamee of Rajeshahye, who lived alone, and had the reputation of possessing some money, was found dead in her house, with a Cloth suffed into her mouth. The murderer could not be discovered.*

DROWNING.†

In Bengal, where a tank adjoins nearly every dwelling, and where passage across the wider rivers, in small and ill-constructed boats, is extremely perilous during a great part of the year, cases of accidental Drowning are, of course, frequent. Even in the Hooghly, near Calcutta, it is no rare thing, in the rains, to bear of the loss of a ferry-boat, containing some

See also a case given at page 102 of this Manual in which there was reason, to believe that two women of Benares were Burked.

† By the Mussulmaun Law, if a person immerse an infant or an adult into water from which there is no prospect of his escape by swimming; as, for instance, in the sea, he is not liable to retaliation for wilful homicide, according to Aboo Haneefah, (as no wounding instrument is used): but the two disciples and Shafijee maintain that he is. All agree, however, that it is manslaughter only, if there be not water enough to endanger life, without swimming; or if the person thrown into the water be capable of swimming, and his arms and legs be not bound nor a weight tied to the body and the place be such that he may escape by swimming. The same difference of opinion exists between Aboo Haneefah and his disciples, if the person were drowned from being repeatedly immersed in water till he died. Aboo Haneefah held that, homicide by Drowning being of rare occurrence, the deterring from it, by capital punishment, was of less consequence than with respect to prevalent offences.

^{*} Police Report, L. P., 1844, p. 21. See also a case detailed in note to p. 93. It will be borne in mind that there are several recorded instances in which Suffocation by forcing Cloth, &c., into the fauces, was Suicidal. In addition to those cited by Taylor, 5th ed. p. 766, one of an artillery soldier under treatment in hospital, where he had previously attempted to throw himself out of a window—who destroyed himself by thrusting a Linen Compress into his throat while he was under the close observation of a special attendant may be mentioned. Amer. Journal of Medical Science, July 1854, from Prag. Vierteljahrset, 1853, 2 Bd., p. 111.

twenty Natives, of whom every soul has perished. The number of children Drowned in tanks every year must be almost incalculable.

It appears, at first sight, very singular how many bodies of adult natives are found in tanks, without any strong suspicion of suicide or murder. It is generally believed, by persons of the lower classes, that those who perish in this manner have fallen victims to Epilepsy (Mrigiroga-commonly expressed Mrigi) under Demoniacal Influence. When, however, it is borne in mind that every Native literally passes a certain definable portion of his life in the tank nearest to his dwelling, and that bathing is going on in every tank, at nearly all hours-before sun-rise, when the water is extremely cold,—and during the heat of the day, when the rays of the vertical sun are nearly all reflected from the polished surface of the water,-it is scarcely singular that some should be attacked with cramp or coup de soleil while bathing; and that many bathers should die suddenly, from natural causes, where visceral disease has long been steadily progressing, and merely requires some exposure or cause of internal congestion to determine the fatal issue.

It appears to be generally believed that where, as not unfrequently happens, persons die suddenly on the margins of reservoirs, and are found lying, with their heads in the water, they have fallen epileptic. This may be the case in certain instances, but it is probable that, when occurring towards mid-day or in the afternoon, these are generally cases of sun-stroke, or heat apoplexy. The pathology of this disease has still, in great measure, to be investigated.* Dr. Russell found, in examining the bodies of several men

^{*} Of late considerable additional light has been thrown upon the subject, in a very elaborate memoir on Insolation, or Heat Apoplexy, published by Mr. Marcus Hill in the Indian Annals of Medical Science, for October 1855.

who were struck down by intense heat, that, in all, the brain was healthy, no congestion or accumulation of blood being observable; although there was a small serous effusion in one instance. The lungs, however, were, in all these cases, congested, even to blackness, through their entire extent; and indeed, so densely loaded, that complete obstruction must have taken place. There was also an accumulation of blood on the right side of the heart, and in the great vessels approaching it. In two cases which I had an opportunity of examining, carefully, during the last hot season, I found appearances similar to these, except that there was no overdistension of the right cavities of the heart. Had one of these men been found dead in a tank, these evidences of Asphyxia might, not unreasonably, have been attributed to Drowning. The bodies of persons sinking in the water under such circumstances would, however, be expected to present certain of the signs of Drowning in addition to these. The subject is one of great importance, and deserves fuller investigation than it has hitherto received.

Still it rarely happens that the bodies of persons thus dying, are brought to the Civil Surgeons for examination, except in cases where death has occurred under manifestly suspicious circumstances, as where the corpse is discovered in a well; or is found in a reservoir with traces of wounding or other violence; or has been sunk by weights, &c., in an unusual manner; or, having been for some time missed, is believed to have been unfairly dealt with.

More than one judicial officer, especially Mr. Sconce of Chittagong, and Mr. Alexander of Howrah, has expressed to me surprize and suspicion at the extraordinary number of deaths alleged to have occurred from *Mrigi* in persons whose bodies have been found in tanks. The latter gentleman informs me that, when he first went to Chumparun, he was astonished at the number of persons reported daily to

have died from Drowning in different tanks in the district, owing to dizziness or swimming in the head, called "Mrigi." The persons so dying were principally women and female children. It struck him as suspicious that so many should be carried off daily in this manner. He therefore issued positive orders that all the bodies should be brought in for post mortem examination;—upon this, the reports decreased wonderfully. He believed that many of the persons reported to have died in this manner had been made away with. This class of cases assuredly still demands a rigorous inquiry.

There is one set of cases, if not of Drowning, certainly of immersion and of choking with mud and water, which are of great and fatal prevalence among the Hindus inhabiting the entire length of the Gangetic valley, but which do not, at present, come within the power of Police interference. I refer to the exposure and destruction of the sick on the banks of the river-or the practice of Ghat Murder as it is now generally termed. It is held, in the Agni Purána, that "those who die when half their body is immersed in Gungá water, shall be happy thousands of thousands of ages, and resemble Brahma." Consequently, it is the practice to bring those whose cases are by their ignorant Kobirajira declared to be hopeless, to the banks of the river; and, as life appears to ebb, to plunge the lower part of the body into the stream. The effect of this practice, especially at night and in the cold season, is selfevident. Some months since, being in the habit of landing at one of the ghats to which the sick are brought, I actually, without lingering for a moment, saw two persons expire in this manner in the course of a single week. A very few years since, it was the practice to fill the mouths of these unfortunates with water until they were stifled.*

^{*} Calcutta Review, December 1848, p. 431, from which most of these particulars are derived. See also Ward's Chapters on "Funeral Rites" and "Public Morals"; and McCosh's Topography of Assam, page 111.

murderous habit is strictly a portion of the rite, but it is supposed to have been abandoned by Hindus of the better classes. Among the more ignorant and bigoted, however, it, doubtless, continues prevalent.

In the Report already noticed, Dr. Woodford shows that, out of 21 suicides which came under his notice in Calcutta, during the year 1850,—six were cases of Drowning. There are only two cases of Accidental Drowning, noted in Dr. Woodford's table, but this merely represents the small number of bodies recovered.

The atrocity of Sacrificing Children by Exposing them to be Drowned or to be devoured by Sharks or Alligators as offerings to the Goddess Gunga was formerly prevalent at Hurdwar, Saugor Island, Bansbaryah, Chaugdah, and other places on the Ganges. Full references to this atrocity and to the regulations which were issued to check it, will be found in Beaufort's Digest,* and in the Revd. Mr. Ward's Work.†

The practice of Destroying Children by throwing them into Wells is one of considerable prevalence. Its commission is probably determined by the fact that many children are accidentally Drowned in these reservoirs, and that the murderers trust, on this account, to evade suspicion.

In 1845, a Behar woman, having long had a quarrel with two other females, inveigled a child of each into a field where there was a large well. She made them sit down and pick each other's hair, and, finding an opportunity, threw them in. One of them was saved.‡

In June 1853, a Hindu woman was tried at Bhaugulpore, for the murder of her male child, five or six months old. She was seen at night near a well and something was heard to

^{*} Paras. 2889-91, p. 535. † Vol. ii., p. 122, Third Edition. ‡ Police Report, L. Provinces, 1845, p. 13.

drop in; suspicion was excited, and she was questioned, but evaded answering; early next morning, the well was searched and the child's body found; the well belonged to one Fukeer Chowkeedar, who was proved to have been on the spot when the body was taken out, but who, for some unexplained reason, reported at the thannah that the child had died a natural death. The woman pleaded guilty, and stated that, not having milk for her infant, she threw it into the well. She was proved to be in very indigent circumstances, and not to have had milk for her infant. One of the witnesses to this effect had been the temporary wet-nurse to the deceased, and had given it milk late in the evening of the day of its death. On being sent into the sudder station, the body was found to be too much decomposed to allow of examination. The Civil Surgeon, however, recorded, that there were no external marks of violence, and that the skin had not the appearance of that of a Drowned person. This ignorant, simple woman's evident poverty, and want of sustenance for her child, were humanely taken as extenuating circumstances, and she was sentenced to imprisonment for life.*

In November 1852, a Hindu woman was tried at Shaha-bad, for Drowning her two children—five and two years old, in a well. The bodies of the children having been found, and the Darogah knowing the well to be considerably raised from the ground, sent for the prisoner's brother-in-law, who admitted that, on the night before the occurrence, there had been a quarrel between the prisoner and his wife, and that it was supposed that the prisoner had, in a rage, thrown her children down the well. The prisoner at first declared that the children had fallen into the well accidentally; subsequently, she confessed the deed, stating that, on the morn-

^{*} Nizamut Adawlut Reports, vol. iii., part 1 of 1853, page 807.

ing after her quarrel with her brother-in-law's wife, when she awoke, she felt so aggrieved, that she took the children to the well and threw them down! She further declared that she first placed her little girl on the edge of the well, when she fell in, and afterwards her boy, who fell in also, she turning her head away; and, on being asked why she did this, she said that her fate was broken and her heart suggested the deed. The evidence of the Civil Surgeon showed that death was caused by Drowning. The only circumstance which seemed in any way to explain her act was mentioned by the woman with whom she had quarrelled, who said that her mother had died of eating opium, and that it was supposed that, when her spirit visited (or, as the witness described it, mounted on her,) she was fierce and quarrelsome. Sentence of death was passed.*

^{*} Nizamut Adawlut Reports, vol. ii., part 2, 1852, p. 789. Crime of this description is by no means rare among the natives; and was formerly much more so than it is at present. It will be found in Beaufort's "Digest," that several instances having occurred in which persons were convicted of putting their children to death from an impulse of passion, with the intention of revenging themselves for a real or supposed insult or injury offered to them by another person, under the idea that the guilt of shedding the blood of the innocent victim, would lie on the head of the person offering such insult or injury; proclamation was made throughout the Ceded Provinces, declaring that any person who should be capitally convicted of putting to death his or her child or children, or of putting to death any other child or person, in consequence of a real or supposed insult or injury, should invariably be punished with death (Para. 2893, p. 536, C. O., Nos. 42 and 55 of vol. 1.) The practice however, has been merely checked. In 1817, a Hindu was found guilty, at Etawah, of bringing his infant daughter before the door of a person who had beaten him, and of wounding her with a kuttar (or dagger) and throwing her down as dead "under the mistaken notion that the guilt of her innocent blood would lie on the head of his enemy," Macnaghten's Reports, vol. i., p. 340. In 1853, a Hindu, at Moorshedabad, who had engaged in a violent quarrel after drinking, brought out his child, only 23 days old, and killed her by dashing her on the ground that his opponent might suffer in consequence .- (Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 521). Only a few months

This is a common crime in the North-West Provinces.

In August 1854, a Hindu woman at Jaunpore, drowned her female child, a year and a half old, in an indara, apparently to revenge herself upon her husband who had slapped her face.*

Mussamat Neemia drowned her child three years old in a kua tank, without any discoverable motive. The case was very carefully weighed by the Judges of both Courts. No suspicion whatever of insanity existed. About a month previously to the murder, she became the mother of another infant. It was doubted whether she had been the subject of puerperal fever (Mania?) but the relatives stated her to have been in good health at the time, and about her usual work. (She may have been apparently in good bodily health and yet have suffered from puerperal Mania,) she was sentenced to imprisonment for life.†

since, a Hindu, at Shajehanpore murdered his wife, a child only eight years old, while she was sleeping, to revenge himself upon his father-in-law,-(Nizamut Adawlut Reports N. W. P., August 1854, p. 222.) In 1845, a woman of Tipperah whose husband had married a second wife, which led to constant disputes, concluded an altercation by returning to her room and murdering her own child as it lay asleep upon her bosom .- (Police Report, L. Provinces, 1845, p. 40.) See also three very remarkable instances of homicide committed upon this principle, by Brahmins, toward the end of last century, in Sir J. Shore's paper "on Some Extraordinary Facts, Customs, and Practices of the Hindus," Asiatic Researches, vol. iv., p. 336. Some mitigation of these crimes may, possibly, be found in the gross ignorance and superstition out of which they spring; but no palliation of this kind can be admitted in the case of a Mussulmaun woman, who was sentenced, upon her own confession, at Beerbhoom, in 1851, for murdering her deaf and dumb son, aged 6 years, by cutting his throat with a bhattee, or coarse knife, and throwing him into a tank, with an avowed desire of bringing a false accusation of murder against her paramour, who had abandoned her .- (Nizamut Adawlut Reports, vol. i. of 1851, p. 515.)

^{*} Nizamut Adawlut Reports, N. W. P., for the above date, p. 298. See also Nizamut Adawlut Reports, vol. ii., p. 375. (A woman in a sudden fit of passion, threw her child into a well, where it was drowned.)

[†] Nizamut Adawlut Reports, N. W. P., 9th January 1852, p. 16.

Mussamat Guadawa, of Jaunpore, having been abused and beaten by her husband, she left his house and threw her son, a child of two, into a well, where he was drowned.*

Shortly afterwards Mussamat Munnee, of Allygurh, having quarrelled with her husband, murdered her daughter, aged two years, by throwing her into a tank.†

In that part of the country also women thus ill-used or offended very frequently throw themselves and their infants into wells. The females are often rescued—the children generally perish.

Mussamat Bisoonee, of Jaunpore, had a quarrel with auother woman, (the females had been intriguing with each other's husbands,) and threw herself into a well with her girl, a month old, in her arms. She was taken out alive, but the child perished. The next day, the other woman also threw herself into a well, but was brought out living.‡

A remarkable case of suicide and murder occurred at Rungpore in 1854. It appeared that two sisters-in-law, Mussamatans Kaootranee and Panbee, whose husbands ill-treated them, went at midnight to a tank, carrying with them the infant of the former, twelve months old. One or other of them cut the child's throat, both then threw themselves into the water. Panbee was drowned; the other's heart failed her, and she crept out.

Mussamat Rabee, a Mahratta, of Saugor, exasperated in a dispute with another female about a trifling debt, jumped after dark into a well, with her infant, aged eighteen months, in her arms. She was extricated alive, her infant was drowned.

^{*} Nizamut Adawlut Reports, N. W. P., 16th July 1853, p. 871.

† Ibid, 18th October 1853, p. 1301.

‡ Ibid, 10th December 1852, p. 1469.

[§] Nizamut Adawlut Reports, 28th October 1854, p. 521.

Nizamut Adawlut Reports, N. W. P., 4th May 1852, p. 392.

Gureebinoa, of Azimgurh, on being abused by her husband for not having his food ready, ran with her infant in her arms to a brick well, and threw herself and child into it. As she fell, the child slipped out of her arms and was drowned, but the villagers hearing her cries, came and rescued her.*

Mussamat Doorga, of Muttra, enraged at being refused food by her mother, left the house and threw herself and her infant girl into a well. She herself was brought out alive, and apparently uninjured. The child was drowned.†

Mussamat Nawuleea, of Muttra, quarrelled with her husband's brother, and threw herself into a well, where there was deep water, with her infant daughter. She supported herself by swimming, but the infant was drowned.

Children are often Drowned for the sake of their Ornaments.

—In 1806, a Brahmin of Alligurh was found guilty, upon his own confession, of murdering two children, by throwing them into a well, after robbing them of their ornaments.

Adults are not very unfrequently Drowned in Wells.

In 1851, a Hindu was sentenced to death, at Purneah, for killing his wife by throwing her into a well. The darogah

Nizamut Adawlut Reports, N.W.P., 8th July 1853, p. 829.
 † Ibid, 3rd March 1855, p. 302.

[‡] Ibid, 11th November 1854, p. 694. See also Nizamut Adawlut Reports, vol. ii., p. 55. (A mother convicted of throwing herself and her two children into a well, causing the death of the younger child, apparently under the influence of sudden anger, excited by an altercation with her husband.)

[§] Macnaghten's Reports, vol. i., p. 102. See also Reports of N. W. P., 25th February 1852, p. 133. (A boy of six robbed and drowned.)—Ibid, 1st December 1852, p. 1423. (A boy of nine made away with in the same manner.) Ibid, 8th October 1853, p. 1282.—(A similar case,) p. 226, and for July 1854, pp. 11 and 54, (by a boy ten or twelve years of age.) In August 1854, Ibid, p. 266, a man sentenced for throwing his newly-married wife, a child of eight or nine years, into a well, after having stripped off her clothes and ornaments—Nizamut Adawlut Reports, vol. iv., pp. 59, 192, 293.

reported that, upon raising the corpse out of the well, in which there were six feet of water, it exhibited a black mark, as if from the blow of a lattee, on her right side; another on the right fore-arm, as if from drawing a cord; a third, eight fingers in length, from the top of the shoulder to the neck, apparently the brand of a hot iron; a fourth, also of a burn, from the throat, extending over the shoulder, fourteen fingers long.*

Again, in 1852, a Hindu of Shahabad, was sentenced for having murdered a boy four or five years of age, and for having attempted the life of the child's mother, by throwing them into a large well about 35 feet deep.†

Doojah, of Shajehanpore, confessed that, finding his elder brother's wife in criminal connexion with a person named, he pursued her and threw her into a well, where she was drowned.‡

It was lately reported that a native woman had fallen into a well in Calcutta, and had drawn in and drowned a man who attempted to save her.

The reports of the North-West Provinces are replete with instances in which persons have been Murdered and Thrown into Wells, and many have been cited in this Manual. This, we have already seen, was a frequent practice among the Thugs.§

^{*} Nizamut Adawlut Reports, vol. i. of 1851, p. 1512. † *Ibid*, vol. ii., p. 2 of 1852, p. 500.

[‡] Nizamut Adawlut Reports, N. W. P., 18th April 1854, p. 424. See also P. R., L. Provinces, 1844, p. 13, (a reputed witch thrown down a well). *Ibid* for 1849, p. 19, (a wizard treated in like manner).

[§] See page 56. In addition to the cases in which the bodies of murdered persons were thrown into wells, which were afterwards filled up,—see two others, Nizamut Adawlut Reports, N. W. P., 13th November, 1854, p. 711, and Police Report, L. P., 1845, p. 31. Col. Sleeman mentions that, during the scarcity of 1833, the bodies of two hundred people in a village in the Jaunpore District were thrown into one large well which was then closed. For additional cases of persons murdered and then thrown into wells, See

It does not appear that, in falling into these wells, the bodies of the victims generally receive fractures, or other very severe injuries, which might lead to doubt in the Surgeon's mind with regard to the cause of death. There are two kinds of wells,—the k u a, or well of small diameter, and the wide-mouthed well or bricked reservoir (indara.) The bodies of those who fall or are thrown into the former are, of course, more likely to present traces of contusion, &c. Where, however, a dead body or an infant is merely dropped in head foremost, and is not thrown with a forward impulse, no injury beyond those received by contact with the water can be expected to result from the perpendicular fall.*

A few months since I was sent for to see the remains of an European, who had fallen head foremost into a well in the yard of a reputable inn, near Calcutta. He had drank rather freely, and left the billiard table where he had been playing at night, making his way to a corner of the compound where the well was. The mouth of the well was about four feet across, and was surrounded by a parapet about a cubit above the ground. He appeared to have stumbled upon this low parapet, and to have struck his forehead upon the sharp edge of the opposite margin of the mouth of the well. He was found almost immediately afterwards, his head and shoulders immersed in the shallow water and the mud. He was brought up quite dead, the stunning blow on the head and the position of the body having, doubtless, hastened suffoca-

Nizamut Adawlut Reports, N. W. P., 22nd September 1852, p. 1053. (A person killed by fracture of the skull and thrown into a well,) and the 1st November following, p. 1277. (A woman's head being severed, the body cast into a well.)

^{*} Magistrates may compel the owners of tanks or wells adjacent to any public thoroughfare to fence them in such a manner as to prevent danger. Police Officers are to ascertain, from time to time, the state of public wells without proprietors, and to report when they are insecure, with a statement of the expense required to make them secure. Beaufort, 2457 and 2463.

tion. It is singular that, among the many recorded cases which I have read of persons being thrown into wet wells Up-country, I have only been able to find one in which it appeared that severe injury was noticed to have resulted from the fall.* Here, a boy having been robbed of his ornaments and thrown into a well, the witnesses observed a scar on the head, which was considered to be owing to the body having struck against the sides of the well. The Surgeon, however, stated that death was owing to suffocation by drowning, and that he did not observe any external signs of violence.†

In another case, a boy of eleven, robbed of his ornaments and thrown into a well, was drawn up severely bruised, and with his arm broken. It is not mentioned, however, whether the well was wet or dry.‡

On the other hand, the Reports contain numerous remarkable instances in which persons thrown into wells were preserved almost unhurt.

^{*} A boy of ten, who was robbed of his ornaments and thrown into a dry well, was killed by fracture of the skull.—Nizamut Adawlut Reports, N. W. P., September 1st 1853, p. 1068.

[†] Nizamut Adawlut Reports, N. W. P., October 8th 1853, p. 1282. ‡ *Ibid*, Feby. 21st 1852, p. 128.

[§] See Police Report, L. P., 1848, p. 9. (A boy thrown into a well by a robber, seized a tree growing out of the brick-work of the well, screamed for help, and was rescued,—Nizamut Adawlut Reports, N. W. P., September 3rd 1853, p. 1113. (An old woman robbed of her ornaments and throwu into a well. The water being unequally deep, she escaped.)—Ibid, October 3rd, of the same year, p. 1228. (A boy of twelve robbed and thrown into a well. The thief threw a heavy stick down at him, this the child accidentally seized, was supported by it, and saved.)—Ibid, October 3rd, p. 1238. (A hump-backed man, while stooping over the brink of a well, was pushed in from behind. He fell head foremost. The water was deep, but he got upon the wooden framework or wall, which encircled the water and supported the sides, whence he was rescued,)—Ibid, January 14th 1854, p. 25. (A girl of twelve, having been robbed of her necklace was pushed into a well. She sunk, but rising again, clung to some shrubs and weeds growing out of the sides of the mud until she was rescued,)—Ibid, March 23rd 1855, p. 381. (A

Allusion has already been made to the frequent commission of deliberate murder by children of tender years.

The following cases of Drowning by young girls, require more especial notice here.

In 1810, one Mussamat Odhaneah, a girl only nine years and four months old, was convicted, at Alligurh, of having drowned a child in a nullah not more than a span deep, and for stealing the ornaments worn by the deceased.*

In 1852, a married Hindu girl, of Hooghly, "only twelve or thirteen years old," was left by herself in charge of an infant a month old. The mother of the infant not returning when she was expected, the girl appears to have carried the child about four miles, and was seen on the way patting it and endeavouring to soothe it. Its body was afterwards found in a tank, without any traces of blows, having evidently died from drowning. It was thought probable that, in

woman of eighty, travelling with two men who carried her property, was told to look into a brick well, where she would see the deity Sheo. She did so and was thrown in. She fortunately clung to a brick and supported herself in the water, which was eighteen feet deep,)-Ibid, July 6th 1852, p. 633. (A feeble woman, stating herself to be aged 80 or 100 years, robbed of her ornaments and thrown into a well, supported by clinging to the branch of a tree,)-Ibid, March 30th, of same year. (A girl of ten was robbed of her ornaments and thrown into a well. The water was ten cubits deep, but the bore being very narrow, "the child struck across it by her shoulders and feet, her back only getting wet." The witnesses, however, stated that, when she was got up, she was insensible, and did not recover till she had been warmed before the fire,)-Ibid, October 22nd 1852. (A girl of eight was plundered of her ornaments, had a handkerchief tied round her neck, and was dropped into a well, "but the knot had been unloosed by the water," [?]; "and, whether owing to the air in the handkerchief and clothes, or whether the child, in her simplicity, being not aware of her danger of drowning, placed herself on her back, she did not sink, and was brought up, uninjured,)-Ibid, May 16th 1854, p. 546. (A woman thrown into a well by her paramour, saved by clinging to a brick.) It is somewhere mentioned of Jung Bahadoor, I believe by Mr. Oliphant, that, aware of a custom which the Nepaulese have of dropping people into wells, he practised the art of falling into those reservoirs with impunity.

* Macnaghten's Reports, vol. i., p. 213, previously cited.

her weariness and despair at the infant's fretfulness, she had thrown it into the tank. The child had not worn any ornaments.*

Drowning by Homicidal Violence is by no means so rare an occurrence now as it appears to have been in the time of the Mussulmann Law-giver.

In 1853, a Hindu woman of 70, and a boy of ten or twelve years, were convicted of having stifled a child of eight years old in a shallow ditch, (probably by placing a hand over his mouth and nose and sinking him in the water,) and robbed him of his ornaments. The Medical Officer found, "the lungs distended with air, the blood-vessels gorged, and the right side of the heart full of blood," whence he deduced that the death was a violent one, and was probably caused by suffocation, but the decomposed state of the body prevented certainty. There were no external marks of violence. the state of the body prevented certainty.

^{*} Nizamut Adawlut Reports, vol. ii., part 2 of 1852, p. 467.

[†] The ordeal of suspected Witches by Water, by the Rajpoot Bhoomeas, deserves attention in illustration of this subject. The rules, which appear to be carried out with a precision which would have delighted Hopkins the Witch Finder, are described as follows by a writer in the East Indian Army Magazine for October 1854 .- "The suspected person is confined up to the neck in one side of a common canvas pack-saddle, and in the other side are sewn up two and a half cakes of cow-dung; the whole is now thrown into a deep pool, and, should the unfortunate woman sink, she is sometimes saved ! but, if she unfortunately floats, she suffers the fatal penalty of her supposed crime. A still more cruel ordeal is for a man to drag the woman into deep water, where he supports himself by the aid of a strong bamboo, another person on the bank fires an arrow, and, on its leaving the bow, the man leaps on the woman's back and presses her under; if she continues below the water until the arrow is brought back to the archer, she is no witch; but, should her struggles or any accident bring her to the surface before that time, she is considered guilty, and adds one more victim to the number sacrificed to this deadly superstition." This is also a Bengalee mode of ordeal.-Ward vol. i., Ed. of 1822, p. 55.

[‡] Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 634. See also

In 1843, a woman and her paramour were condemned, on their own confession, for the murder of the former's husband, having twisted his cloth round his mouth, and killed or drowned him in a ditch containing three feet of water, the deceased being a weak man.*

Three boys driving their cattle into the Soane for water, saw a person, who was afterwards proved to be a bad character and a thief, lay hold of a traveller in the midst of a piece of dead water, and, tripping him up, hold him under till life was extinct.†

A Rajshahye man confessed that, having abducted a married woman, he sat down with her on the river side, and she refused to accompany him further-saying that, if he accompanied her to her father's house, the inmates would not receive her; if she became a boistumee, and went with him he would desert her as soon as his wife was old enough to cohabit with him; and that, if she returned home, her husband would cut off her hair and nose. He was to go by himself,-as for her it was better she should die. That, not being able to persuade her to go on, and, on her saying that he might strike or kill (mar) her, he got angry, seized her by the hand, and, dragging her to the river, forced her into the water, in a place where the depth was up to the knees, and with his left hand held her hair, and with the right on the back of her neck kept her head under water till she died. He then lifted up her body, and, finding that she had ceased to breathe, he left the corpse in the water and went home-taking with him her ornaments and the things she had given him. ‡

similar cases—Macnaghten's Reports, vol. i., p. 76, and Nizamut Adawlut Reports, vol. iii., part 1, p. 197.

^{*} Nizamut Adawlut Reports, vol. iii., part 1, p. 192.
† Police Report, L. P., for 1843, p. 13.
Nizamut Adawlut Reports, 30th November 1854, p. 69

[‡] Nizamut Adawlut Reports, 30th November 1854, p. 694.

A man of Baraset, walking along the banks of the river with a person who had seduced the wife of one of his relatives, dragged him into the water, and held his head under until he was dead.*

A Sylhet man having had intercourse with another's mistress, the injured person waylaid him on the banks of a jheel, and, aided by others, bound him hand and foot and threw him in.†

Several persons of Jaunpore, were capitally sentenced for murdering two men, one of whom they severely wounded and then bound and threw into a *nullah*.‡

Mussamat Mykeea, of Shahjehanpore, was convicted of the murder of a girl ten years of age, by drowning her, after tying her hands with a rope made of bukhela grass, after which she took the silver ornaments from the body.§

Cases are of rather frequent occurrence in Bengal, in which persons are knocked down either in the shallow water of irrigated or flooded paddy fields, or in the small pools which so abound over the whole country, and die either from the effects of the blow, or from Drowning while in a stunned condition. More than one of these cases was brought to me for investigation at Chittagong, but the bodies were so much decomposed, that I could form no opinion from them of the cause of death .- Two chuprassies attached to the G. T. Survey began to catch fish in a hole, about eight feet square, with a foot and a half or two feet of water in it, the surface of the water was about the same depth below the level of the ground, and a small bund of the earth thrown out rose about the same height at the edge. The owner of the pool interfered with them. One of them struck the man with a cane stick, the other with his hand, and knocked him into the

^{*} Nizamut Adawlut Reports, 1850, p. 63. † *Ibid*, 1848, p. 35.

[‡] Nizamut Adawlut Reports, N. W. P., 5th August 1853, p. 955.
§ Ibid, 24th November 1854, p. 752.

hole. Several very unintelligent witnesses saw the occurrence, and stated that the chuprassies held the old man down with their lattees:—running up, they saw the chuprassies take the man out in a dying state. The Assistant Surveyor considered it impossible for a man to be drowned in the hole by two others holding him down with the canes produced in court. The medical officer found the body too much decomposed for examination. The only fact proved, therefore, was that the deceased was struck, fell into the pool and died.*

It by no means very rarely happens in this country, that persons are more or less completely Strangled, and then thrown into wells or tanks. Cases of this kind may, of course, call for very careful discrimination on the part of the medical jurist.—Chyetunno, Christian, and Mussamat Dungun Mallah, of Backergunge, were sentenced for the murder of a girl ten or twelve years old, married about a year previously, to the male prisoner, who had for some time cohabited with the female prisoner, his brother's widow; each of the prisoners accused the other of throttling the poor child, whose body was found in a hole with shallow water. The mouth was full of blood, blood issued from the nose, and those who observed the body, saw black marks on either side of the gullet. The medical officer received the body when it was too putrid for examination.†

A delicate looking girl, from thirteen to fifteen years of age, was sentenced at Jaunpore to imprisonment for life, for strangling a young boy, the son of her husband's former mistress. The body was found in a well. There can scarcely be a doubt, judging by the confessions of the prisoner, and another woman her accomplice, that the boy's neck was compressed. The Civil Surgeon considered that his death

^{*} Nizamut Adawlut Reports, November 3rd 1854, p. 528. † *Ibid*, October 11th 1854, p. 441.

was caused by Drowning; the boy might, he thought, have been thrown into the well before he was quite dead.*

In a country traversed by many large and rapid rivers, into which it is customary to throw the corpses of a large proportion of the poorer inhabitants, it would be expected that the bodies of murdered persons would very frequently be made away with in this manner. Doubtless, there occur many instances of the kind which never come under the notice of the authorities; and several cases are given in the Reports, in which bodies were thus disposed of. The recorded instances are also not unfrequent in which the bodies of murdered persons have been sunk, not only in tanks but in rivers, either by fastening the limbs to some weight at the bottom,† or by attaching to them bags of earth or bricks (stones not being common in Bengal,‡ or by tying large gurrahs (earthen vessels) round the neck or waist.§

^{*} Nizamut Adawlut Reports, N. W. P., January 5th, 1853, p. 15.

[†] Nizamut Adawlut Reports, vol. i. of 1851, p. 661. And Macnaghten's Reports, vol. ii., p. 163.

[‡] Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 406—and two other instances. Also Calcutta Police Report for 1852, p. 5, (body sunk in a tank.)—Nizamut Adawlut Reports N. W. P., for July 1854, p. 107, (body sunk in a well.)

[§] Case reported by Mr. Hutchinson, of Shahabad, in 1844. A similar case has occurred under my own notice. See also,—Police Report, L. P., 1838, p. 71, a man murdered and his body sunk in the river, with pots filled with sand fastened to his waist.) *Ibid* for 1845,—(the body of a woman believed to have been murdered, found sunk in a tank with pots of earth fastened to it.) Nizamut Adawlut Reports, December 3rd, 1853,—(body of a murdered man found floating in the river, the hands and feet tied together with a rope which was twice tied round the neck, reaching to the waist, where it was also tied twice round, and a *gurrah* attached to it.) *Ibid*, March 2, 1855, p. 304,—(the skeleton of a murdered man found sunk in a river by means of koolsees filled with sand.) Nizamut Adawlut Reports, N. W. P., July 23 1852, p. 727,—(a headless body found in a river, the hands and feet bound with ropes, and four large gurrahs attached to sink it.)

The fact of a body being found sunk in a river with earthen vessels or other weights attached, or secured to a stake, cannot however, in the absence of other evidences of crime, be considered as proof of homicide. The bodies of the poor Hindus are generally sunk in this manner.*

Formerly suicide was frequently committed in this manner; and, although under the control of our Government, these practices have been greatly checked, still it is probable that no ancient superstitious custom has or ever will become entirely extinct in India. If, however, a body be found sunk in this manner in either a tank or a well, it must be certain that either murder or suicide has been committed. I have not met with any instance in which a person seeking self-destruction in one of these reservoirs attached weights to his body. In such cases the manner in which the rope is tied, should be carefully scrutinized. In examining the body of a woman found sunk in a tank with gurrahs attached to it, I felt convinced that it was in the last degree im-

[‡] Ward says, that the poor of Bengal "throw the body into the river, or fasten it with a stake and cord by the side of the river, or tie a pan filled with water to the body and sink it." The same author states, upon the authority of a modern Hindu historian, that Kasum Allee Khan threw Raja Rajubullubhee and his son into the river, with vessels of water fastened to their necks. He also mentions that a friend of his saw sixteen females drown themselves one morning at Allahabad, each had a large empty earthen pan slung by a cord over either shoulder; a brahmin supported each as she went over the side of the boat, and held her up till she, by turning the pan aside, had filled it, when he let her go and she sunk. While Dr. Robinson resided at the same place, twelve men went in boats to drown themselves in the same spot. Each had a piece of bambu fastened to his body, at each end of which was suspended a large earthen pan. While these remained empty, they buoyed them upon the surface of the water, but each man with a cup, kept filling the pans from the river, and as soon as they were full, they dragged, their victim to the bottom. Ward also relates the instance of a devotee who drowned himself near Nuddea, by sinking himself in mid-stream with pans fastened to his neck and waist."

probable that the strong knots with which the rope was tied round her waist, could have been fastened by herself.

A very common practice prevails among criminals in the N. W. Provinces, of sinking bodies of murdered persons enveloped in blankets, cloths, and bags. It would appear that the corpse is tied up to render its conveyance more easy, and that it is recklessly thrown into the water without removing the covering. This unguarded course, however, frequently leads to detection.*

There are so many exceptions to the rule that the bodies of Mussulmauns are buried, and that those of the poorer Hindus, having been partially consumed or scorched, are thrown into the river, that it would be difficult to point to any circumstances which should give a suspicious character to the discovery of the body of an unknown native, left on the bank or floating upon the surface of an Indian river, unless there were evidences of its limbs having been tied during life. All of the very poorest natives, Mussulmauns as well as Hindus, dwelling on the banks of the large rivers, unhesitatingly commit their dead to the stream, whenever they are unable to incur the expense and trouble of burial or incre-

^{*} Nizamut Adawlut Reports, N. W. P., 10th February 1852, p. 110-(A man beaten and throttled to death his body tied up in a sheet and thrown into a tank.) July 20th 1852, p. 689-(A man strangled, his body carried to the river wrapped in his own doputtah.) Ibid, February 4 1853, p. 153-(A man strangled, his body wrapped in his own blanket with a large stone, and sunk in a nuddee.) Ibid, May 17th 1853-(A man killed by injury to the head, his body tied up in a cloth with a view to taking it to the river.) Ibid, July 16 1853, p. 866-(A man strangled, his clothes rolled tightly round his arms and legs, before throwing the body into the river.) Ibid, October 20th 1853, p. 1311-(A girl hacked to death, the body first buried, then disinterred, wrapped in a sheet and thrown into a tank.) Ibid, December 8th 1853, p. 1451-(A man's throat cut, his body wrapped in a blanket and thrown into a well.) Ibid, April 28th 1854, p. 451-(A man strangled with a cotton rope, his body wrapped up in a blanket and thrown into a well.) Ibid, January 8th 1855, p. 21-(A woman strangled or hanged, her body placed in a pote and thrown into a well.)

mation. The strict rule of the Hindu Shastras enjoins that lepers (whose absolution is not performed by their sons), those who die by accident or suicide, and those who, renouncing their families, become mendicants, should not be burnt after death.* Adherence to these rules, especially in the cases of those who commit suicide or are accidentally killed, (who cannot "be thrown into the desert like wood," as the Shastra commands) would lead to the submersion of a great number of suspicious bodies. Fortunately, however, it rarely, if ever, happens that such corpses are brought from the river for medico-legal examination.

A few brief additions may be made to the rules for the investigation of cases of supposed Drowning, laid down by the European medico-legal authorities, to illustrate the proper mode of inquiring into such cases in India.

Dr. Taylor remarks that, "If, in examining a body taken from water, we discover traces of mortal disease, or marks of external violence sufficient to destroy life, then there is always room for suspicion. Why the body of a person, who has really died from natural causes, should be afterwards thrown into water, it would not be easy to explain; but we can readily appreciate the motive where murderous violence has been used."†

This rule, it will be observed, applies here to bodies found in tanks, lakes, wells and rivulets, but not to those discovered in the Ganges and its tributaries.

External appearances.—The very characteristic pallid condition of the bodies of Europeans recently drowned is, of course, not recognizable in natives; it might be noticed in persons of high caste and light complexion, but the hue of the low caste native's skin only appears darker after death. Neither can any discolouration of the lips of these people (short of extreme congestion) be at all received as a guide.

^{*} Calcutta Review, September 1851, p. 223.

The tongue is generally described as being "swollen and congested, frequently pushed forwards to the internal edges of the lips, sometimes lacerated by the teeth," (Taylor—p. 675). I have not observed very extraordinary congestion of this organ in cases of drowning—it will, doubtless, be most marked in very plethoric subjects. Mr. Bishop* found, in the body of a female, which had been in the water about an hour and a half, that—"The tongue was neither swollen nor indented, but pallid."

Brain,-Allusion has already been made to the danger of grounding a medico-legal opinion upon observation of the fulness of the cerebral and meningeal veins after death from Asphyxia. Dr. Taylor remarks-" That a congested state of the cerebral vessels is often met with in the bodies of the drowned, is a fact which cannot be disputed; but the same degree of congestion is observed, not only in other cases of Asphyxia, but also in the inspection of bodies where death has proceeded from various causes unconnected with cerebral disturbance"-(p. 666.) In the case of adult females, Mr. Semple found the cerebral vessels nearly empty.† Apoplexy. the result of mere congestion, is a very rare occurrence in drowning. Dr. Taylor has only met with reports of two cases. A rather obscure case was reported in 1844, by Mr. Macnash, of East Burdwan, in which the body of a healthy female child, found in a tank, presented no trace of external injury, except a slight and apparently accidental scratch on the neck, but internal examination showed that death had been occasioned by apoplexy, as a considerable quantity of blood was found effused in the brain. He considered that suffocation by Drowning might have produced this appearance.

In 1834, I assisted in examining the body of a sailor who fell into the sea from the yard-arm vertex downwards.

^{*} Quoted by Dr. Taylor, p. 681. † Lancet, May 1841, and Op. Citat, p. 682.

This accident happened, if I remember rightly, in the Mediterranean; he survived it several weeks, although with severe cerebral symptoms, and died in Haslar Hospital. We found very extensive effusion of blood beneath the arachnoid of both hemispheres.* Injuries of this kind are only liable to occur in India, in falling from the larger sort of native vessels, and from buildings and trees over-hanging rivers and tanks.

According to the authority above cited, -"The only characters met with internally upon which any confidence can be placed to indicate that the individual has been Drowned, are the presence of water in the stomach; and the presence of a mucous froth on the lining membrane of the trachea; but, at the same time, the restrictions to the admission of these signs as positive evidence of Drowning, may be such as to throw great uncertainty on the correctness of a medicolegal opinion founded simply on their existence." The presence of water in the stomach affords strong evidence of Drowning,—when it is salt, when it is in very great quantity, or when it is of peculiar colour, as in peat bogs, &c., or contains weeds or confervæ. Throughout the greater part of India the first of these is out of the question. It is wellknown that, where the power of deglutition is lost, or the drowning person never rises to the surface, water may not enter the stomach. Again its presence in moderate quantities, without admixture of weeds or mud, can scarcely go for much in persons who are habitually water-drinkers. I find, on comparing five cases of drowning quoted by Dr. Taylor, that in one case the stomach contained three ounces of liquid; in two, half a pint; in one, a pint; and in one about a quart. Dr. Ogston found water in the stomach in five cases out of seven. Usually, the natives do not drink

^{*} Noticed by Dr. Taylor, p. 702.

more than a pint of water at a time. Still the discovery of a quart of rather indifferent water in the stomach of one of them would hardly appear singular. It would be very desirable that, in sending in the bodies of persons supposed to have been Drowned, the police should state whether the bottom of the reservoir or channel in which the body was found was of mud or sand, and also what kind of vegetation grew on its margin, and within it, whether grass, large aquatic weeds (tank jungle), or green mantling. As most of the bodies dissected in the Calcutta Medical College are procured from the river, examination of these would be likely to throw considerable light upon the question whether water enters the stomach and lungs of a body immersed after death. Professer Walker, of the College, informs me, that he has never seen water in the stomachs or air passages of bodies from the river.

According to Dr. Taylor, "water does not readily penetrate into the stomach of a subject which has been thrown in after death; the sides of the œsophagus applying themselves too closely to each other to allow of the passage of the fluid. If putrefaction has advanced to any extent, it is possible that water may enter." We must, at the same time, consider that, with the advance of decomposition, the distention of the internal organs with gases rather favors the expulsion than the ingress of fluids and air.

Water may or may not be present in the lungs of persons drowned, and Dr. Taylor remarks that, "there is little doubt that the quantity may become increased after death, because it is now well known that water will penetrate into the lungs, before the access of putrefaction, when the body is thrown in dead."

A few years since, I examined a case in which the detection of foreign matters in the air passages, established a very important point in evidence. The body of a child was discovered in a tank at a considerable distance from his own house, and suspicion was naturally excited that he had been conveyed thither and made away with. Dissection afforded clear evidences of death from Drowning-the fauces, larynx and trachea contained small portions of green vegetable matter, and the right bronchus was almost completely filled with so large a portion of an aquatic weed, doubled together, that it appeared astonishing how any such body could pass the rima. It was afterwards proved distinctly that no weed of the kind grew in the tank where the body was found. Further inquiry led to the discovery that the boy's body had been found by a woman in a tank near his home, in which the weed lodged in the air passages grew abundantly. This female had conveyed the corpse to the more distant tank, which belonged to a person against whom she bore a grudge. *

The presence of mucous froth in the trachea and lungs is a frequent and important sign, but it is not always present; may result from strangulation, apoplexy, narcotic poisoning it and other forms of Asphyxia; and is liable to disappear after long submersion, or where the subject is allowed to remain exposed to the air for several days before it is examined.† Dr. Casper's recent observations on the putrefactive process bear with considerable importance upon these forms of Asphyxia. He finds that, of all the internal organs, the larynx and trachea are the first to exhibit the changes of decomposition. If the person have not died by Asphyxia or laryngitis, the whole extent of the mucous membrane of the trachea will be found perfectly pale, while the body remains

^{*} See a case of Drowniug, by Mr. H. Carter, in which mud was found throughout the air passages.—Trans. of Medical and Physical Society of Bombay, No. ix., p. 43, 1842.

fresh, or exhibits a few green spots upon the abdomen. As soon, however, as this green colour begins to spread over the abdomen, but before any change has taken place in any of the other internal organs, the mucous membrane of the larynx and trachea will have become discoloured, acquiring a cherry-red colour, which gradually, with the progress of decomposition, settles into a dark brown. In many hundred bodies examined, of persons of all ages, and with his attention directed particularly to this point, Dr. Casper declares that he has never found a single exception to the rule here stated.*

The generality of bodies found in Indian rivers and tanks have suffered more or less, from the depredations of fishes, &c. I lately examined a putrid corpse which had evidently been sunk in water. I gave it as my opinion that the water in which the body had been lying was of recent collection, as there were no traces of gnawing. It was recently decided, by two American Coroners, that fish do not begin their depredations upon a body until after decomposition has set in. This may be true, as regards bodies drowned in the sea; but I have known bodies, in Indian tanks and rivers, attacked either by fish or water-rats, or aquatic insects, before there was the slightest sign of decomposition.

There are many facts which show that our present knowledge of the Condition of the Thoracic Organs, and especially of the Heart, in cases of Asphyxia, is very far too loose and indefinite to guide us safely in forming a decided opinion upon cases involving a suspicion of homicide.

Thinking it right to draw my illustrations as far as possible from the pages of our latest and best authority, I shall

^{*} Gerichtliche Leichen. Oeffnungen Zweites Hundert, Berlin, 1853, and Amer. Jour. of Medical Science, July 1854.

quote the following contrasted observations cited by Dr. Taylor:

Case, by Dr. Farguharson, of a woman whose body had been in the water about an hour .-Examined about 16 hours after death. The trachea and bronchial tubes contained watery froth or frothy mucus. On compressing the lungs, a discharge of watery froth took place from the mouth, a small quantity of watery fluid having previously escaped when the body was turned over. All the parts of the pulmonary tissue were gorged with blood, and were much heavier and of a darker red colour than in the normal state; the posterior portions of both lungs were more engorged underneath, or from position, the right cavities of the heart and the coronary veins were filled with dark fluid blood, the left cavities were empty.

Case, by Mr. Bishop, of a woman whose body had been in the water about an hour and a half .- Examination 24 hours after death. Mucous froth in considerable quantities was found in the trachea: the vesicles were exceedingly minute in the upper part, but, at the lower portion of the tube they were as large as a mustard seed; a small quantity of clear fluid flowed through the bronchial tubes when the lungs were raised. lungs were not collapsed: they crepitated on pressure, and were rather bloodless anteriorly; posteriorly they were somewhat gorged with blood, apparently from gravitation. The right side of the heart was very flabby, and contained scarcely any blood.

Dr. Taylor has justly contrasted these cases, "as showing the variable nature of the appearances met with in the drowned." They prove far more than this—they display, most convincingly, the great variability and uncertainty of the Signs of Asphyxia—for there can be no doubt that both were genuine instances of Asphyxia by Drowning—and yet all recorded observation tends to show the prevalence of a conviction that the essential and invariable characteristic evidence of Asphyxia is the Accumulation of Blood in the Right Heart and in the Lungs.—I believe this opinion to be decidedly erroneous.

The following case first particularly drew my attention to this point.

In going through the wards of a London Hospital, many years since, I found a number of gentlemen endeavouring to restore animation by galvanism, artificial respiration and other means to a young, strong-looking man, who had been treated too freely with opium in an attack of Delirium Tremens. The heart's action was maintained for a considerable time, but every measure ultimately failed. It was found, upon examination, that the right cavities of the heart were well-contracted and almost empty, while the lungs were any extreme engorged with blood, and were studded throughout with a multitude of small apoplectic effusions. Here, a tolerably powerful heart had been kept in action by galvanism for a considerable period after natural respiration had ceased, forcibly propelling the blood into the lungs, where it could not be oxygenated, and the effect was a certainly an extreme example of Asphyxia, with a nearly empty right heart and engorged lungs. Since meeting with this case, I have looked with particular care to the state of the right heart in examining the bodies of those who have died from Asphyxia, and have found that, while in many of the cases, the right auricle and ventricle probably contained more blood than is usual in the generality of instances where death is not attended with any distinct impediment to the circulation, there were certain hearts in which, quite apart from the effects of decomposition, neither cavity was at all remarkably full, and that there were several in which, the auricle being somewhat distended, the ventricle was well contracted, and contained no unusual quantity of blood. I am not, at present, prepared to offer a demonstrative explanation of these three sets of cases, but I believe that these various conditions of the heart are determined as follows:—(1.) Where there occurs a mechanical impediment to the passage

of blood through the lungs,-either gradually, as in cases of old emphysema or mitral contraction, or suddenly, as in failure of a weakened left ventricle,—the right side of the heart, already more or less dilated and deficient in muscular power, and with an imperfect safety-valve action, vields under the obstruction, and is found over-distended after death. Again, similar over-distention of the right ventricle occurs where death is immediately caused by an influence which suddenly and entirely suspends innervation, as under the full action of carbonic or prussic acid.—(2.) In cases of ordinary mechanical strangulation and suffocation, the heart's action usually continues for a longer or shorter period after respiration has ceased.* This has been clearly proved by Sir B. Brodie, and has since been confirmed by numerous observations, especially by those of Nysten+ whose experiments have shown that the power of the right side of

It is mentioned, in a pamphlet of the time, that, after the body of Bellingham (who was hanged for the murder of Mr. Percival in 1812) was dissected—"It was noticed that his heart continued to perform its functions; or, in other words, to be alive for four hours after he was laid open."

Had the contemporaries of Vesalius, in 1564, been acquainted with facts like these, the accident of his having opened the body of a man in whom the heart still beat might have been visited upon that great anatomist with a penalty short of absolute ruin.

^{*} We have scarcely means of judging for how long a time after apparent death the human heart naturally continues to retain a certain amount of nervous and contractile power. We know for how lengthened a period the hearts of certain fishes—especially of the shark and ray species—retain this power after separation from the body; and very strange indeed as it may seem to be, we must not entirely reject, although we may be disposed to qualify, an observation mode by Lord Bacon, who says, in his History of Life and Death,—"I remember having seen the heart of one that was bowelled, as suffering for high-treason, that being cast into the fire leaped, at first, at least a foot and a half in height, and after by degrees lower and lower, for the space, as I remember, of seven or eight minutes,"

[†] As quoted by Dr. Sieveking.

the heart continues long after the irritability of the left side is extinguished.* The length of time during which unoxygenised blood is thus circulated, and the freedom with which it traverses the lungs, must depend mainly upon the muscular tone of the heart, the completeness of its safety-valve apparatus, and the freedom of the pulmonary vessels. Upon the gradual cessation of the heart's action, the walls of a perfectly healthy right ventricle will, to a greater or less degree, contract, and expel much of its contents, first by the safety-valve and, further, by the pulmonary artery. Hence, in one of these cases of Asphyxia, the right ventricle should be found either nearly empty, or merely containing a normal quantity of blood, and this will, I believe, be observed to happen wherever the heart has been sound and powerful, and no other disturbing influence has been in operation. During the last hot season, I examined the bodies of two robust and healthy men, lately arrived from England, who died asphyxiated, from Insolation, or what has been erroneously termed "Heat Apoplexy." Both of

^{*} Mr. E. R. Bickersteth has found, in experiments on animals, that, in death from the inhalation of chloroform, the respiratory movements cease before the cardiac. That, the heart continues its action, uninfluenced by the chloroform, for a period longer or shorter after the cessation of respiration, and that its then failing may be considered as a natural consequence of respiration having ceased, and as independent of the influence of chloroform. That if, after the respiration has ceased, and while the heart is still in action, chloroform continues to be absorbed into the system, its movements become impaired or cease, the chloroform, in such case, acting directly upon the heart. And that, if artificial respiration be had recourse to, before the cardiac contractions are seriously affected, and be properly maintained for a sufficient period, the respiratory function may be re-established .- (Edinburgh Monthly Journal, September 1853.) Two Surgeons observed the state of the pulse of a criminal who was executed in the prison at Albany U. S. The heart did not cease to act until nine minutes and a half after suspension. During the fifth minute, there were no less than 128 pulsations.—(Med. Times and Gazette 1st July 1854—as quoted by Taylor, p. 909.)

these men died evidently suffocated from gradual arrest of pulmonary innervation. I watched one of them until he expired, and the means which I employed-chiefly friction, over the front of the chest, with a mixture of mustard, spirit, and turpentine oil, tended to maintain the action of the heart for some time after the arrest of respiration. I examined both hearts in situ-raising and dividing the pericardium, and the yielding wall of the right ventricle with forceps and scissars. The right cavities were decidedly not over distended—they merely contained small and very loose coagula of yellow fibrine and a little fluid blood. The lungs, however, were enormously congested. I consider these observations of considerable weight, as they were made with the utmost caution in the recent bodies of two perfectly healthy muscular men dying gradually from Asphyxia. Dr. Taylor mentions that, in cases of hanging, where the inspection has been delayed for several days, distention of the right cavities of the heart, may not be observed (page 639). He also remarks that, after Drowning, "independently of the changes which have taken place in consequence of putrefaction, the right cavities of the heart, and the vessels connected immediately with them, may be found collapsed and generally destitute of blood, (p. 608). He does not, however, explain this latter circumstance. It is mentioned, incidentally, by Drs. Jones and Sieveking in their Morbid Anatomy, that, in the post mortem examination of the body of a lad who was brought in asphyxiated by Drowning to St. Mary's Hospital, and for whom some efforts were made to restore animation, there were found none of the visible signs commonly attributed to Drowning, and there was no congestion of any of the viscera.*

In his admirable review of the medical evidence of Death from Drowning in relation to the case of W. B. Kirwan, Dr.

^{*} Page 416.

Taylor remarks that—"Cases have been met with where the lungs have not been found gorged, and the cavities of the heart empty; but I cannot call to mind a case where the lungs have been found engorged as a result of Asphyxia, and the cavities of the heart empty. The absence of the distention from one or both organs would, in general render it impossible to give, upon medical grounds, an affirmative opinion that death had taken place from Asphyxia."* In Mrs. Kirwan's case it was observed, that—"There was no blood in the right or left cavities of the heart, or in the great vessels, and the lungs appeared much congested." This, however, was thirty-one days after death, when such evidence could not be regarded as satisfactory.

A case showing the vital importance of settling this physiological question definitively occurred in a trial at Mymensing, in 1853.

A man had quarrelled with his two brothers about money matters. His body was found, bound with cords, floating down the stream of a Nullah. No one actually saw him murdered; but the evidence tended to render it extremely probable that he was struck, perhaps killed, at all events rendered insensible, and then tied hands and feet together and thrown into the Nullah. The Civil Surgeon deposed that "although no marks of violence were observable on the body, owing to the decomposed state in which it reached the station," (it had floated) "still the decomposition was more advanced externally than internally."-" From the state of the heart and lungs, death was caused by Drowning and not by fever, (though he might have had fever,) for the circulation of the blood and respiration must have been in action at the time of his having been immerged in water. The lungs were filled with water and blood, and the heart also was filled with coagulated blood, which could not have been the case, had the

^{*} Dublin Quarterly Journal of Medical Science, February 1833, p. 98.

Judge held that it was evident, from this statement, that life was not extinct when the man was carried to the river. Mainly noticing the difference between the statement of the Surgeon, and the assertions of the chief witness, who declared that the man was dead before he was thrown into the water, the law officer acquitted the prisoners. The Judges considered that the body was thrown into the water before life was extinct, and convicted.*

It is, however, a fact, which will, I am confident, be generally accepted hereafter, that,—although in many cases of Asphyxia, the power of the right ventricle is overcome, and its cavity is found gorged after death,—there is a set of instances in which, the action of the heart continuing after the cessation of respiration, the right ventricle is found well contracted and nearly empty, the lungs being congested in an extreme degree. Unless this fact be admitted, it may, in certain cases, be found difficult to substantiate our opinion that death has resulted from Asphyxia.†

^{*} Nizamut Adawlut Reports, 3rd November 1833, p, 840.

[†] We may fairly imagine the following conversation occurring between a prisoner's counsel and the medical witness in a case of Drowning. Q .- To what cause, speaking physiologically, do you attribute death in this case? A .- To Asphyxia. Q .- In what state did you find the right cavities of the heart? A .- The auricle appeared full. The ventricle was not distended. Q .- Would you say that the right ventricle had suffered "a sort of paralysis of its muscular tissue?" A .- No. Q -Does not Dr. Carpenter lay it down, in the first edition of his Manual of Physiology, page 403, as a rule to which he does not state any exception, that, in cases of Asphyxia, "the venous blood accumulates in the pulmonary artery, in consequence of the obstruction of its capillaries; it distends the right cavities of the heart; and the accumulation extends to the venous system," &c.; and that-"the right side [of the heart] suffers from over-distention, which produces a sort of paralysis of its muscular tissue." Does not Dr. Watson, in vol. 1, Ed. 3, p. 67 of his lectures say, that, in death from Apnaa "the lungs remain full, the right chambers of the heart distended, and therefore less capable of contract-

The question must not, however, be decided without due consideration of all the facts which may be brought to bear upon it. Dr. Ogston* found, in 53 instances of Drowned subjects, that the right cavities were empty in 2 cases; merely moist in 1 case; containing a little blood in 3 cases, nearly full in 3; full in 15; distended with blood in 17; inordinately distended in 12. Here then we find 9 cases out of 53 which, at first sight, appear to countenance the views advanced above. With the exception of one instance, however, where the right cavities were found "nearly full" of blood 11½ hours after death, these cases afford us no such aid. I have only spoken with regard to the condition of the heart previous to the occurrence of decomposition—whereas in 8 of these 9 cases, examination was made from 4 to 56 days after death.

Indeed, it is difficult to judge how many of Dr. Ogston's 53 cases can be taken into this inquiry. We find that, in 30, the bodies were examined at from 11 to $71\frac{1}{2}$ hours after death. Here, unfortunately, two distinct sets of cases are inextricably thrown together, viz. those in which examination was made during and after the cessation of cadaveric rigidity. All, therefore, that we can deduce from Dr. Ogston's researches in favor of the above view is—that, in 5 out of the 30 cases, (one-sixth), the right cavities were not found distended within $55\frac{1}{2}$ hours of death, while Dr. Ogston's experience did not afford any recent case in which these cavities were found empty or containing merely a

ing?" and are we not also taught by Dr. Alison, in his Outlines of Pathology, p. 30, that, in such cases, we find the left side of the heart "nearly empty; and the blood accumulated on the right side and in the lungs?" How, therefore, do you explain your statement, so utterly opposed to the generally received opinion of physiologists, that an individual can die Asphyxiated, without a paralyzed and over-distended condition of the right ventricle of the heart?

^{*} London Medical Gazette, for August 1851, page 290.

small quantity of blood. Still the importance of even one apparently exceptional case like Mr. Bishop's (where, 24 hours after death by Drowning, "the right side of the heart was found very flabby and contained scarcely any blood") must not be overlooked, as indicating the existence of a distinct law, the operation of which is not the less real because frequently interrupted. To judge fairly of the state of the heart in cases of Asphyxia, the bodies should be examined previous to the cessation of cadaveric rigidity, and the state of the auricular and ventricular walls, and the quantity of blood contained in the cavities should be decided upon while the organ remains in situ. The heart should never be raised from the pericardium until the projection or depression of the walls of its right cavities, and the amount of their distention or otherwise with blood have been carefully ascertained.

Again, in cases of Asphyxia, the Lungs may be found in almost any condition, from a state of extreme vascular distention attended with rupture of the vessels or pulmonary apoplexy, to one of unusual bloodlessness. Dr. Taylor says, in describing the appearances in cases of Drowning. "The lungs are sometimes found gorged, and at others pale and collapsed:" (p. 679). In fact, the vascular condition of the lungs in cases of Asphyxia will vary according to the plethora or anemia of the individual's system, the state of his heart, the rapidity or slowness in the operation of the causes which led to death, and a variety of other circumstances.

In 30 out of Dr. Ogston's 53 cases the examination in shown to have been made within 71½ hours after death. Of these 30 cases, the lungs were found sparingly congested in 4, congested in 12, and highly congested in 14. Hence it is sufficiently clear that Asphyxia by Drowning is not essentially characterised by extraordinary engorgement of the pulmonary vessels. When, taking these facts into ac-

count, it is borne in mind how large a proportion of natural deaths result from Asphyxia, and is remembered that we shall probably not meet with one case in ten thousand in which, after natural death unattended with hæmorrhage or exhausting discharges, abundance of blood will not be found in the left auricle and in the posterior parts of the lungs, we shall be cautious in relying upon the condition of the heart and pulmonary vessels alone in forming our opinion, where the life of a suspected party is at stake.*

BURYING ALIVE.

We have many references to this practice, not only among the ancient Jews, Goths and Peruvians, but also, in more recent times, among the Monastic orders of Europe. Partial Burial was inflicted, as a punishment, by the Mussulmaun rulers of India; † and it has been generally reported that, in

^{*} See Dr. Taylor's remarks. "On the Medical Evidence of Death from Drowning, in relation to the case of W. B. Kirwan" (Dublin Quaterly Journal of Medical Science, for February 1853, p. 94). In this case it was found, thirty-one days after death, that, "the lungs were healthy," [and "collapsed"] "but congested posteriorly, interiorly," &c. ; this congestion was assigned to engorgement of blood during life, ["the minute vessels gorged with blood"] "The heart was healthy, and empty both at the right and left side, as were also the large vessels connected with it." In the newspaper report of this case, the medical man who examined the body was made to assert that the condition of the lungs afforded sufficient evidence of violence, as he had never seen such congestion of the organs, except where death had been attended, with a violent struggle. As this rash statement is not quoted by Dr. Taylor, it was probably not made. Still the jury appears to have decided, mainly upon the medical evidence, that this was a case of violent death. One fact may certainly be taken for granted, in cases of this description, -that, when the process of decomposition has once fairly set in, no vascular change in the lungs, short of apoplexy, can be taken as evidence that Asphyxia by Strangulation or Drowning was the cause of death.

[†] Sir Thomas Roe, who visited the court of the great Mogul in 1614, mentions that one of Nourmahal's women, being detected in an intrigue, was set to up the arm-pits in the earth close rammed about her, with her feet tied

comparatively recent times, a native female buried one of her slave girls alive. Until a few years since, the practice of Burying Lepers Alive appears to have been common in Bengal, among both the Mussulmauns and the Hindus. Accounts of trials for this atrocity in the years 1810 and 1820, will be found in Macnaghten's Reports.*

Cases still occur in the North-West Provinces.

In 1852, three Zemindars, Brahmins, were convicted at Scharunpore of Burying their uncle, a leper, while still alive. He had become reduced to a loathsome condition by the fearful ravages of the disease; and, for eight nights and days, lay moaning and crying outside his house, into which he could not be brought by reason of the putrid state of his sores, and their having generated maggots. All this time, he supplicated his nephews to put an end to his miserable existence. They hesitated and questioned for some time, his entreaties and imprecations were, however, more than they could bear, and they decided, as they afterwards confessed, on taking the consequences and burying him alive. They took him down to a nullah at dusk, dug a hole, and thus disposed of the body. They stated that the chest was just warm, but no more. He was, to use their own expression, beyond death when they consigned him to his grave.+

In the following year, two Mussulmauns were sentenced to imprisonment and fine, at Moradabad, for having Buried their

to a stake, so to continue three days and two nights without any sustenance, her head and arms bare, exposed to the violent heat of the sun. If she died not in that time, she was to be pardoned. By the Mussulmaun Law, if a person be put alive into a grave, and kept there until he dies, according to Imam Mahomed, the murderer is liable to suffer death in retribution; but, in the opinion of Aboo Haneefah, judgment is given for the price of blood only payable by the Aakilah, because the homicide is not committed with a wound.

^{*} Vol. i., p. 218; and ii., p. 18. And vol. iii., p. 139. See also Reports of Cases in which Lepers were voluntarily burned alive or drowned, in 1814 and 1816, vol. i., pp. 229 and 292.

[†] Nizamut Adawlut Reports, N. W. P., 31st December 1852, p. 1560.

leprous brother alive, at his own request. He had been afflicted with leprosy ten or fifteen years, his hands had dropped off, the sores on his body were full of worms, and the smell proceeding from him was intensely offensive. He intreated his brothers to Bury him Alive, and threatened to haunt them in the next world if they refused to accede to his request.*

Fearful as these errors are, they possibly find their parallels in Great Britain in the present day. It is said to be a common practice, in the remote northern parts of Scotland, for the friends of one in whom the death agony is much protracted to remove the support from his head, with a view to expedite dissolution. There cannot be a doubt that, almost within the memory of persons now living, the Irish peasantry considered themselves perfectly justified in putting a victim of hydrophobia "out of his misery," by smothering him under a feather bed!

Towards the end of last century, the widows of the Yogees, the caste of Hindu weavers, were not unfrequently Buried Alive with their deceased husbands.

Ward found, on inquiring among the Hiudus employed at Serampore, that almost every one of them had seen widows thus Buried Alive. He describes that a large and deep grave is dug near the Ganges, and, after certain preparatory ceremonies, the widow descends into it, and takes the dead body on her lap and encircles it with her arms. The earth is thrown in by degrees, and two persons descend into the grave, pressing it firm with their feet around her. The earth keeps rising; still she makes no remonstrance or effort to escape. At length it reaches to her head, and then, in haste, the rest of the earth is thrown upon her and trodden down.

A very singular crime gave rise to a trial at Sylhet,

^{*} Nizamut Adawlut Reports, N. W. P., 14th October 1853, p. 1288.

in March 1853. A gomashta, having given offence to two young Hindus, was inveigled by them into their house, at night; and, with the assistance of their father and younger brother, was murdered. Two of the neighbours, hearing groans in the prisoners' house, asked what was the matter; but, receiving no reply, went to the house, when one of the prisoners came out and struck the light down, while his mother set fire to part of the buildings. On entering and searching the house, the neighbours discovered a grave, or hole, described as about one hath (or cubit) broad, two long, and two deep, which was covered over with a mat. Under the mat was a board, with five or six bamboos laid upon it, and under the board was the body of the unfortunate gomashta, lying amidst mud and water, which half filled the grave. The Sessions Judge considered it probable that the four prisoners tumbled the deceased into the grave, and then, putting the board over him, (for the board very exactly fitted the grave,) stood upon it till he was suffocated. No outward marks were observable on the body, and it was too decomposed to be examined internally by the Surgeon, who, however, from its appearance, was of opinion that the deceased did not die a natural death, but might have been suffocated.*

SUICIDE.

Besides the cases alluded to above, instances of Suicide by Burial,† by Poison and in other ways by persons sitting *Dhurna*, with a hope to bring down a curse upon those whose doors they had vainly beset, begging for the payment of

^{*} Nizamut Adawlut Reports, vol. iii., part 1 of 1853, p. 309. See also an atrocious case, where a wretch, at Durrung (Assam) lately confessed to have twisted the neck of his infant daughter, to have thrown her on the ground, and then to have *Buried her Alive*.—N. A. Reports, vol. iv. of 1854, p. 561.

[†] See a case of Suicide and murder, tried in 1825, in which a fukeer, having failed to receive contributions from a shop-keeper in zillah Agra, adjourned to a tope without the town, and sat *Dhurna* for some days; when he allowed

debts or for a gift, were formerly not unfrequent in India. I have seen it mentioned that, about thirty years since, ten lepers of Benares burnt themselves, and ninety others threw themselves into wells, to revenge themselves upon some one who had offended them.

I am informed that, in the inveterate feuds which prevail among rival families and villages up-country, it is still by no means a very rare thing for an aged person to allow himself to be taken, a willing victim, into his opponents' land, where his people murder him, and charge his crime upon their adversaries. This barbarity appears to be a vestige of the old Hindu practice of erecting a Koor. A circular pile of wood was prepared ready for conflagration; upon this sometimes a cow, and sometimes an old woman, was placed, and the whole was consumed together. The object of this practice was to intimidate the officers of Government or others from importunate demands, as the effect of the sacrifice was supposed to involve great sin in the person whose conduct forced the constructor of the Koor to this expedient. Sir J. Shore, who was one of the first to describe this practice,* mentions that an instance occurred in the Benares district, in 1788. Three Brahmins held lands in partnership with others, but the public assessment was unequally imposed upon them, as their partners paid less, while they were charged with more than their due proportion; they, therefore, refused to pay any part of the revenues whatever, and erected a Koor, as they declared, to intimidate the Government officers from making any undue demands upon them. An old woman had suffered herself to be placed

himself to be Buried Alive by his companions—Macnaghten's Reports, vol. ii., p. 409. See also Asiatic Researches vol. iv., p. 49. Regulation VII. of 1820, renders the offence of sitting *Dhurna* punishable by fine or imprisonment.

^{*} On some Extraordinary Facts, Customs and Practices of the Hindus—Asiatic Researches, vol. iv., p. 335.

on the pile; but the timely interposition of authority prevented the completion of the sacrifice; the woman, who was nearly blind, was summoned to appear before the English Superintendent, but absolutely refused, declaring that she would throw herself into the first well rather than submit. The summons was not enforced. This was mentioned by Sir J. Shore, as the only instance of setting up a Koor which had occurred for many years previous to 1788, although the practice was said to have been frequent formerly; but it was expressly asserted to have been limited to a very small portion of that province.*

^{*} A reference to Beaufort's Digest of the Criminal Law of the Presidency of Fort William* will show with how much difficulty the Brahmins, and especially those of Benares, were restrained by our Government, towards the latter part of the last century, from committing acts of frantic violence in opposition to legal authority, with a view to intimidate the native servants of Government-they erected these Koors; threatened to cut their wives and children in pieces, and even did in some cases carry their threat into effect; lacerated their own bodies more or less slightly with knives or razors; and threatened to throw themselves into wells, or to swallow poison. In some few instances, these men destroyed themselves to bring upon their opponents the curse which attaches to the slayer of a Brahmin-but these cases were the exception. One of these extreme instances, however, occurred in Tirhoot so recently as the year 1843. Two men were candidates for the Mohuntship of a "Muth" or Hindu Temple at Hajeepore. One of them, Beeran Doss, came to the thannah and desired the Darogah to come quickly, as Pursora, his opponent, had shut himself into one of the temples and set fire to the place. The Darogah found the temple in flames, and, forcing open the door, dragged out the deceased, most severely scorched and quite insensible. On throwing some cold water on his face, he revived for a few moments, and made use of his last breath to accuse Beeram Doss and two others of having beaten him, thrown him down, got on his chest, forced poison down his throat, and dragged him into the temple, which they then closed and set on fire. The Civil Surgeon found no poison in the viscera, and declared that the man died by exhaustion, and not from any other cause. The door, when the police came, was fastened on the inside, which could only have been done by the deceased, and it appeared that he

^{*} Paras 2895 to 2904, pp. 537-41.

It would be out of place here to inquire at much length into the principal Causes of Suicide among Natives.

It is almost needless to mention, that Suicide has always been held by the Hindu religion to be one of the most acceptable rites that can be offered to their sanguinary deities. According to the Ayen Akbery, there were five kinds of Suicide held to be meritorious in the Hindu—viz. Starving; Covering himself with cow-dung, and setting it on fire, consuming himself therein; Burying himself in snow; Immersing himself in the water at the extremity of Bengal, where the Ganges discharges itself into the sea through a thousand channels, enumerating his sins and praying till the alligators come and devour him; or Cutting his Throat at Allahabad, at the confluence of the Ganges and Jumna. To these might be added the custom which formerly prevailed at the Mahadeo Hills, where men threw themselves from a perpendicular height of four or five hundred feet, and were dashed to pieces on the rocks below-to fulfil the vows of their mothers; * Drowning at Hurdwar, Allahabad, and Saugor; the horrible practice of dying under the wheels of Juggurnath's car; perishing in the cold of the Himalayahsand the custom of Sati. This latter practice appears to have been nearly, or quite extinguished in Bengal, by the humane legislation of the British Government; but it is still fearfully prevalent in several of the Native States of India; and cases also from time to time occur in the N. W. Provinces. The latest cases of Sati with which I am acquainted

had a quarrel with Beeram Doss and the two others—in which he was struck and otherwise insulted, and he snatched up some fire, rushed into the temple, shut himself in, and set fire to the cloth roof.*

^{*} Sleeman's Rambles and Recollections, vol. i., p. 132.

^{*} Police Report, L. P. for 1848, p. 8. According to Stewart, it was anciently a custom among the Hindus that, when a Raja was thrice defeated or taken prisoner, he was considered unworthy to reign, and burnt himself on a funeral pile.

occurred at Benares in 1852,* and at Shahjehanpore in 1854.+

The Natives of Bengal not unfrequently destroy themselves in despair when the subjects of incurable maladies. Formerly these suicides of the diseased and the aged were publicly effected with all the formalities of a religious rite. The self-devoted individuals being Burned Alive, throwing themselves into pits filled with ignited materials, Drowned in the Ganges, or Crushed to death at Juggernauth.‡

In Professor T. W. Wilson's memoir, on 'the Painful Affections of the Stomach termed by the natives of Bengal "Peetsool." '-(Indian Annals of Medical Science, October 1854,) the author mentions that, so obstinate is this Peetsool considered by the natives, that it is attributed to a weapon in the hands of Siva, who inflicts the blow, but cannot remove the disease; the sufferer, in consequence, often despairs and seeks relief by Suicide. The same number of the Annals also contains a very remarkable case by Dr. J. W. Madge, of the Madras Horse Brigade, in which a native horse-keeper hanged himself about eleven hours after receiving a very severe kick on the abdomen, which caused great depression and excruciating pain. In addition to other injuries, it was discovered that the duodenum was entirely divided across (except one small strip) as if by a sharp instrument, and the edges everted to the extent of half an inch at each end.

In a trial at Mynpooree, the accused stated that his wife, eleven or twelve years of age, killed herself by cutting herself across the abdomen with a husya "because of the pains in the belly which she had long endured;" the circumstances

^{*} Nizamut Adawlut Reports, N. W. P., 30th June 1852.

[†] Ibid, 1st April 1854, p. 358 and 26th September, p. 433.

[‡] Many interesting particulars relative to the commission of Suicide by persons who were diseased, poor, or despised, will be found in Ward's work. Vol. ii., 3rd edition, pp. 116 and 121. See page 289 of this Manual.

of the case rendered this statement improbable. Two assessers, Thakors, acquitted him, remarking that—"women often threw themselves into wells when suffering pain." The third, a Vakeel, convicted him of wilful murder.*

A case has already been cited (at p. 288) in which a woman, when suffering from a paroxysm of pain in the stomach, to which she had been for some time subject, took up a sickle and killed her two children, and then endeavoured to cut her own throat.

In the table above alluded to, Dr. Woodford shows that, in 21 cases, Suicide was committed in the following modes;—Hanging 10; Drowning 6; Arsenic 3; Cut Throat 1; By a narcotic poison, supposed to be Opium, 1.†

SIMULATED DEATH.

India is, probably, the only country in the world where a person, wishing to prefer a false charge against his enemy, would venture to simulate death, and allow himself to be brought to a medical man for examination. I have heard of more than one case of this kind. Dr. Kenneth Mackinnon informs me, that the body of a man alleged to have been murdered, was brought to him some years since. Finding that the deceased had a very tolerable pulse, he adopted means which assisted the corpse in making off with great activity. In another case, an offer to save the deceased's friends the expense of burning his corpse, was attended with the best results.

RAPE.

Instances of this crime appear to be of great frequency in India, and there is also reason to believe that persons are, by no means rarely, charged falsely with its commission.

^{*} Nizamut Adawlut Reports, N. W. P., 31st May 1853, p. 719.

[†] The crime of attempting to commit Suicide, is punishable under the provisions of Section XIX., Reg. XIX. of 1807. See N. A.Reports, vol. iii., part 1 of 1833, p. 842.

In the investigation of cases of Rape, difficulty may sometimes arise with regard to the question of Puberty. Cohabitation in marriage certainly takes place much earlier here than in other countries; and, consequently, the developement of Puberty is frequently hastened; but it appears very doubtful whether menstruation naturally occurs much sooner in life in India than in Europe.* Dr. Webb's Pathologia Indica contains some important remarks on this subject by Baboo Modusoodun Gupta, who shows that, according to Sushruta, "the menstrual discharge begins after the twelfth and ceases after the fiftieth year." Angira, one of the Hindu law-givers, says that girls are called Rajaswala (or females with menses) after the tenth year. Atri and Kasyapa (Hindu sages) state that, if an unmarried girl discharges the menstrual fluid at her father's house, the father incurs a guilt similar to that of destroying a fœtus, and the daughter becomes Brisalee, or degraded in rank. It appears that this doctrine is generally acted upon throughout the Hindu community. According to the Baboo's observation, the females of this country generally arrive at the age of Puberty after the twelfth year, when they are fit for all the purposes of marriage. He thinks that Menu very judiciously fixed the time of marriage of females at twelve with men of thirty. Most of the females of this country begin to menstruate after the twelfth year, or at the beginning of the thirteenth, and the function continues till the fortieth and, in some cases, to the forty-fifth. Menstruation at ten years is very uncommon, it probably does not occur in more than one or two instances out of a hundred females. It is perhaps equally rare for it to be delayed beyond the thirteenth year. It is the custom of the country, in their early marriages, to send the girl at perhaps nine years, occasionally, to the

^{*} I believe that Dr. Roberton's inquiries led him to form nearly this opinion, but I have not his Memoir at hand.

house of her husband; but, if the husband be so distant that this cannot be done, menstruation is generally delayed till the thirteenth year. He believes that the catamenia appear sooner or later according to the mode of living of the females, and the sexual excitement to which they may be subjected, as he finds that the first menstruation of girls in good circumstances generally takes place when they are eleven years old, even in some cases at ten years. He never observed a female in indigent circumstances to menstruate earlier than the age of twelve years. He has been informed by several women that, when the menstrual flux begins as early as in the eleventh or twelfth year, it does not, in many cases, recur for a year after this first appearance; but, after that period, the secretion again takes its natural course. It may therefore be fairly questioned whether or not this, which is supposed by them to be a first appearance, may not be rather a first copulation, and the result of a ruptured hymen.*

About a year since, I examined the body of a poor girl, stated to be only twelve years old, who had lived for nearly a year with her husband, a man between twenty and thirty years of age. Her outward appearance was that of a well-grown child of eleven or twelve—there were none of the outward signs of puberty. The uterus was that of a child. The vagina, however, was considerably developed.

I have lately seen the particulars of a case given by Dr. W. A. Green, of Dacca, in which he had to perform craniotomy. The patient was a Hindu girl of twelve in labour with her first child. The head was impacted, and she died undelivered.† According to the Abbe Dubois, who resided

^{*} Op. Citat, page 277.

[†] Dr. Stoakley, of Northampton, Co. Virginia, relates the case of a negro girl thirteen years of age, who brought forth a healthy child of ordinary size, after a natural labour of a remarkably easy character—Philadelphia Med. Examiner, April 1855, and Med. Chir. Rev. for October of that year.

According to Taylor, the earliest age at which impregnation has been known to occur is nine years.

in the Madras Presidency, Hindu girls although married at a very early age, remain at their parents' houses until the first appearance of menstruation, when, after certain ceremonies, they are sent to their husbands.

According to Aboo Haneefa, a male cannot be considered to have arrived at the age of Puberty, until he has completed his eighteenth year, unless he is proved to have indulged in or to be capable of sexual intercourse. Yoosuf and Moohumaud say the fifteenth year.*

In English law, an infant under the age of fourteen years is presumed to be unable to commit a Rape; nor is evidence admissible against him to show that, in point of fact, he has attained, the full state of Puberty, and was capable of committing the crime.†

I find recent cases in which lads of fifteen and sixteen years were convicted of Rape. There is an instance on record, in which a boy thirteen or fourteen years of age was found guilty of the crime, and sentenced, in consideration of his youth, to three years' imprisonment. Done in which a lad of fourteen was sentenced to five years' imprisonment for Rape on a girl of about the same age. And another where a boy only ten years old was convicted by the futwa of Rape on a girl, three years of age; the court sentenced him, as for a misdemeanor, to imprisonment for one year.

It is, however, always a matter of great difficulty to obtain a correct answer with regard to a Native's age. Singular questions sometimes arise in the courts upon this point. A lad calling himself twelve years of age, but who appeared to be about fourteen or fifteen, was convicted of Rape on a

^{*} Index to Macnaghten's Reports, vol. i.

† Roscoe and Archbold, as cited by Beaufort, p. 576.

‡ Nizamut Adawlut Reports, vol. iii., p. 147.

Vizamut Adawlut Reports, N. W. P., 4th December 1852

[§] Nizamut Adawlut Reports, N. W. P., 4th December 1852, p. 1452.

|| Ibid, vol. iii. p. 87, and Beaufort, para. 3018.

child of nine; and, with reference to his extreme youth, was sentenced to only three years' imprisonment with labour in irons.* A prisoner tried at Bundlekund for Rape on a child of seven, represented his age to be eleven years; although, in the opinion of the Sessions Judge and of the jury, he must have been about eighteen years old.†

In the case of females, however, it will be generally inquired of the Medical witness, not how old the girl is, but whether he considers that she has reached the age or condition of puberty.

According to the English Law, the unlawful and carnal knowledge of a girl under the age of ten years is felony; and, if the girl is above the age of ten, and under the age of twelve years, the offence is a misdemeanor; and, in these cases, it is immaterial whether the act was done with or without the consent of the female.‡

^{*} Nizamut Adawlut Reports, N. W. P., 21st October 1853, p. 1326.

[†] Ibid, 5th May 1854, p. 474 .- A man of Banda, who confessed to the murder of his wife, declared, on trial, that he was twelve years of age; although, in the Judge's opinion and in that of the jury, it was clear that he was not less than thirty. He had, moreover, thick mustachios and a bushy beard!—Ibid, 9th September 1853, p. 1155.—A prisoner convicted, at Allahabad, of murder and robbery, was recommended by the Sessions Judge to a mitigated punishment on account of his youth, he appearing to be only sixteen years old. At the thannah, the prisoner stated that his age was twenty-six. The Judges of the Superior Court observed, that the Sessions Judge had not conformed to the Circular Order No. 105 of the 4th December 1811, which directs that, whenever a Judge may have reason to believe that a prisoner has stated his age inaccurately, he should specify on the record of the trial his opinion as to the apparent age of the prisoner. It is not sufficient to say (as the Sessions Judge had done in the present case) that the prisoner is not ' of mature age.' He was therefore called upon to supply this defect. He reported that, having again had the prisoner brought before him, 'his apparent age was twenty.' Sentence of Death was passed.-Nizamut Adawlut Reports, N. W. P., 1st December 1852, p. 1423. Another question of the same kind arose in a trial at Bareilly in the same year-30th July, p. 750. See also a very remarkable case involving a question of this kind, Ibid, 30th September 1852, p. 1095.

[‡] Roscoe and Archbold, as cited by Beaufort, p. 577.

Under the 9 Geo. 4, Chapter 74, for the East Indies, Section 65* it was enacted that :- If any person shall unlawfully and carnally know and abuse any girl above the age of eight years, every such offender shall be guilty of felony, and, being convicted thereof, shall suffer death as a felon; and, if any person shall unlawfully and carnally abuse any girl above the age of eight years and under the age of ten, any such offender shall be guilty of a misdeameanour, and, being convicted thereof, shall be liable to be imprisoned for such term as the court shall award. Here it will be observed that the Indian Act gave a less age by two years than the English Act. The spirit of the Indian Act does not, however, appear to be adhered to in the courts of this country. It was held that the consent of a girl of the age of eight years was immaterial; and the prisoner was convicted on a charge of "illicit carnal knowledge of the prosecutor's daughter."+ It was also decided, in a conviction for Rape upon the person of a girl "aged about ten years" that the offence is Rape, with or without the consent of the child, if she is "under age."İ

The rule practically carried out in the courts of this country would appear to be that consent on the part of the

^{*} As quoted by Hough, page 448.

[†] Nizamut Adawlut Reports, vol. ii., p. 452.

[†] Nizamut Adawlut Reports, vol. ii., part 1 of 1852, p. 544.—In another recent case where the girl was ten years old the higher court of the N. W. P. decided that "the acquiescence of the girl was, with reference to her immature age, immaterial in Law." Nizamut Adawlut Reports, N. W. P., 8th December 1854, p. 813. Some time previously the Sessions Judge of Chittagong held that, in the case of a girl of ten, the consent of a child of so tender an age could not extenuate the prisoner's guilt. Nizamut Adawlut Reports, 25th November 1853, p. 791. See also a similar opinion in the cases of children of nine. Ibid, vol. i. of 1851, p. 471, and Nizamut Adawlut Reports, N. W. P., 21st October 1853, p. 1326; and in that of a girl aged from seven to nine years, p. 880.

female, when under puberty, cannot be received as any mitigation of the crime.

It is certain that some married girls of nine and upwards live with their husbands.* It may not be considered that this arrangement takes place with the consent of these unhappy children, indeed we have some very strong evidences to the contrary; still, while such a custom exists in the country, the rule, although not less strictly enforced in the

^{*} See Baboo Modusodun Gupto's statement, cited above, also the case of a Rajpoot who murdered his mother-in-law, in consequence of the latter's objecting to the consummation of his nuptials with her daughter, "a girl about seven years of age" to whom he had been betrothed (Macnaghten's Reports, vol. i., p. 92.) Instance of a girl "some nine years of age" who lived with her husband, (Nizamut Adawlut Reports, vol. ii., part 2, 1852, p. 45). Case of a girl "ten or twelve years old, who cohabited with her husband, but unwillingly, Nizamut Adawlut Reports, 24th Feb., 1855, p. 253. Also a case of Rape on a married girl whose age "did not exceed 13 years," and who it appeared had not reached puberty, but who had "lived with her husband for some time," and "had been in co-habitation with him."-Reports vol. iv. of 1854, p. 657 .- On the other hand, we meet with rather frequent cases, especially Up-country, in which it is positively asserted that girls of twelve and upwards have been married for some time, but have not cohabited with their husbands. See Nizamut Adawlut Reports, N. W. P., 4th January, 1854, p. 14-(a girl about twelve years of age, who had been Raped, declared that, though married a year previously, she had never cohabited with her husband: this was confirmed by the evidence of her husband, her mother and grandmother. The Medical Officer gave it as his opinion that the girl was a virgin prior to the rape)-also Ibid, March 16th 1854, (a girl calling herself twelve, but thought by the jury to be fourteen, having had similar violence committed upon her, deposed that she had been married for a year, had lived with her husband in the same house, but had not been carnally known by him. The husband deposed that he had been married to the girl a year; and that, during the last three or four months, she had lived with him; they slept separately. The Civil Surgeon found such injuries as led him to the opinion that Rape had been committed on her person. The Higher Court observed that the near approach to maturity of the girl might be thought to cast doubt on the statement that consummation had not occurred during a year's union with her husband, still there appeared to be no reason to question the truth of her charge.")

cases of unmarried children, should be and indeed is somewhat more cautiously dispensed in the cases of those who are known to have lived in their husbands' houses—whatever their ages may be.

We find Mr. W. Dorin, one of the Judges of the Nizamut, holding, in 1826, that "the English doctrine regarding the assent of children being immaterial, he was against adopting it in this country, where females came to maturity so early."*

Some extraordinary pleas occasionally arise out of the Question of Consent in these cases. A wretch of Budaon, when under examination for Rape upon a child six years old, but to appearance only four, repeatedly declared that the poor infant seduced him into the commission of the act.† Again, in a trial at Shahjehanpore, the prisoner, an adult, admitted his guilt, pleading that the girl, who appeared to be only six years old, of her own accord came to him and consented to the act.‡

I have taken the details of 66 trials for Rape from the printed Reports of the Nizamut. § In only 14 of these cases did the accused escape sentence by the Superior Court.

In these 66 cases, the ages of the females are stated as follow: Four years, 1; six, 2; between six and seven, 1; seven, 5; seven and eight, 2; eight, 1; nine, 3; nine and ten, 4; ten, 8; ten and eleven, 2; eleven, 1; twelve and thirteen, 1; thirteen, 5; young girl, age not mentioned, 1; fourteen, 1; fifteen, 1; fifteen and sixteen, 1; sixteen, 2; adult women, 19; widows, 5.

It will be observed that in 30, or nearly one-half of these cases, the females were under the age of twelve.

^{*} Macnaghten's Reports, vol. ii., p. 452.

[†] Nizamut Adawlut Reports, N. W. P., 14th June 1853, p. 767. ‡ *Ibid*, 30th December 1832, p. 1553.

[§] That is, of the Calcutta Court, up to April 1854, including 13 cases reported in vol. i. of the Decisions of the Nizamut Adawlut of the N. W. P.

More recently, a wretch was sentenced at Delhi, to twelve years' imprisonment for a Rape and aggravated assault upon a woman 70 years of age!* Another monster was found guilty, at Bareilly, of a Rape, upon an infant apparently not more than three or four years of age, and still suckled by her mother!†

In a large proportion of the cases of the younger children, it was very clearly proved that rather severe injury had been received. It is mentioned in several of the recorded cases that the vagina was lacerated. In a case where a girl of twelve was Raped (not included in the above 66 cases,) the Civil Surgeon deposed that there was a rupture of the lower part of the vagina to the extent of half an inch.‡ In another case, a poor infant of six years, but apparently much younger, was found by the Medical Officer to have suffered rupture of the hymen and laceration of the perineum and vagina.§ In one instance only does the violence of the assault appear to have proved fatal, in a girl of ten, who made a declaration that she had been violated by two persons. The medical particulars of this case are not given. ||

In another case (not counted with the above) it appeared, in a trial at Bareilly, that a girl eight or nine years old was violated by a man of twenty-five. The girl did not mention the occurrence to her mother until the evening, when notice was given to the police. A dahee examined the girl and stated that a Rape had been committed on her person. She was sent to the thannah, from thence to the dispensary where the native doctor examined her, whence she returned home and died. The length of the interval

^{*} Nizamut Adawlut Reports, N. W. P., June 1854, p. 371.

[†] Ibid, 1st February 1853, p. 141.

[‡] Ibid, 10th March 1855, p. 336,

[§] Ibid, 3rd March, 1855, p. 375.

^{||} Ibid, vol. i., p. 542.

between the assault and the girl's death does not appear in the printed report. It was positively asserted that the deceased, although betrothed, had not cohabited. The Civil Surgeon examined the body and stated that, in his opinion, Rape had been committed on her person, and that diarrhœa had preceded death; that such ailment may have been caused by fright and alarm, but that he could not state distinctly that this resulted or was brought on by the injury of Rape, as other things may have assisted the alarm, and he did not know exactly what took place between the injury and death. The Courts held that there was not sufficient evidence to connect the death of the deceased with the violence perpetrated on her person, and acquitted the prisoner of murder—but found him guilty of Rape.*

The existence of a Purulent Discharge in the female is only mentioned in one case that I have met with. A man was accused of violating a child of ten. The Civil Surgeon deposed that he could not state positively that a Rape had been committed, but that the discharge was not natural. There was a slight white discharge from the vagina, and slight swelling of the external parts of generation. These appearances might have resulted from such a cause as the violence alleged: the discharge might have been the result of other causes besides violation or its attempt. The higher court observed that it was a material omission in the Sessions Judge not to interrogate the Civil Surgeon particularly whether the girl was or was not still a virgin. Neither does it appear to have been inquired whether the accused suffered from Gonorrhæa or Syphilis.†

The question has been mooted, in England, whether Rape, attended with Completion (i. e. Complete Penetration) can be

^{*} Nizamut Adawlut Reports, N. W. P., 26th November 1852, p. 1385.

[†] Ibid, 26th March 1855, p. 384. This important point has been fully discussed and weighed by Taylor, p. 244.

perpetrated on a child of *Ten* by an adult man.* The question is of some practical moment, and a careful investigation of some of the cases presented to the notice of Medical Officers in this country might assist in elucidating it.

Still it is greatly to be regretted that a merely physiological question of this kind should, both in England and in India, have tended to screen atrocious criminals from the full punishment due to their guilt. Thus Taylor cites a case in which the evidence left no doubt that the crime had been committed on the person of a girl about ten years old. The Surgeon stated that there were considerable marks of violence about the pudendum, but Completion (i. e. penetration) was, in his opinion, physically impossible on a child under ten years of age. Upon this evidence, the charge of felony was abandoned. + So, in this country, a lad apparently about fourteen or fifteen years of age was tried for a Rape on a girl of nine. He admitted the act, but asserted that it was with the child's consent. A woman, witness to the sooruthal, deposed that connexion had taken place. "The Civil Surgeon's deposition was to the effect that a Rape was attempted; but, from the tender age of the child, he did not consider it could forcibly have been effected. " The prisoner was, however, convicted. In the case of a man tried for Rape on a child of three or four, the Civil Surgeon deposed that, on examination of the girl, "he found specks of blood and laceration, from which he concluded that Rape had been attempted." The prisoner was convicted of "an attempt at rape;" but the case, being one of unusual atrocity, he was sentenced to ten years' impri-

^{*} Taylor, pp. 641-42.

See also an important case, Nizamut Adawlut Reports, N. W. P., vol. ii., (1852,) p. 1218.

[†] Page 642.

[‡] Nizamut Adawlut Reports, N. W. P., 21st October 1853, p. 1326,

sonment with hard labour in irons,—the usual punishment, on conviction for Rape, being imprisonment for seven years.* Again, in a very recent trial at Azimgurh, a lad of eighteen was convicted "of an attempt at Rape, the Medical evidence not sustaining the completed offence." The Civil Surgeon was of opinion that a Rape was not effected, but he spoke to the rupture of the hymen, and to injury, from forcible connexion, having been inflicted on the vagina. In consideration of his youth and the "slight injuries" sustained, he was sentenced to the mitigated punishment of three years' imprisonment.+ It is difficult to perceive under what circumstances the crime could have been held, in the above cases, to be not "Rape"-but an "attempt to commit Rape," when it is an established principle of the English Law that "A sufficient degree of penetration to constitute Rape, in Law, may take place without necessarily rupturing the hymen"-"the degree of penetration being quite immaterial." And while it has been maintained, in India, that proof of penetration of the vulva, without rupture of the hymen, is sufficient to substantiate a charge of Rape.§

On the other hand, I find, in the Nizamut Adawlut Reports of the North-Western Provinces, a case, in which a person, apparently about eighteen years of age, was tried for Rape on a child of seven. The evidence of the midwife and of the Civil Surgeon went distinctly to show that the crime had been Completed." A second, in which the Civil Surgeon deposed that such marks of severe injury existed upon

^{*} Nizamut Adawlut Reports, N. W. P., 1st February 1853, p. 141.

† Ibid, 7th March 1855, p. 317.

[‡] Taylor, p. 642.

[§] Nizamut Adawlut Reports, vol. ii. of 1852, part 1, p. 548, and vol. iv. p. 20.

Nizamut Adawlut Reports, N. W. P., 5th May 1854, p. 474.

the person of a child of eight as to lead to the opinion that "Rape had been committed by violence."* And another, where the sufferer was a child of about four years, in which the prisoner was convicted of Rape and sentenced to seven years' imprisonment, it being in the opinion of the Superior Court "clear from the evidence of the Civil Surgeon that the offence was Complete." + Also, in the case of a child aged about six, but apparently younger, the accused was convicted of Rape, the Civil Surgeon deposing that the lacerations inflicted were very extensive, and that a Rape had been "perpetrated to the extent possible on an infant." It is merely frivolous to argue, as a point of law, even that complete vaginal penetration is impossible in any infant however young, when it is certain, from numerous recorded instances, that such penetration has been effected in children of all ages—the fact that this penetration has, in very young girls, only been effected by severe laceration of the parts should, most assuredly, not be held as a mitigation of the atrocity.§

In cases of alleged Rape, the Medical Officer's opinion will, not unfrequently, be required as to the manner in which

^{*} Nizamut Adawlut Reports, N. W. P., 11th February 1853, p. 206. † *Ibid*, 10th May 1852, p. 431. ‡ *Ibid*, 23rd March 1855, p. 374.

[§] In a case tried at Cuttack, the Medical Officer deposed that the sufferer, a child aged about nine years, "had lost all traces of virginity."—Nizamut Adawlut Reports, 24th October 1854, p. 487. In another case of a girl of nine, the Civil Surgeon of Agra deposed that he "saw the child on the morning of the 28th November, on the fourth day after the occurrence, and perceived no signs of violence whatever, which he considered must have remained visible if the injuries described by the two women had existed on the 25th. He, however, said that the girl was not a virgin; and that, if she had on any previous occasion, had connexion with a man, marks of violence would not have remained. It was admitted that she had once visited her husband's house. Here we have also the opinion of an experienced Surgeon of the possibility of the act in a girl of nine.

the criminal may have prevented his victim from offering valid resistance, and from crying loudly. In several of the recorded cases, it appears to have been clear that the females were either held by accomplices (3) or had their hands tied, or placed under them (3). In a very large proportion of the cases (12) it was declared that the females' cries were stifled by wrapping a cloth across their mouths. In one case a woman of twenty stated that the accused stuffed his ungowcha into her mouth; a girl of nine was similarly gagged; in another, a girl of eight said that the defendant stifled her cries by compressing her cheeks with his fingers, and in a fourth, it appears that a poor child's mouth had been filled with sand.

The class of cases which is likely to occasion the Medical Officer most uncertainty in this country, is that in which, although the great body of the evidence tends to establish the fact that girls past the age of puberty and accustomed to sexual intercourse have been violated, some of the statements of the prosecutrices and their friends are not susceptible of confirmation by medical evidence. In many of these instances, it appears highly probable that much additional colouring is given to the facts, with a motive which is self-evident. This mixture of falsehood with truth, however, calls for the utmost vigilance on the part of the Medical Officer in a large proportion of his medico-legal investigations.*

The crime of Adultery is punished, both socially and legally,† with so much severity in this country that, in many cases,

^{*} See a case especially illustrative of the difficulties involved in these inquiries.—Nizamut Adawlut Reports, 17th October 1853, p. 663.

[†] Any person committing Adultery—" Penalty"—Imprisonment with hard labour for any period not exceeding seven years, and two years in lieu of stripes, Regulation XVII. of 1817, Section VI.; Regulation II. of 1834, Section I. See cases in which both parties were convicted, and sentenced to

there has been strong reason to believe that women detected in its commission have charged their paramours with Rape.*

Wherever it is possible, the opinion of a Medical Officer is obtained by the judicial authorities in cases of this kind; but it frequently happens that the reports of native midwives, or of other and probably less intelligent females have to be taken. Considering, however, the extreme care and strict fidelity (rather than the high degree of medical knowledge) required in investigating the generality of cases of this description, it must be evident that much caution should be observed in receiving the opinions of native women upon

imprisonment.—Nizamut Adawlut Reports, N. W. P., February 7th 1853, p. 185; June 1854, p. 649; October 26th 1854, p. 623.

A person accused of Rape was punished for Adultery by the Nizamut Adawlut of Calcutta in 1824. A bearer was sentenced to imprisonment for Adultery with a woman in Calcutta. Nizamut Adawlut Reports, December 23rd 1854, p. 802.

By the ancient Mussulmaun Law, it was held that if a person found a man with his wife or female slave, and the wife or slave be assenting to the whoredom, both parties might be slain. There appears, however, to have been reservation to the effect that killing was only justifiable where the slayer was not able to prevent the criminals from effecting their purpose "Zena," which included adultery, fornication, rape, and incest, was punishable by the law only upon the evidence of four men, eye-witnesses to the fact, or upon the confession of the offender four times repeated! Under which circumstances, the punishment awarded—stoning to death—was probably seldom inflicted.

By the Hindu Law of Menu, an Adultress of high rank was to be devoured by dogs in a public place and the Adulterer to be burned to death on an iron bed. A mechanic or servile man, having connexion with a woman of twice-born class was to lose the part offending—c. viii.,—s. 371-2-4. It is mentioned in the Ayen Akbery that, where the man is inferior, he shall in all cases be put to death, and the woman shall have her nose and ears cut off.—Gladwin's Trans. v. 3, p. 211. It appears, however, to have been ruled by Menu that, where the parties were of equal rank, the man was not to be punished for Adultery if the woman consented.

* Macnaghten's Reports, vol. ii., pp. 317, 926, 1254; Nizamut Adawlut Reports, vol. ii., part 2, p. 495; vol. iii., part 2, p. 39; vol. iv., p. 427, Nizamut Adawlut Reports, N. W. P., for August 1854, p. 300.

them, and that it would be safe to expect from these females so much explicitness of detail as to render the reports of their evidence available for submission to competent medical authority.

The dhaees often give their statements with great confidence and fulness. In a case where a man had found his daughter, aged nine, lying senseless in a field and with blood flowing from her private parts, and had her examined by a midwife at the thannah, this woman deposed-"that connexion had been violently made, the hymen broken, and the act consummated. She also declared that the girl had not arrived at the age of puberty, and that she was too immature to have any sensual desire." The Sessions Judge remarked that it appeared that the deposition of the Civil Assistant Surgeon had not been taken on oath. The statement of that officer was, he thought, inconclusive for the prosecution, and, it being of a negative kind, his appearance on trial was not considered necessary or expedient, with reference to the distance of his station from that of the trial. He agreed with the majority of the jury in finding the prisoner guilty. The Judges of the Superior Court remarked that the evidence of the Civil Assistant Surgeon, which the Sessions Judge regarded as inconclusive. could not, in justice to the prisoner, be denied weight. He examined the girl, at the latest, four days from the event (the dhace examined her on the day after.) He stated that "there were no signs of inflammation, nor any evidences to show that violence had been committed; the hymen was, however, absent. He added his opinion that it was possible that no signs of external violence should remain five days after the crime, but that would depend on the amount of violence used. The Court held it to be, if not altogether impossible, yet in the highest degree improbable that, had the marks of violence described by the midwife existed on the 19th, no

trace should remain on the 22nd. The Court also considered the midwife's earliest statement to be inconsistent with the assumption of Rape having been fully committed on a virgin child of the immature age of eight or nine. It spoke of little or nothing more than that the girl had recently lost her virginity; slight partial laceration was alluded to, but not swelling or bleeding of the parts, which were additions made in the subsequent examinations of this witness. Further, there was no proof (except the father's statement, not made in his earliest charge,) that the girl's marriage had not been consummated. The Court ordered the prisoner's acquittal and release.*

One Kewal was tried, at Delhie, on the accusation of a girl of ten, for an attempt to commit a Rape. Two midwives, who examined the person of the child, deposed that an attempt to commit a Rape on the child had evidently been made, but that the act had not been consummated. The Superior Court called upon the Sessions Judge to report whether the Civil Surgeon was examined as to the completion of the offence, and, if not, why the evidence of that Officer was not taken on a point in regard to which it would have been of the highest value. The Joint Magistrate explained that there was no Civil Surgeon stationed on the spot, and that it was only in extraordinary cases, requiring particularly great professional knowledge to elucidate them, that the sufferers were sent to the Civil Surgeon at Delhie. He did not consider the rules regarding the examination of European Medical Officers applicable to this case. The evidence of the experienced women, called dhaces, whom he employed, he considered preferable to that of the Native Doctor stationed there. Unless there were an order existing, (which he was not aware of there being, applicable to that

^{*} Nizamut Adawlut Reports, N. W. P., 20th April 1854, p. 431.

district,) making it necessary to expose the body of a female suffering from Rape to a person of the other sex, he should always think it best to avoid doing so [!] The female herself, if possessed of any modesty, would generally object to such a course as well as her friends; and forcibly to do so while no direct order applicable to a case occurring so far from Delhie existed, might subject the Government Officer so acting to an accusation of illegal or at least oppressive conduct. The Superior Court considered that the explanation given by the Joint Magistrate for dispensing with the evidence of the Civil Surgeon was satisfactory. The Court do not appear to have taken into consideration that Officer's somewhat questionable opinion that examination by midwives is always preferable in cases of Rape to that by persons of the other sex.*

In a large proportion of cases, investigations cannot be made by the Medical Officer, until the lapse of a considerable period from the time at which the offence is alleged to have been committed. Where this delay is believed to have been owing to design or carelessness, or no steps have been taken to obtain the testimony of midwives or medical opinion, the complaint is generally disallowed.†

In some instances, this delay, whether unavoidable or intentional, is so great, as to render it impossible that the Medical Officer should give more than a negative opinion. In other instances, however, as in certain cases of young children and of unmarried girls, an approximative opinion may, not unfrequently, be formed, even many days after the commission of the offence. Thus, in two cases of full-grown girls, finding the hymen injured, but not in process of

^{*} Nizamut Adawlut Reports, N. W. P., 14th February 1833, p. 235.

[†] Reports, vol. i. of 1851, p. 536; vol. ii., part 2 of 1852, p. 87; vol. iv., p. 250.

contraction to the form of carunculæ myrtiformes,—I have been enabled to state my belief in the truth of the allegation, that penetration had probably occurred for the first time a fortnight or three weeks previously.

As in England, evidences of Emission are not required here, to establish the crime of Rape. I find only one case in which the question of the presence of spermatazoa was referred to the Chemical Examiner. Here the Medical Officer of Umritsur transmitted a portion of wadded rezae (coverlet), suspiciously marked, to Mr. Siddons, but zoosperms could not be detected. As the crime of Rape is often committed with brutal violence on young children in this country, bloodstains are frequently noticed on the clothes of both parties.

There are many cases in the criminal records of this Presidency, in which the ravisher sought more or less successfully to destroy the life of this victim. A man of Bhaugulpore, having committed a Rape and being alarmed at the threats of the female to have him punished, attempted to kill her, by cutting her throat, and then tried to escape.*

A Sylhet man committed a Rape on a girl of ten, cut her throat, and was sentenced to death.

A girl was found in the fields, at Sarun, with her throat cut; it was supposed that the murderer had first ravished her and then murdered her.‡

In a trial at Bareilly, a man confessed that he had enticed away his master's daughter-in-law: three others accompanied them, two had criminal connexion with her, and, upon her refusing the third, she was thrown down, and killed with a sword. A lad of Benares, who stated himself to be eighteen, but who appeared to be fourteen or fifteen years old, con-

^{*} Police Report, L. P., 1849, p. 18.

[†] Ibid 1845, p. 37. ‡ Ibid, for 1850, p. 6.

[§] Nizamut Adawlut Reports, N. W. P., 30th October 1852, p. 1258.

fessed at the thannah and Magistrate's Court, that he had carnal knowledge of a child of seven, had caused her death by so doing, and had stolen her ornaments. The body was found concealed in a room, much decomposed, with a stone on the chest, and a cloth wrapped round the neck. Dr. Leckie, on removing the cloth, found that the whole of the soft parts of the neck had been destroyed, from which he inferred that it had been compressed, and that Strangulation was the probable cause of death.* We find a few instances where women of this country have killed those who attempted to ravish them. In 1845, a woman of Monghyr was acquitted of murder by the Nizamut, she having inflicted the wound on the deceased which led to his death, when he was attempting to violate her person. + The readers of Indian History will be familiar with the instance which occurred in 1696, when Soobha Singh, a rebel, having overrun Bengal, killed the Raja of Burdwan, and taken his daughter prisoner, attempted the honor of the latter, when the spirited girl stabbed him to death with a knife which she had concealed, and then pierced her own heart.

There is a very important set of cases which, it is to be trusted, are peculiar to this country, examples of which sometimes come under the investigation of medical officers. These are instances in which Fatal Injuries are inflicted on the Persons of Young Girls in the First Act of Connexion.

In 1847, there was a trial, at Bancoorah, in which Mr. Cheek, the Civil Surgeon, was questioned whether he thought it possible that a man, having connexion with a girl 11 years of age, could, without unusual or extraneous force, have produced rupture of the perineum from the vagina to near the anus? also whether a wound of eliptical or diamond shape, large enough to admit three

Nizamut Adawlut Reports, N. W. P., 24th June 1853, p. 793.
 † Police Report, L. P., 1845, p. 15.

fingers, could have been caused by the simple act of coition. He replied that he had never seen a case of the kind, but had every reason to believe that rupture of the perineum might occur from a man having connexion with a child of that age. He considered, however, that the mere act of coition would not produce a wound of the shape described above. He thought that, if a rupture of the perineum had taken place from coition, it would have been in a straight line from the vagina towards the anus. (It would appear that the body was not seen by Mr. Cheek). He considered that a mere rupture of the vagina to the anus is not sufficient to cause death, although the injury is of a very severe nature. In cases of midwifery, such accidents do occur, and are not necessarily followed by death. With regard to the probability of the girl in question having died from the hæmorrhage attending such a rupture, he considered that there is a great difference in various constitutions. In one case, death might be caused by a loss of blood which would not be fatal in another.

There cannot be a doubt, however, that, in many cases, unusual and extraneous force is employed. I am informed by an eminent missionary, thoroughly conversant with the customs of the natives in the neighbourhood of Calcutta, that he is assured that means are commonly employed, even by the parents of immature girls, to render them aptæ viribus by mechanical means, especially by the use of the fruit of the plantain! In 1853 a wretch, also of Bancoorah, was found guilty and sentenced to fourteen years' imprisonment, upon a charge of having committed a Rape upon a girl about ten or eleven years of age, married, but living apart from her husband. There was every reason to believe the statement of the child that—"he took a small lattee, or stick, which was in her hand, and, after using it, 'ad deobstruendam viam,' to considerable effusion of blood, succeeded in completing his

purpose." The injury inflicted does not appear to have been dangerous.*

In 1849, a man of Sylhet was sentenced to two years' imprisonment for causing the death of his wife, a child of tender years, by forcibly having connexion with her.

The Museum of the Calcutta Medical College contains a preparation, sent by Mr. G. Evans, t displaying the uterus, vagina, and greater portion of the external parts of generation of a young Mahomedan female, showing laceration of the perineum, and a considerable portion of the vaginal sheath, the effects of violence done to the parts on the first act of copulation, by which a violent hæmorrhage, to the destruction of the child (barely twelve years old) was occasioned. The uterus and parts concerned were diminutive and undeveloped, as might naturally be expected at that tender age, and before the process of menstruation had been established. The coagula at the bottom of the bottle were removed from the vagina after death. The sudden and unlooked-for death of the child, on the first night of her marriage, and the unaccountable quantity of blood found beneath the bed, and upon her linen, led to the suspicion of unfair means having been resorted to for her destruction. The body having, accordingly, been exhumed to ascertain the cause of her death, the perineum and vagina were found ruptured in the manner described, and as is represented in the preparation. But, as a judicial inquiry elicited no facts or circumstances tending to show that any unlawful means had been made use of by the husband to effect his purpose, and his generative organs presenting nothing unusual to account for the appearances, while the immediate cause of her death was satisfactorily explained by loss of blood from the vagina, Dr. Webb believed

^{*} Nizamut Adawlut Reports, N. W. P., 30th November 1853, p. 327.
† Police Report, L. P., for the above year, p. 35.

[‡] The following description is by Dr. Webb-Pathologia Indica, p. 285.

that this might be considered a case of extreme preternatural weakness or laxity of the genital system of the female, and one of very rare occurrence, for the common practice of Eastern nations, in forcing sexual intercourse upon children, of even earlier years than the subject of the present inquiry, would not appear to be attended with similar disastrous consequences.

This offence was, however, made punishable, under the Mahomedan law,—when death was the result of the first attempt at connexion.—See Skipwith, para. 952,—where is cited the case of a prisoner convicted of killing his wife, a girl of eleven years, in his attempt to consummate marriage, and sentenced to fourteen years' imprisonment with hard labour. It is added, that the Civil Surgeon recorded his opinion that the violence had been occasioned by the introduction of some hard instrument.—(Nizamut Adawlut Reports, vol. vi. p. 29.)*

^{*} From this and many other facts, it is evident that the ancient law-givers of this country, in providing for the early marriage of females, were careful to protect them against too early cohabitation. The practice of sending immature children to their husbands' houses, which at present obtains, is evidently as much an infraction of the law of the land, as it is a violation of the law of nature.

The practice of early marriage or betrothal has been usual in nearly all unsettled countries, and was common even in England nearly up to the the end of the 17th century. The following examples may be mentioned from a multitude of others-Isabel, daughter of Philip the Fair, King of France, married Edward the 2nd of England, in her 12th year, January 1308. Her second child was born when she was 17 years old. Her eldest daughter was married at 15, her second was married in her 9th year to a child of 4. Elizabeth Hardwick, afterwards Countess of Shrewsbury, married (cir. 1533) before she was 14; her daughter Grace married, in 1567-8, at the age of twelve. Audrey, the eldest daughter of the Earl of Southampton, was betrothed to the eldest son of the Earl of Northumberland, but died in her 14th year. Her younger sister, Elizabeth, was afterwards married to Lord Percy, in her 15th year-this was in 1662. The whole Peerage might be gone through with similar results. Immature children were always separated for a few years.-Still the practice certainly often led to disgracefully early unions.

I find, among the Reports of Medical Officers filed by the Nizamut, a case, by Dr. O'Dwyer, which appears to have a very important bearing upon this question. Here, the body of a child was found submerged in a tank, with a laceration throughout the entire length of the vagina, sufficient, in itself, to cause death; but the medical witness believed that the body had been thrown into the water before life was extinct; he found some swelling about the neck, and he believed the child to have been strangled. The case admits of doubt, still it is probable that this girl, having been accidentally injured, was at once put out of the way.

It appeared, in a trial at Jessore, that a Hindu confessed that he had strangled a young girl to whom he was married, who was unwilling to remain with him, and who had refused to sleep with him. He afterwards suspended the body by the neck, trying to make it appear that she had destroyed herself. The darogah stated that marks of strangulation and of injury to the pudenda were apparent. The Native Doctor deposed that there were marks of a rope round the neck, and the appearance of a stick having been forced into the private parts. The Judge of the Superior Court considered that there was strong presumption that the prisoner had used the girl in a cruel and brutal manuer before he took her life.*

It is to be feared that the existence of a severe law, while it may possibly act as a restraint upon the brutality of some men, in other instances leads to the commission of murder; or to the concealment, until too late, of serious injuries where, otherwise, timely assistance might be sought for and obtained.

According to the Mahomedan Law, a man's confession of Whoredom with a Lunatic Woman, subjected him to Hudd. A remarkable trial, upon a question of this kind, occurred in Ohio U. S. in 1853. In the sixth Section of the Act for the

^{*} Nizamut Adawlut Reports, 31st July 1854, p. 158.

punishment of crimes, Curren's Revised Statutes, p. 184, it is provided -- "That if any male person, seventeen years old and upward, shall have carnal knowledge of any woman, other than his wife, such woman being Insane, he knowing her to be such, every person so offending shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be imprisoned in the penitentiary, and kept at hard labour not more than ten, or less than three years." In this case it was held, for the defendant, that the female, being an Idiot, had no will; and, therefore, that a Rape could not be committed on her person against her will. It was further claimed that the word Insane, did not include the Idiotic; and hence that the defendant could be convicted of neither of the charges embraced in the indictment. Mr. Justice Nash ruled that a female Idiot, or an Insane female is the subject of Rape; and hence, of an assault with the intent to commit that crime; and that a male person, of a proper age, who shall have carnal knowledge of a female Idiot, knowing her to be such, is guilty, under the sixth Section, of having carnal knowledge of an Insane woman, knowing her to be such.*

Question of Virginity.—In a few instances, the Medical Officer may be called upon to decide whether a female is or is not a Virgin. About three years since, I was consulted in a case of this kind. A slave or lower servant in a Mussulmaun's family had disappeared. It was suspected that the missing man had intrigued with his master's daughter, and had been made away with by her friends. I was, therefore, called upon to state whether this woman (apparently about 20 years of age) had been accustomed to intercourse. I found the vagina remarkably narrow,† but there was no hymen. I reported that the woman's person did not present the chief sign of virginity, but that the absence of this might have

^{*} American Journal of Medical Science, April 1854, p. 532, already cited?

[†] Native women are very much in the habit of employing local astringents.

been consequent upon disease, or many other causes apart from sexual intercourse. I was, however, decidedly of opinion that she had not been habituated to sexual intercourse.*

UNNATURAL CRIME.

The works of the older travellers nearly all contain references to the enormous prevalence of this crime among the "Moors" of India.†

Stavorinus mentions some revolting, and probably exaggerated instances of the commission of this crime with the Lower Animals, by Mussulmauns. It cannot be doubted that such atrocities are frequent among these degraded people in the present day. A gentleman of the highest veracity assures me that a late Judge of Hooghly once mentioned to him that, when about to sentence a Native to imprisonment on proof of his having committed this crime in corpore capella, he intimated his decision to the Native jury, who hinted that, if so much severity was to be employed against so prevalent a crime, the prisons of Bengal would not be large enough to hold the culprits. Convictions for this crime are however rare; I only find one case in the Record-of Unnatural Crime with a Cow-at Dinagepore. † A recent writer in the Calcutta Review states, that there are, at present, in Lucknow, at least a hundred houses of ill-fame, registered and taxed, which are tenanted by Men only. There cannot be a doubt that male and female children are stolen from every part of India to meet the atrocious demands of that modern Sodom. Facts have recently

^{*} See a remarkable case involving the question of Virginity in a native woman of Bombay.—Taylor, p. 650.

[†] See Tavernier's Voyage, English Translation of 1678, p. 54. Fryer's new account of East India and Persia, 1698, p. 97: and Wilcocke's translation of Stavorinus's Voyages, 1798, vol. i., p, 456.

[‡] Police Report, L. P., 1845, p. 23. § For September 1855, p. 128.

come to light which prove that there exists, Up-country. a very extensive and abominable trade of unnatural prostitution regularly carried on by Eunuchs. Dr. Ebden's paper, already referred to (p. 342,) will show how extensively this moral pest has spread in the states of Rajpootana; and a case tried at Mynpoorie in 1852, -in which one Ali Buksh, quarrelling with an Eunuch named Bhoorah, who had lived with him as a prostitute for nearly two years, nearly severed the unfortunate wretch's head from his body,-led to the exposure of the practices of a class of Eunuchs, dressed as women, whom they are said to resemble also in shape, who are believed to have vested rights to contributions at weddings, &c., in certain villages allotted to one or more of them under a sort of acknowledged internal Government. have, in fact, a King, according to some, resident at Delhi, others say at Ferruckabad.* It is to be feared that, especially in the larger Mahomedan towns, Up-country, these practices are so common as scarcely to be regarded as criminal by the ignorant. Thus we find two prisoners, convicted of the crime on their own confession, relying upon the plea that-" It was their Occupation." !† Again, very recently, a wretch who was tried at Delhi pleaded guilty to the charge, evidently apprehending that the penalty of the law can only be incurred when the crime is accompanied by violence. He thought to exculpate himself by averring that the boy, aged 13, submitted willingly, in consideration of a payment of five annas. He further urged, in his defence, that this was not the first time he had committed this crime with the same boy. ‡

By the ancient Mahomedan law, the justification of homicide by the party upon whom this crime is attempted is expressly stated, in the Nukshbundeeyah and the Humadeeyah,

^{*} Nizamut Adawlut Reports N. W. P., 6th November 1852, p. 1314.
† Nizamut Adawlut Reports, vol. ii., p. 49.
‡ Nizamut Adawlut Reports, 15th September, p. 1158.

as follows "A man uses force, to commit Sodomy on a boy, (umrud, literally, a beardless youth,) who is unable to resist and prevent him, except by killing him .- The homicide in this case, is justifiable." Cases are mentioned by Stavorinus and Fryer where the victims courageously took the lives of their assailants; their conduct brought them the commendation and protection of the public. In the older writers, the crime of Bestiality is specified, as between a man and a quadruped or a woman and an ape. By two authorities, the discretion of the Cazee, in punishing, for determent, the offences of Bestiality and Sodomy is stated to extend to death, by ordering the offender to be burnt, or thrown down from a high place or by causing a wall to fall upon him. Scourging or confining in a place of bad odour are also cited as authorised modes of punishment; which castration and excision are declared not to be. Some authorities held that Sodomy should meet the same specific punishment as whoredom, and Shafiee's opinion was that, in pursuance of a tradition from the prophet, both parties should suffer death. In the Tubeen, the perpetration of this crime, with a man's own wife, or with a female slave, is declared liable to Tazeer.*

Sodomy was included under the general head of "Zena," or whoredom: and, to constitute legal proof of a crime of this nature, it required the evidence of four respectable male witnesses, or the confession of the guilty person four times repeated before the Cazee, he (the Cazee) declining to receive the confession, and sending the confessing person away the first, second, and third time! (Macnaghten's Reports, vol. i., p. 382.) The punishment for such atrocity appears, however, to be sufficiently provided for in Regulation XVII, of 1817.†

^{*} Op. Citat, pp. 256-326.

[†] The following notes convey all the points involved in the trials recorded in the Reports of the Courts of Bengal and the N. W. P., that can be of importance in a medico-legal point of view. A boy of 10.—Injuries threat-

PREGNANCY.

In cases where females are sentenced to death in India, it appears to be customary to call for the opinion of the Civil Surgeon as to whether they are "Quick with Child," or not—apart from any plea of Pregnancy. In Native women, the change of colour in the areolæ of the breasts, and the appearance of the brown line from the pubes to the umbilicus, described as characteristic of pregnancy by Dr. Montgomery, cannot, of course, be looked for.

The only case, bearing upon this question, which I have met with, is one in which a woman, sentenced for poisoning her husband, simulated pregnancy, and deceived the Sub-Assistant Surgeon who examined her.*

ened life .- Macnaghten, vol. i., 234. The prosecutor, a man aged 21, of good constitution, alleged violence against the prisoner, an old man above 65. Acquittal-Vol. i. of 1851, p. 1599. A child of 5-Seventeen days were lost before the Civil Surgeon saw the child; he could only depose to cicatrization externally, and to some inflammation within; but considered that some forcible penetration must have occurred to produce these appearances. -Reports of N. W. P., vol. i., p. 444. Idem, p. 465. A boy of 12 accused of forcibly committing the offence upon one two years his senior; a medical opinion not taken. Acquittal. Idem, p. 558. One Khurukgir, of Bareilly, made a report at the thannah, that four persons named had forcibly committed Sodomy on his person. Upon examining the informer the Civil Surgeon reported that "no recent injury had been received by him, but that there were signs of old standing injury on his person, which could be relied on, as showing that he was addicted to the practice of Sodomy." The Superior Court convicted three of the assailants, and acquitted their accuser.* On a child of 3 or 4 years. Injury alleged; a Surgeon's opinion not given. Nizamut Adawlut Reports, vol. iv. of 1853, p. 27.

* Police Report, L. P., 1846 p. 42.

^{*} Nizamut Adawlut Reports, N. W. P., 5th February, 1853, p. 178.

CRIMINAL ABORTION.

In a country, like India, where true morality is almost unknown, but where the laws of society exercise the most rigorous and vigilant control imaginable over the conduct of females, and where six-sevenths of the widows, whatever their age or position in life may be, are absolutely debarred from re-marriage, and are compelled to rely upon the uncertain support of their relatives, it is scarcely surprising that great crimes should be frequently practised to conceal the results of immorality,* and that the procuring of Criminal Abortion should, especially, be an act of almost daily commission, and should have become a trade among certain of the lower midwives, or dhaees.†

It is stated by Dr. Montgomerie, that the Malay women of Singapore are much in the habit of causing Abortion when a large family is likely to prove troublesome.

Ward, the Missionary, described the crime of destroying illegitimate children in the womb as prevalent to a shocking degree in Bengal. In the family of a single Koolin brahmin, whose daughters never live with their husbands, it was common for each daughter to destroy a child in the womb annually; this crime he found also to be very prevalent among widows, so numerous in this country. The pundit who gave him this information, supposed that 10,000 children

^{*} The Chief Magistrate's Report on the State of the Town of Calcutta, for 1852-53, contains a most striking illustration of the folly of the present system, among the Hindus, of preventing the re-marriage of their widows. Calcutta, with a population of about 416,000, supports 12,419 women of ill-fame, avowed and shameless (London, with its 2,000,000 inhabitants, is said by Lord Shaftesbury to contain not more than 7 or 8,000). Of these unfortunates, no less than 10,461 are Hindus.

[†] According to Burckhardt, the practice of Abortion is frequent at Mecca, and the seed of the Mecca Balsam tree (Balsamodendron Gileadense) is the drug commonly used.

were thus murdered, in the province of Bengal, every month!! Expressing his doubts of this extraordinary and shocking circumstance, this person appealed to the fact of many females being tried for this offence in the Courts of Justice, in every zillah in Bengal. He said the fact was so notorious that every child in the country knew of it; and that the crime had acquired an appropriate name, Petuphela, viz., thrown from the belly; pet phelance is also a term of abuse which one woman often gives to another. It was a fact too, he was assured, that many women died after taking the drug intended to destroy the child. A Koolin brahmin assured him, that he had heard more than fifty women, daughters of Koolins, confess these murders. To remove his doubts, he mentioned an instance which took place in the village where he was born, where the woman was removed in the night to an adjoining village, till she had taken medicines, and destroyed the fœtus. Her paramour and his friends were about to be seized, on a charge of murder, when the woman returned home, having recovered from the indisposition occasioned by the medicines she had taken. On making further inquiry into this subject, a friend, upon whose authority he could implicitly rely, assured him that a very respectable and learned brahmin, who certainly was not willing to charge his countrymen with more vices than they possessed, told him, it was supposed that a thousand of these abortions took place in Calcutta every month!! This statement Mr. Ward considered was doubtless over-coloured.* The same brahmin affirmed that he did not believe that there was a single Hindu, male or female, in the large cities of Bengal, who did not violate the laws of chastity.

^{*} The Infanticides were, in eleven years prior to 1844, in the United Kingdom, 8,000, or 727 yearly; the returns were still considered incomplete.—Hough's Precedents in Military Law, page 478.

Mr. Ward was a very careful inquirer and,—if, as is most probable, much of the depravity described above existed in Bengal forty years ago,—there can scarcely be a doubt that it prevails without any abatement at the present moment.

A considerable number of cases are brought before the notice of Medical Officers, in which it is stated that Abortion or Premature Confinement has been produced by violent illusage, blows, kicks &c. As these charges are usually preferred Natives against persons with whom they are at bitter feud, and as the evidences of violence are not often very apparent, the Medical Officer needs do little more than inquire closely and report with caution. The proof of such violence must generally rest with the police.

The majority of cases of this class which demand medical investigation are those in which the death of both mother and child has resulted from swallowing drugs, or from the employment of local irritants and mechanical means to cause the expulsion of the fœtus.

The notorious prevalence of this practice appears to have led, formerly, to much undue interference on the part of the police. It has, therefore, been ordered that,—" Police officers inquiring into any charges of Abortion unattended by death, unless expressly ordered to do so by the Magistrates, shall be liable to fine and dismissal."

It cannot be doubted that, but for a rule of this kind, much inquisitorial tyranny and false accusation might be practised. A strong illustration of this came before me in 1850. On being requested to examine some matters alleged to have been used to procure Abortion, I found them to

^{*} Regulation XXII. of 1816, Section XXII; C. O., No. 303, December 31st 1824; Regulation XXII. of 1817, Sections XII, XIII. See an important case bearing upon this point—Macnaghten, vol. i., p. 349.

consist of a scrap of plantain leaf and a leaf of the jack tree (artocarpus integrifolia) smeared with office ink in such quantities as to allow of being dissolved off and used at the commencement of my letter reporting that a fraud had been attempted.

The real cases are, however, only too numerous. Dr. Webb gives the following as some of the methods practised to produce Abortion in India, (communicated to him by an intelligent student of the Calcutta Medical College:)

"Assafætida, lall chitra root, ginger, garlic, long pepper. Mixed and made into pulp, to be taken internally. After an hour, shampooing of the belly and lower part of abdomen, as well also introducing eight inches length of *lall chitra* branch, so as to enter into the mouth of the womb, produces Abortion.

Tamarind pulp, Jabakkhar Nabon salt, mixed and taken, as well as lall chitra branch introduced, produces Abortion.

Arairaj tree bark, black pepper-corns 25, produces Abortion.

Golockpore pice, bahoo leaf, used for the after consequences.

Wookra root, black pepper-corns boiled together are used as the above for the space of three days.

Expressed juice of Boori Gooa Pan 3 ss. to be repeated every third hour to produce Abortion.

Assafætida softened with water was anointed in the region of the navel, and at the same time hot milk was given internally, as hot as could be taken, and that a large quantity, in a case of threatened abortion; this hastened the expulsion of the fætus, and the remedy is used for the production of Abortion also."*

A careful investigation into the *Internal* means employed for procuring Abortion among the Natives is much needed.

In July 1852, the deputy commissioner of Jubbulpore

^{*} Pathologica Indica, p. 281.

despatched a fluid, obtained by Dr. A. Wilkinson, from the stomach of a Brahmin woman, who had asserted, in her dying declaration, that she suffered from the effects of arsenic administered to her by her paramour to produce Abortion. Dr. Wilkinson pronounced his belief that the matter found in the stomach contained Arsenic; this was confirmed by the Chemical Examiner's analysis.*

In a case which occurred at Tipperah in 1848, the prisoners are reported to have administered to a woman who was pregnant by one of them, a mixture of red sulphuret of arsenic, white oxide of arsenic, blue vitriol and vermillion, for the purpose, as they said, of producing Abortion; the woman died in consequence.

Dr. O'Shaughnessy has shown that the lall chitra is sometimes given internally to occasion Abortion.‡

It is probable that the Native Abortionists employ a variety of Mechanical Means and of Local Irritants to effect their destructive object. It is believed that the introduction of

^{*}In 1848, a Tipperah man gave his mistress poison, with the view, as he said, of procuring Abortion, but which caused her death in a few hours. The poison had previously been used by him to kill rats, so that he was well aware of its effects.—Police Report, Lower Provinces 1848, p. 37. Mr. Brown, of Weston-on-Trent, has reported the case of a young woman, 24 years of age, who was supposed to have died of peritonitis after premature delivery. It was found that she had been the subject of ulceration of the stomach produced by the action of arsenic (probably taken to induce Abortion), which was detected in that organ by chemical analysis (Association Journal, October 7, 1859.) On the other hand Mr. Carter, of Newbury, referred to Dr. Taylor the case of a female, aged 22 years, who took a large dose of arsenic when she had passed the fifth month of pregnancy. She died in less than seven hours, purged and vomiting, but did not abort—Taylor, page 534.

[†] Police Report, Lower Provinces, 1848 p. 3. The Police Report of that year makes allusion to four other deaths caused by giving drugs to procure Abortion, occuring in Tipperah.

[‡] See Antea, p. 287.

arsenic is practised, but I have not been able to meet with an instance of the kind.*

Mr. Edgeworth, Commissioner and Superintendent of the Trans-Sutlej States, has recently communicated to the Medical Board some interesting particulars which he has collected in criminal trials regarding the drugs used to produce Abortion by the village midwives about Jalandhur. That most commonly in use appears to be the stem of the Trianthema pentandra, called Bis-kopra and Itsit. This is usually looked upon as an innocent pot-herb. In most cases of which he has heard, the stalk was employed locally; but, in one instance, it was given with other drugs as a bolus. Another substance used for this purpose is the Mynphul,-fruit of the Ranolia dumetorum. In addition to these, Cloves, Nutmeg, and Saffron, Fenugreek, and Sal Ammoniac are used. A mixture of these seven ingredients was successfully employed in a case recently tried by him. In another recent case, a mixture of Mynphul, Gugger Bel, (Cuscuta Reflexa-the branches) and Malkungni (Celastrus Paniculata) had been given by the mouth.

^{*} In 1849, the Chemical Examiner received, from the Magistrate of the 24 Pergunnahs, a packet of substances which, it appears, were believed to have been used in procuring Abortion. Dr. O'Shaughnessy detected fused litharge, realgar, alum and some harmless substances, the whole being commonly used by Native women for removing hair from the axillæ and pubes. He thought that, doubtless, some of the substances might, if applied within the orifice of the womb, cause such irritation as would lead to Abortion ; but, under the above circumstances, their possession could scarcely be deemed a proof of criminal practices. I have made some inquiry relative to the arsenical composition used by natives as a depilatory. Baboo Dyalchurn Bysack, of the Ooterparah Hospital, informs me that it is composed of hurtal (orpiment) and lime. Some persons mix these in equal parts, others use an excess of orpiment or of lime. These are made into a paste of the consistence of thick honey, which is applied lukewarm over the parts, and is allowed to remain from 5 to 7 minutes. The surface is then washed clean with cold water, when the hair is either removed with the paste, or is easily plucked out without pain. This practice is most frequent among the lower classes and women of ill-fame.

In a case tried at Furruckabad, it was stated that the dose which had caused a woman three months gone to abort was five pills and some soda and carrot seeds.*

In 1851, a Hindu was tried at Backergunge for administering the juice of some jungle plant to his sister-in-law, seven months gone in pregnancy, in consequence of which she was taken ill and passed some congealed blood. She died in 50 to 60 hours, from the effects of this medicine, having previously acknowledged the illicit intercourse between herself and the prisoner, and the fact of his having given her the medicine alluded to, to procure miscarriage. The body was so much decomposed that the Sub-Assistant Surgeon who examined it could merely state that the woman's death was caused by abortion of a fœtus about 7 months old, the after-birth having remained attached to the womb. He could not pronounce that the substance (fluid?) said to have been administered by the prisoner would cause miscarriage. The prisoner was acquitted. The judge of the higher court remarked that the examination of the Medical Officer had not been sufficiently close. He should have been questioned regarding the properties of the asclepias gigantea, and its effect upon the system, when given in large quantities. It is, he believed, an irritant and an active purgative, and is injurious to the system, according to the quantity or frequency with which it is administered.

There can be no doubt that the acrid milky juice of the Mudar may act fatally to both mother and child in such cases, by its powerful emetic and cathartic operation.

Professor T. W. Wilson informs me that a by no means unusual mode of procuring miscarriage among the native women of Calcutta is by placing a lighted wick in a *lotah* br ass water vessel) and applying the mouth of the pot over the hypogastric region, after the manner of a large cupping

^{*} Nizamut Adawlut Reports, N. W. P., July 8th 1853, p. 822.

glass. Traction is made upon the vessel while it is firmly adherent, and probably a partial separation of the placenta, or, possibly, very severe injury to the uterine parietes, is the result. Probably this means and *Pressure* are generally employed at advanced terms of pregnancy.

The most frequent and probably most destructive mode of causing Abortion among the Bengalees is by the introduction into the uterine cavity of a large portion of the root of the *Lall Chitra*, or Plumbago Rosea.

In a case where death was caused at Hooghly, in 1843, by administering means to cause Abortion, there could be no doubt, from the report of the Civil Surgeon, that the deceased had died from inflammation of the womb, caused by the introduction, though the Vagina, of a piece of stick called *Cheeta*, but there was not sufficient evidence against the three persons accused.*

In 1844, it was reported to the Joint Magistrate of Bancoorah, that the relations of a pregnant woman intended to
administer drugs to her to procure Abortion. A burkundauz was sent to inquire into the matter. He found the
woman very ill, having been recently delivered. She stated
that two persons had given her drugs. These individuals
were sent in with her paramour. There was, however, no
proof forthcoming against them. After her death, it was
found that a stick, (a piece of which remained in the womb,)
had been forced up the uterus, and that inflammation, arising
from its presence, caused her death.†

It was reported, in the case of a professional Abortionist, convicted at Tipperah, in 1845, that her medicine was a pill of the Cheeta tree, and that she also passed into the Vagina a stick of the creeper called Moaheeanee.‡

In his report of 1850, already noticed, Dr. Woodford refers

^{*} Police Report, L. P., 1853, p. 69. † *Ibid* for 1844, p. 64. ‡ *Ibid* for 1845, p. 40.

to a case in which he found a portion of this root "in the gangrenous uterus, with a piece of string attached, which had been accidentally broken in the withdrawal."*

In May 1854, the body of a Hindu woman, who had died under suspicious circumstances, was brought to my hospital in a very advanced stage of decomposition. The Native Doctor informed me that, when placed in the dead house, it appeared in a natural condition. I, however, found the womb everted between the thighs of the corpse, evidently by the gaseous distention within;† and, lying beside it, and evidently having recently escaped from its cavity, the body of a fœtus of about 4 months, greatly decomposed, and a portion of the lall chitra root, seven and a half inches long and rather thicker than a common writing quill. This had

^{*} See also a similar case by Dwarkanauth Das Basu, Pathologica Indica, p. 333. The woman died of peritonitis a few hours after her admission to the hospital. In the uterus a piece of Lall Chitra stick was found, the uterus was in a state of ulceration from the contact of this foreign body, the Vugina was inflamed and ulcerated. The peritonitis was said to have come on four days previous to her admission to the Medical College Hospital.

[†] In a notice of this case, published in vol. xxi. p. 193 of his excellent "Abstract," my friend Dr. Ranking remarks,-" We are not disposed to accept Dr. Chevers's explanation that the contents of the uterus were expelled by the accumulation of gas in the intestines." The Editor does not state the reasons for his dissent, but speaks of my case as similar to one by Dr. Mayer, of Warzburg, cited in the preceding volume of the Abstract, p. 193. In this latter case, the child was extruded from the uterus of the mother 54 hours after death. When there was "found no absolute evidence of death." The reviewer holds that, here, in all probability, the child was expelled by the " mere rigor mortis of the uterus." In my case, this explanation was quite inadmissible. The body was brought to my hospital frightfully swollen by putrefaction, long after the cessation of the rigor mortis; and, subsequently to its being deposited there, the fœtus was expelled,-the abdomen being enormously distended by gas. This appears also to have occurred in the body of a woman whose case became the subject of a trial at Tirhoot in 1853. A widow, having become pregnant, disappeared, and was reported to have been murdered by her relations. Her body was sent to the Civil Assistant Surgeon, after disinterment, in a very advanced state of putrefaction. "The womb, with a portion of the small intestines, had been forced by the promotion of putrefaction (gases in the abdomen) through the external

been scraped,* and was thickly coated with adhesive inflammatory deposit.

In the following August, I examined the body of a Mussulmaunee, dead three days, who was alleged to have died in consequence of the employment of means to produce Abortion. I found that this had been effected by the introduction of a portion of the same root, about four inches and a half long and rather more than half as thick as a common cedar pencil. The contents of the uterus, which must have been of the 4th or 5th month, had been expelled, but this irritating substance remained lodged in its cavity. The lining of the uterus, still coated with decidua, had a seared appearance, almost as if molten lead had been poured over it, and the root was completely draped with a thick shreddy deposit. Decomposition had advanced considerably, but the mucous membrane of the stomach, as well as that of the first portion of the duodenum, was of a deep lake colour, while the rest of the intestinal tract was pale. This, however, appeared to result merely from a state of high congestion. The stomach contained rather more than an ounce of sanguinolent fluid, exactly resembling strawberry cream in There were solid feeces in the rectum. Thinkappearance.

organs of generation, and a small portion of the remains of these alone were visible." The right side of the abdominal parietes had burst, so as to give exit to the gases of putrefaction. "From the absence of the uterine organs, he was unable to state if the deceased was pregnant; but, had she been so far advanced as to be unable, from her size, to conceal it, the womb would not have been protruded out of her body; therefore, if she had been pregnant, it must have been of short duration." The above cases appear strongly to oppose the conclusion here arrived at by the Medical Officer,

^{*} Dr. O'Shaughnessy mentions that the *Plumbagin* exists principally in the *bark* of the root. It is to be feared, however, that this scraping is merely intended to increase the irritating effects of the blistering substance.

ing that the powder of lall chitra might have also been given, I sent the stomach to the Chemical Examiner, but nothing suspicious could be detected.

It appeared, in a trial at Mymensing, that a widow, having entered upon a disreputable course of life, and becoming pregnant, she and one of her paramours had recourse to a woman of the bearer caste, who was "acquainted with medicine" to procure Abortion. This hag furnished "a twig of a creeping plant" which she procured on the bank of the river,-this was introduced into the womb. It immediately began to cause pain, but she was entreated by her paramour to bear it for the sake of preserving their reputation. On the following day, she began to complain of severe pain in her stomach, saying that it was owing to some medicine which had been given her for the purpose of procuring Abortion. Her death occurred three days after this. The Civil Surgeon deposed that death was caused by miscarriage, that the womb was enlarged, that there was no fœtus in the womb, it must have been thrown away, and death ensued from hæmorrhage; that there was a large sore [?] on the surface of the womb; to which the fœtus had been attached, with effusion of blood in and around it: that the miscarriage must have been caused by the introduction of a stick of a highly irritating nature into the womb, such as the piece of stick shown to him in court, which was found in the womb. That it was called Akulmendee (Lawsonia Inermis?) and is universally used by the natives for procuring Abortion by introducing it into the womb. The hag admitted, before the darogah, that she had furnished the medicine to be applied to the deceased's person to cause Abortion; and, when the darogah asked her to show him the twig, she procured a twig from the jungle saying that this was what she gave. This twig was produced in Court together with the piece of stick which was discovered in the deceased's womb-they were of the same kind.*

It might be imagined that a mode of procuring Abortion more violent and cruel than the above could scarcely be imagined. A series of still more atrocious cases is, however, on record.

In 1845, Dr. J. Macpherson, then Medical Officer of Howrah, examined the body of a Hindu female,† about 25 years of age, in an advanced stage of decomposition. She was said to have been recently delivered; and, on her deathbed, to have accused the man with whom she cohabited of having caused Abortion. The intestines, within the pelvis, were found to be in a state of acute inflammation, with shreds of lymph freely effused: and, floating among them, and lying transversely, was found a piece of stick, about 51 inches long, of about the thickness of a small quill, and with one end slightly sharpened. [Doubtless this was a portion of the lall chitra root. On examining the uterus, its fundus was discovered to have been perforated by the stick, a small hole, large enough to admit of its passage, remaining pervious. The contents of the uterus had been recently evacuated, its coats were dilated to one-half more than its usual size, and the spot to which the placenta had been adherent was plainly recognizable. No laceration of the os uteri was discoverable: and it was not known what had become of the fœtus. As one end of the stick had the look of having been broken off, it may have originally been much longer, and have been broken off by the violence employed in introducing it. The evidence went to show that no one but the man with whom she cohabited could have had access to her, and it is not to be supposed that she could, of herself, have used

^{*} Nizamut Adawlut Reports, August 2nd 1854, p. 188.

[†] Singularly enough, her name appears, by the report, to have been Chittra.

sufficient force to pierce the walls of the uterus. Its passing so directly through the axis of the uterus must have been accidental. It appeared that death occurred in about 18 hours after the receipt of the injury.*

One Omao Chung, of Sylhet, was sentenced to imprisonment for having, apparently in league with a professional Abortionist, killed a woman who was with child by him. The Civil Surgeon deposed that he found in the vagina a root of Lall Chitra about ten inches long, which had pierced the further part of the womb and had caused much inflammation. It appears that this treatment was followed by death in three days.†

In 1855, Mr. G. M. Shircore reported the case of a Hindu woman, about 30 years of age, who was brought to the Medical College Hospital, collapsed and dying, with tympanitis and great abdominal tenderness. She stated that she had miscarried, at between the 4th and 5th month, six or eight days previously; but distinctly denied having received any injury whatever sufficient to cause Abortion, which she alleged had occurred spontaneously. There were found extensive traces of peritonitis. An abscess was found in the left lumbar region over the psoas muscle, within which was lodged a thin pointed slip of bamboo, about six inches long. There was a gangrenous appearance of the os tincæ, and the lining of the uterus was coated with a dark grumous thin mucus, but the condition of the organ appeared otherwise but little altered, and it displayed no opening whatever through which the bamboo could have been thrust, nor the slightest mark of recent cicatrization. A large ragged ulcer was, however, found in the rectum, at least nine inches above the anus, communicating directly with the cavity of

^{*} India Journal of Medical and Physical Science, April 1845; London Medical Gazette, vol. 36, page 102, and Taylor, page 528.

[†] Nizamut Adawlut Reports, December 22nd 1853, p. 963, and December 22nd 1854, p. 792.

the abscess; and through this, no doubt, the stick had passed.*

From several recorded cases it would appear that the dhaees, in some instances at least, merely furnish the instrument by which Abortion is to be caused, which is employed by the woman's friends, her paramour, or even by herself; hence doubtless, the great severity of the injuries inflicted in the above cases.

The whole of the printed reports of the Calcutta Nizamut, up to the end of April 1854, contain reports of only 14 cases of trials for procuring Abortion. In 12 of these instances death of the unhappy women resulted. But few of these cases embody much information that is valuable in a medicolegal point of view. Many of them, however, show that there is a class of Native women who are professed Abortionists. A woman was sentenced at Humeerpore, in 1824, upon her own confession, for causing the death of a pregnant female. This hag had been brought from a distance to effect the crime, which had evidently been preceded by others in which she was an agent, she having practised the art, and that not secretly, as an avowed and successful profession. † At Tipperah, (a place notorious for this crime,) a woman was convicted in 1845, of having caused death by administering drugs to procure Abortion. It was supposed that this was her regular trade, her charge in each case being five rupees. I I am informed, by Mr. Edgeworth, that, about Jalandhur, (Trans-Sutlej States) certain hags make a regular trade by procuring Abortion. He is of opinion that, although death

^{*} Op. Citat. for October, 1845, p. 583. In 1847, Dr. Murray, of Beerbhoom, reported, in a criminal case, that he found the womb of a Brahminee woman ruptured, that it and the abdomen were so much inflamed as probably to have caused death; and that Abortion had previously taken place. It is to be regretted that further particulars of so remarkable a case are not given.

[†] Macnaghten's Reports, vol. ii., p. 335. ‡ Police Report, L. P., 1845, p. 40.

frequently results from the means which they employ, these women are not professional poisoners. One Musst. Proba, of Sylhet, was sentenced to imprisonment for having produced the Miscarriage of a woman who was with child by her husband's brother: death ensued. It appeared that deceased consented to give ten annas, (little more than a shilling,) to the prisoner, who was spoken of as skilful in her art. A root appears to have been the destructive agent employed.* The reported cases show that several members of a family, as the brothers, the mother and other female relations of the woman, and the friends of the seducer, by no means rarely become parties to the crime, in their anxiety to conceal the disgrace, or to avert its punishment; that the deaths of both mother and child often result from the administration of drugs, solely by the mouth, without the employment of local means; and that the criminals are apt to plead that they employed means with a view only to restore arrested catamenial function—as in the following case.

In 1852, three persons were tried at Cuttack, for the wilful murder of a woman, by means applied, with her own consent, to cause Abortion. A man who resided in the deceased's house, and who stated that he was 100 years old, testified that he had seen one of the prisoners (who evidently followed the profession of midwife, but denied the fact,) sit on the deceased's bed with another woman, both on the day of her death and on the day previous, and that he saw her give and apply medicines, internally and externally, to the deceased, who did not afterwards rise from her bed. The midwife admitted to the Police that, understanding that the deceased's monthly courses had stopped, she, upon being repeatedly requested to prescribe something for their return, procured some assafætida and aloes, and prepared two buttees,

^{*} Nizamut Adawlut Reports, October 26th 1854, p. 505.

or rolls of cloth twisted round a small stick, and gave them to the deceased, telling her to apply them, one at a time. She stated, before the Magistrate, that she gave the woman a pootlee, or roll of cloth with salt on it, to apply to her private parts, (probably the bag of dried and heated salt often used in the treatment of amenorrheal cases), and also, though in somewhat a confused manner, admitted administering assafætida and aloes, but disclaimed giving her the buttees. The Medical Officer deposed positively to the fact of the deceased having been recently delivered of a fœtus of about 4 months, and that her death was caused by injuries thereby occasioned in the womb. The judge of the higher Court decided that-though the operation was performed with the consent of the deceased, and the death of the woman was not intended; yet, as the act was unlawful, and was attended with probable serious danger, the killing amounting, according to English Law, to murder-according to Mahomedan law it is a punishable offence, but it does not come within the five denominations of homicide distinguished in that law. The prisoners were sentenced to 7 years' imprisonment, with labour.*

It is worthy of remark that, in this country, women not unfrequently induce Premature Confinement when they have nearly advanced to their full period, and when the child is viable.† This is a crime which the medical jurists of Europe appear scarcely to have taken into account. In this country, its commission is, doubtless, generally attributable to a desire on the part of the criminals to anticipate discovery even by a week or two. In other instances, the cause may be attributed to gross ignorance or to miscalculation. A Mussulmaun

^{*} Nizamut Adawlut Reports, vol. ii. part 2 of 1852, p. 910; see also another case in which it was pleaded that medicine was only given for the purpose of restoring the woman's monthly courses, vol. iv. of 1854, p. 495.

[†] See a remarkable case, Nizamut Adawlut Reports, vol. iii., p. 269.

woman was sentenced to perpetual imprisonment, at Bareilly, in 1851, for having been accessory to the death of her illegititame child; she stated that she had been delivered prematurely, in consequence of means employed to procure Abortion, and that the child, when it began to cry, was choked; she could not say by whom. The witnesses concurred in stating that she had nearly reached her full time. A native doctor saw the body about 10 days after death, and stated, perhaps somewhat rashly, that he supposed, from its appearance, that it had been born alive.*

In January 1854, one Musst. Petai and her paramour were sentenced, at Cuttack—the first to death, the other to seven years' imprisonment, on their own confession,—for having murdered the fruit of their illicit intercourse, a male infant born at the seventh month (the mother having taken medicine to procure Abortion), by squeezing its neck.†

The Reports for 1854 contain a remarkable, but very perplexed case, in which it, however, appeared very probable that a woman, having arrived at the full period of pregnancy, went to a midwife to have labour induced by artificial means; that, this was effected "by pressure," and that the child was afterwards thrown into a well, with the secundines attached. The Sessions Judge found the mother and the nurse guilty, but they were acquitted by the higher court.‡

The thannadar of Gohunna (Rohtuck) having heard a report that Mussamat Keesar, a widow, had caused Abortion, obtained leave from the Magistrate to investigate the case; the woman, when examined by midwives, exhibited evident signs of recent parturition; and, at last, admitted that she had been pregnant by her sister's husband, and had had a

^{*} Nizamut Adawlut Reports, N. W. P., vol. i., p. 152.
† Nizamut Adawlut Reports, vol. iv., p. 1.
‡ Ibid, vol. iv., p. 495.

miscarriage. Search was made, which resulted in the discovery of a placenta, buried in the house—this the midwives declared to be the appendage of a child which had gone through the full period of utero-gestation; whereupon the prisoner freely confessed that the child had been born alive, and was buried by her to conceal her shame; the native doctor examined the body superficially, the head was split, and the eyes and ears filled with earth. He did not open the body, and could not state positively whether the child was born alive or not; but, judging from its perfect structure, he was of opinion that it was born alive at the full period.*

Two women of Sarun were committed on a charge of procuring Abortion, and it would seem, from the admissions made by one of them, that they really tried and intended to commit this crime. It was, however, stated "most clearly by the civil surgeon that 'Abortion' did not take place; that the child was born at the full time, perfectly formed, healthy and strong, but that it died afterwards either from accident or violence of some kind applied to it. It appeared that the woman, having become enceinte in the absence of her husband, and being annoyed by the remarks, &c., made on the subject, consented to take some drugs, and also to allow the woman to apply pressure to her abdomen, in order to destroy or remove the fœtus in her womb. witness deposed to having seen one of the prisoners rubbing the woman's stomach, and she confessed that she had taken drugs to procure Abortion. It is not shown, in the printed report, upon what demonstrative evidence the civil surgeon proved that the woman had not "Aborted", (or rather had not been Prematurely Delivered,) by mechanical means; nor is it easy to conceive upon what grounds such a positive

^{*} Nizamut Adawlut Reports, N. W. P., March 16th 1854, p. 273.

conviction could have been arrived at. The judges of both Courts concurred in deciding, apparently upon the medical evidence, that the crime was not completed, but that the attempt involved criminality.*

According to the law in this country, any person causing, being accessory to, or procuring any other person to cause Abortion, in any married or unmarried female, incurs the penalty of seven years' imprisonment with hard labour, and two years in lieu of stripes; labour commutable to a fine. Regulation LIII. [VIII?] of 1803, Section II.; Regulation II. of 1834, Section II. It has been ruled in a circular order No. 303, that "in regard to Abortion, or procuring it, the Court does not consider these offences to be of a heinous description unless death ensue."†

DELIVERY-

Several important questions bearing upon this subject arise, from time to time, in the Judicial Courts of India. Much unnecessary surprise has been expressed at the rapidity with which the women of India, in common with those of most other impoverished and barbarous races, appear to recover from their confinements and go about their ordinary avocations. This, however, can scarcely be regarded as a national usage. According to Ward, the woman begins to attend to her family business about 21 days after delivery-several of the intermediate days being occupied in stated ceremonies. This appears to be the custom among those Hindus who are tolerably well off. According to Baboo Modusodun Gupto, the Hindu women take a stimulating powder made of hot spices for six days after delivery. This gentleman states that all women, except

^{*} Nizamut Adawlut Reports, October 24th 1853, p. 702.

[†] See Reports of the Nizamut Adawlut, N. W. P., for August 1854, p. 263.

Brahminees, remain impure a month after delivery—being excluded from the rest of the family during that time in a separate hut. Brahminee women for twenty-one days. Baboo Prosonocoomar Tagore, however, says that Brahminee women remain impure for eleven days only.* According to Ward, if the child be a son, the mother remains unclean twenty-one days; if a daughter, a month.

It is very different, however, with the majority of the poorer women, whom necessity compels to return early to their domestic slavery. Ward says that poor women, in the northern parts of Bengal, are known to attend to the business of their families the day after delivery. He was informed that, sometimes, a mother is delivered while at work in the field; when she carries the child home in her arms, and returns to her work there the next day. These deplorable facts, however, have many parallels even in England, especially in cases where the unhappy female conceals the fact of her delivery—they result from the extreme wretchedness, not from the unusual robustness or constitutional vigour of the people; and the consequence is shown in the dangers which beset the recovery of native women from confinement, and in the rapidity with which old age and infirmity invariably come upon these unfortunates. According to Baboo M. Gupto, "In two, three, four, or five days" [after delivery] "the mother generally gets fever, that is fatal without proper treatment." He adds, that three or four women out of twenty die of fever and tetanus, in from six to ten days after parturition.+

The following instance of considerable exertion in a native woman after delivery, although remarkable, might be paralelled by numberless instances which have occurred in England. A Brahminee widow, being pregnant by a relative, went five miles from her home. Early next morning, she started to

^{*}Pathologica Indica, p. 336. † *Ibid.*

return, and had travelled two miles when she was overtaken by labour pains, andwas delivered of a male child, born at the full period of gestation. She left the child in the dry bed of the stream, and made her way back to the house she was visiting. She pleaded, at her trial for exposure of the infant, that she was in bad health at the time, and that bewilderment and pain so affected her senses as to make her unaware of what she was doing. The Judge held that the fact of her having come from her home, on foot, the day before, and being able to proceed so far as the nullah just before delivery, and to retrace her steps, unassisted, just after that event, was inconsistent with the idea of a weakly state of body, or with the existence of a tertian fever, which she alleged she had long suffered from.*

The Midwives of this country are occasionally called upon to testify regarding the evidences of delivery, and give their professional opinions with the utmost confidence. A widow of Banda was tried in 1853, upon a precedent which is to be found in the Decisions of the Sudder Nizamut Adawlut for December 1842, page 1541, in which the concealment of the birth of a new-born child is declared criminal and punishable by law. Six midwives deposed to the prisoner having been found, on the discovery of the dead body of the child, "with her breasts in such a state of lactation, as indicated that she had been lately delivered of a child, the milk exuding from them being of that stage and kind which is unfit for the immediate nutrition of the infant.+ One of these midwives also deposed that her private parts were emitting blood. Their general statements showed that the prisoner, at first, refused to have her person examined, and only submitted on compulsion." ‡

^{*} Nizamut Adawlut Reports, N. W. P., July 16th 1852, p. 683.

[†] See a case in which Mr. M. Adam decided a medico-legal question by finding Colostrum Corpuscles in the milk of a woman 4 or 5 weeks after delivery. Monthly Journal of Medical Science, May 1853, p. 474.

[‡] Nizamut Adawlut Report, N. W. P., December 26th 1853, p. 1554.

This question of Compulsory Examination is beset with some diffiulty. In cases involving very grave criminal charges. and especially in those of infanticide, examination becomes a matter of legal necessity. Women in this country are generally much opposed to this ordeal, and occasionally give the medical man considerable trouble. In one case, the woman was so troublesome, that I was obliged to send for the magistrate, upon whose assurance that, if she did not permit an examination, her complaint would be dismissed, she at length submitted. In this case, certain parties had been accused of employing brutal violence. The symptoms appeared to be very serious, and I considered it to be a matter of absolute necessity that the real amount of injury inflicted should be ascertained without delay. In cases where women have accused persons of having beaten them, &c., whereby Abortion was occasioned, I have, after failing to persuade the women to submit to examination reported their obstinacy to the magistrate, who has dismissed the charge.

In some cases of alleged Abortion, or Delivery, the practice common among native women of suckling their children for several years may lead to some uncertainty.*

^{*} Ward says, that a Hindu woman suckles her child, if she have only one, till it is five or six years old; and that it is not uncommon to see such children standing and drawing the mother's breast. Mr. Waring mentions that nothing is more calculated to excite surprize in the mind of a medical man, newly arrived in Burmah, than to witness the lengthened period to which lactation is carried, with apparent impunity, at least as far as the infant is concerned. No certain period is fixed, the general rule being to suckle one child until the mother is several months advanced in pregnancy with her next, but even this rule is not strictly adhered to. He has, in more than one instance, seen two children, one a sturdy young urchin, of five or six years old, and the other an infant of as many months, engaged in drawing sustenance from the mother at the same time. Three years is by no means an uncommon time at which to wean a child, but instances have come under his notice, of which notes were made at the time, in which lactation was prolonged to four years and six months, to five years, and to six years respectively; the

Pregnancy frequently occurs during lactation among women of all races and classes in India. A native woman complained that she had been beaten by a certain person, and had aborted in consequence; her statement could not be regarded as less probable on account of the fact that she was suckling a strong child between three or four years old. She, however, refused to submit to examination, and collateral circumstances rendered it probable that the charge was false.

I do not find that any accurate statistics have been collected which would show the average Duration of the Lochial Discharge—a point of considerable importance in questions of Delivery. Taylor says merely that it "continues from a week to a fortnight or even longer"-Dr. Duncan Stewart has informed me that, in this country, it is not to be looked for after a fortnight or three weeks-my own far more limited experience would show that it is often present at a month or five weeks after delivery. Professor Wilson, Dr. Stewart's successor, has remarked, that the lochia, or rather a sanguineous discharge, frequently recur at about a month after delivery. Dr. Wilson has observed the period of duration of the lochial discharge to be exceedingly various among women; of all classes in this country. It is said occasionally to last from three weeks to a month in Europe, but he thinks this is less frequently the case in native women; and that, in natives, the discharge continues bloody for a shorter period than with Europeans. Here very frequently among Europeans and Eurasians, less frequently among natives. it has occurred to him to observe a return of the red lochial

last mentioned varied the amusement of sucking by an occasional whiff of a cigar! This prolonged lactation does not appear to affect the child in any way, a finer set of children cannot be seen, but it tells wonderfully upon the constitution and outward appearance of the mother.—Medical Notes on the Burmese—Indian Annals of Medical Science, No. 1, October 1853, p. 97,

discharge about a month after confinement. Sometimes the discharge had continued more or less to this time, and then became bloody; in other eases, it had disappeared. So frequently has he observed this, that he is never surprised by it, and women themselves have sometimes spoken of the circumstance as the first return of the menstrual discharge after confinement, stating that it returned once after delivery, and then disappeared during lactation. He thinks it quite possible that this return of the red lochia at this period may depend on the greater amount of exercise which is then taken and may not result from a menstrual molimen.

A few hundred accurate observations upon this question would be of considerable value.

The following case, involving the question of Delivery, illustrates the extraordinary craft and audacity with which the natives of India often plan and effect their criminal designs. One Mussamat Janoo, a midwife of Hissar, being employed to attend a woman in her confinement, persuaded the unfortunate creature that the child of which she had been delivered, was a monster with two heads, not fit to be looked at; she afterwards said that it was dead, and that she would take it away and bury it. She accordingly went away. Next morning, the midwife's services being required, she was sent for. excused herself from going, under pretence that she had herself just been delivered of a child. This improbable story excited suspicion, and the police were called in; she declared that the child was her own. This she also maintained at the trial. It however appeared, from the evidence of midwives who examined her shortly after the discovery of the child in her house, and also by the deposition of the Civil Surgeon, that she exhibited no signs of recent confinement. Several of the neighbours who were constantly in the habit of seeing her, deposed that she had not exhibited any outward signs of pregnancy. She did not attempt to

prove how she had disposed of the body of the child, which she alleged died immediately after its birth. She was sentenced to imprisonment for seven years.*

The question of Medical Responsibility in the Induction of Premature Labour will be found ably discussed, in all its bearings, in Dr. Taylor's work. † It now appears to be generally held by medical authority, that the induction of Abortion, at an early stage of pregnancy, is justifiable, where it is decided, upon sufficient grounds and competent authority, that delivery is not likely to take place naturally, or without seriously endangering the life of the woman. The following case, however, deserves notice, as tending to show that an adherence to the opposite opinion may be held justifiable, even in cases of the utmost extremity. A miserably deformed girl of 17 underwent the Cæsarean operation by M. Lebleu, at the Dunkirk Hospital. She and her child both survived. Ten years subsequently, she informed M. Lebleu that she was three months enceinte, and earnestly desired that Abortion should be effected-a proceeding which she had been given to understand was common in Paris, whither she threatened to go, in the event of Dr. Lebleu's refusal. He replied that he was quite aware of the nature of all such proceedings, but that neither he nor any one in the world had the right to take the life of a fœtus in utero, which was as much deserving care as herself, and that she must submit to a second Cæsarean section. She reluctantly consented, submitted to the operation, and died from hæmorrhage the following day. † There is a case on record, in which the Cæsarean section was successfully performed twice. § In a second case a woman twice suffered rupture of

^{*} Nizamut Adawlut Reports, N. W. P., 26th April 1853, p. 588. † Page 538.

[‡] Gaz. des. Hôp.—and Ranking's Abstract, vol. 21, p. 196.
§ Dr. Meriner's case—Ibid, p. 195.

the uterus, and was twice relieved by the Cæsarean section.* In a third case, a woman underwent this operation thrice with success.† And in still another instance Dr. Michaelis, of Kiel, has reported a case in which he performed the operation for a fourth time successfully upon the same woman.; On the other hand, Dr. Goodman, (cited by Taylor,) has collected an account of 38 of these operations performed in England since 1733. Out of this number, only 3 mothers recovered. In 18 cases the children were extracted living. It would appear, however, that, in a considerable proportion of these cases, the women were dying when the operation was performed—the volume of Ranking's Retrospect already cited, contains the details of 15 of these operations performed upon 11 females, (i. e. 4 of the women underwent the operation twice) the results were 7 recoveries and 8 deaths, none of these eleven women could be regarded as being in a dying state when the operation was performed.

The question may be open to dispute; but, should it ever occur to myself to decide between the steps of inducing the expulsion of the fœtus at the third month, or of waiting to perform the Cæsarean section at the full period, I should, unhesitatingly, adopt the former course.

^{*} Ranking's Abstract, p. 196.

[†] Brit. and Foreign Med. Rev. July, 1836, p. 270, cited by Taylor.

[‡] Plaff's Mittheilungen. Heft, vii-viii, 1836, and India Journal of Med. and Physical Science, vol. iii., for 1838, p. 442,—where it is suggested that, in cases of hopeless deformity of the pelvis, the fallopian tubes should be divided during the Cæsarean operation.—Not, however, an altogether safe proceeding, or one which would certainly prevent the occurrence of tubal pregnancy.

INFANTICIDE.

The Murder of Female Children, -whether by the direct employment of homicidal means, or by the more inhuman and not less certain measures of exposure, privation and neglect,-has, for ages, been the chief and most characteristic crime of six-sevenths of the inhabitants of British India. Throughout that portion of the country usually known as Central India, and especially in Rajputna, in Cutch Bhooj, in the province of Agra and in Khondistan, the destruction of Female Children has prevailed in all historic times. Bengal Proper, or the Delta of the Ganges, appears now to be comparatively free from this scourge, but the Bengalees were only prevented by a stringent law from thinning their surplus population by throwing their children to the Alligators at the mouths of the Ganges,* and polyandry still obtains among the Kasias, or Hill people near Sylhet; -wherever this custom prevails, as among the Khonds and in the Neilgherry Hills, it points demonstratively to the practice of Female Infanticide. Beyond all this, the wilful neglect of Female Children operates destructively in every town and village throughout the length and breadth of India. By the Hindu, the advent of a Female Child is superstitiously regarded as a curse, and is practically viewed as a tax and a misfortune. The daughter, so welcome in the English peasant's homestead, so fondly greeted as the crowning honor and presiding grace of every European family of gentle blood-is viewed, alike by the Hindustani Rayut and the Rajput Thakoor, as a certain presage either of poverty or of shame hereafter. The daughter of the Hindu must always be dependent upon others for her support; + she must be suitably married, and a crime will

^{*} See Beaufort, p. 535, para. 2889.

^{† &}quot;In infancy, her father should guard her; in youth, her husband should guard her; and in old age, her children should guard her; for, at no time, is

be involved in the postponement of her nuptials beyond the age of childhood.* At her husband's death, she must trust wholly to the support of others; and her conduct must be watched with unceasing vigilance, lest shame, with all its direct accompaniments, feud, revenge and murder, should be entailed upon her house. †

a woman fit to be trusted with liberty."—*Hitopodesa*. This is an almost literal quotation from Menu, who adds—"By a girl, or by a young woman, or by a woman advanced in years, nothing must be done, even in her own dwelling-place, according to her mere pleasure."—C. v., S. 147.

* "He who takes to wife a damsel of full age, shall not give a nuptial present to her father; since the father lost his dominion over her by detaining her at a time when she might have been a parent.—Menu, Chap. ix. S. 93.

† A multitude of painful instances might be cited in illustration of the deadly certainty with which the people of this country punish offences against the chastity of their women. Ward mentions that a Rajput of Loodhiana, having been induced by the tears of his wife to spare the life of a daughter born to him, the daughter grew up and had arrived at the age of thirteen, but had not been demanded in marriage by any one. He began to apprehend the danger of her bringing disgrace upon the family, and resolved to prevent it by putting the girl to death. Shortly after forming this atrocious resolve, he either over-heard, or pretended to have over-heard, some of his neighbours speaking of his daughter in a way that tended to increase his fears, when, becoming outrageous, he rushed upon the poor girl and cut her head off. A few years since, a Hindu of Mynpoorie seduced the daughter of a Brahmin who had a previous feud with his famlly. The injured father, finding that his daughter was pregnant, brought her out of the house at night, when all were asleep, and killed her by two sword cuts ;-then rushing with a relation of his into the seducer's house, they killed him and his father, and hacked three others very severely. They were arrested near the spot with the bloody swords in their hands. They exclaimed that they had killed their enemies, and made no attempt to escape or to resist-Nizamut Adawlut Reports, N. W. P., July 1st 1852, p. 613. One Badee, of Futteepore, having learned that his niece, a brahminee girl, aged about 19 or 20 years, had intrigued with a Sonar, at once seized the woman by the hair, dragged her to the house of the seducer's uncle, and there with a bill, or gurasa, killed her with two blows on the neck; and remained near the body of his victim till apprehended by the Police.—Ibid, December 22nd 1853, p. 1538. Neither are such instances of retribution by any means rare in Bengal. It lately appeared, in a trial at East Burdwan, that a servant in the employ of one Puresh Mullick, The results of this condition of things may be set forth in a single paragraph. It is clearly established that, in every country in Europe, there is an excess of females. The census of 1851 showed that, throughout Great Britain and Ireland, the number of males then amounted to only 48.2 of the inhabitants. The recent census of the North-West Provinces of India, gave 53.4 as the percentage of males in a population of 30,271,885, while the official census of Mysore, for 1852, showed that, in a population of 3,410,382, the number of adult males exceeded that of females by nearly ten per cent., while the excess of male infants was sixteen per cent!

Allusion has been already made to the employment of opium in the systematic practice of Female Infanticide in India. Among the Rajputs, it appears to be customary to destroy the infant immediately upon its birth. Sir John

having contracted an intimacy with his master's sister, who was a widow, was discharged for his presumption in aspiring to the favor of one so infinitely his superior. She followed him to his house, and a nika marriage was the result, to the unmitigated and undisguised disgust of the woman's family. About twenty days after the consummation of the marriage, the brother, with several of his people, burst, at midnight, into the house of the unfortunate couple. The brother desired one of his party to kill the woman, who was immediately seized and literally hewn to pieces with an axe,-Nizamut Adawlut Reports, November 17th 1854, p. 604. A host of examples already cited in these pages, must be taken as proof that there is but little relenting in the calm, vindictive, unsparing nature of the even-tempered, soft-mannered Bengalee. Instances of implacable unwearying hatred might be cited, from the pages of the criminal reports of Bengal, which would scarcely be paralleled by any records of Italian vengeance-One will suffice here. In 1846, a Hooghly man confessed that he had murdered a person with whom he was at bitter enmity. He displayed in his statement the utmost hatred against him, declared that the deceased had turned him out of his situation, and then stripped him of all his property; and described how, day after day, for four months, he had traced his victim until he met with the opportunity of making away with him !-Police Report, L. P., 1846, p. 72.

Shore found that the mothers of the Rajkumar infants simply starved them to death. Mr. Duncan states that: "They killed their infant daughters, or allowed them to die, by denying them all sustenance from their birth."* Mr. Shakespear states that: "The infant is often strangled. Among the Rajputs in the Allahabad territory, the juice of the Mudar plant, (asclepias gigantea) is usually administered. In the Gwalior districts, the new-born infant is ordinarily put to death by administering poison in the shape of a tobacco leaf, or that of the dhatoora plant, but this object is said sometimes to be effected by violence." In the other Rajput states, opium is generally employed. † The latest report on Infanticide in the Agra district, contains several allusions to the practice of poisoning infants with tobacco powder. In the recently published "Punjab Papers on the Crime of Infanticide," Mr. Montgomery mentions, in addition to the atrocities cited at p. 284 of this Report, that, during Hindu ascendancy, when Infanticide was considered no crime, the child was destroyed immediately after birth, by filling its mouth with cow-dung, or by immersing the head in cow's milk, or by drawing the secundines and umbilical cord over the face. In the Goojerat district, the practice, according to this authority, is to bury the infant alive. The body is placed in an earthen pot, the top of which is covered with a thick paste of dough. In the Khangar district, the juice of the Mudar is administered; or death is brought about by causing injury to the navel. According to Captain Macpherson, the female infants of the Khonds, are destroyed by exposure in the jungle ravines immediately after their birth.

We have, at present, no means of ascertaining the rates of natural mortality which prevail among Native infants in the

^{*} See the earlier laws for the control of this atrocity, Beaufort, p. 536, para. 2892.

[†] Calcutta Review, vol i., p. 385.

various districts of India. It is, however, nearly certain that but a very small proportion of those born arrive at maturity.*

It appears that, except in those districts where Government employ agents for the express purpose of suppressing Infanticide, cases of Systematic child-murder rarely come under investigation in Indian Courts, and the few which are tried are principally those in which the crime is perpetrated with a view to the concealment of illegitimate births.

I find only 10 trials for Infanticide among the printed Reports of the higher Courts doing a period of four years...†

Death caused by Exposure.—In 1822, a Mussulmaun woman was tried, at Rajshahye, for abandoning her full-grown male child in the jungle, with its navel-string uncut. It was found alive, but it expired in a few hours. She was sentenced to imprisonment for life.

In May 1854, a case occurred at Cuttack, which appears to illustrate in a singular manner, the superstitious ideas of the Ooriahs. The prisoner's wife having given birth to three female children, the first two live, the third dead, he selected the weaker of the two living children, and deposited it naked in a jungle, among thorns, placing it in such a manner that the birds of prey might readily dispose of it. His alleged motive was the belief that the birth of three children at once was of evil omen to the Zumeendar, the Government, and the country, and the fear of expulsion from his village, should

^{*} Stewart mentions that it is related of Raja Mān Sing, who died in the Dekkan in 1615, that his Seraglio consisted of fifteen hundred women, by each of whom he had two or three children, all of whom died before their father, except his successor, Raja Bhao Sing. Admitting the probability that the Raja actually lost one hundred children, we may judge what rate of mortality must prevail in the bamboo huts and mud hovels of India, when death is so rife in the palace nurseries.

[†] Those of the Calcutta Court from the commencement of 1851, up to April 1854, and those contained in the Reports of the Nizamut Adawlut of the N. W. Provinces.

the portentous occurrence become known: the infant was found alive, but died soon afterwards. On consideration of the peculiar circumstances of the case, he was sentenced to 14 years' imprisonment, with labour in irons.*

As an illustration of this class of cases, may be mentioned that of a woman tried at Cuttack, in 1851, for exposing her illegitimate infant in a dry water-course. Her defence was that she placed the child, at midnight, shortly after its birth, at its father's door, and that some one there must have removed the child to the nullah. The Sessions Judge decided that, with reference to the circumstances of the case, and the custom which so commonly prevails in this country, among females situated like the prisoner, viz.—that of placing their illegitimate offspring at the doors of their reputed fathers, in order to make them support themselves and their children, he did not consider the prisoner's statement improbable. The child survived; Sentence, six months' imprisonment.†

The custom of leaving illegitimate children at their fathers' doors also prevails in the N. W. Provinces.

Throat Cut.—A case which bears upon that cited above was tried at Sarun, in January last. A woman, having borne a female child which her paramour refused to maintain, left it, in the presence of witnesses, on the bed upon which he was sleeping. On the following day, it was found in some grass jungle, with its throat cut. It eventually died. He was sentenced to seven years' imprisonment.‡

In 1848, Dr. Irvine, of Patna, examined the body of an infant, (the state of whose thorax proved that it had lived,) whose head had been severed from its body.

Drowning.—In 1851, one Musst. Toolsee was sentenced to perpetual imprisonment, at Cuttack, for having placed her

^{*} Nizamut Adawlut Reports, vol. iv., p. 341. † Vol. i. of 1851, p. 1129. ‡ Vol. iv., p. 22.

illegitimate male infant in an earthen vessel and sunk it in a river. "She said that the child was born alive and cried; and that, about an hour and a half afterwards, when it had ceased to cry, and she did not know whether it was alive or dead, she carried it away and threw it into the river." '*

Injury to the Head.—Mussamat Bundanneeah, a widow, having brought forth a female infant the result of illicit intercourse with her late husband's brother, threw the child, just after its birth, into a dry well, which was stated to be fifteen cubits in depth. Strange to say, the child was not immediately destroyed by the fall, and its cries attracted the attention of the neighbours, who took it out. It survived a day and a night. The Civil Surgeon found no external traces of injury, but considered, from the effusion of blood from the nose, that some concussion of the brain was probably produced by the fall.† In 1851, a Mussulmaun and his paramour (the widow of his brother) were sentenced to transportation for life for murdering their new-born child by fracturing its skull.‡

A widow, of Seonee, being delivered of an infant—the fruit, as she asserted, of a casual intercourse with a sepoy in the jungle, concealed the birth, and buried the child within the enclosure of her house. The Sub-Assistant Surgeon stated that, after examination of the body, and the application of tests, he was convinced that the child (of full term) had been born alive, and that death had been caused by violence done to the head, the skin of which was swelled and a large extravasation of blood beneath it, especially the left parietal bone, which was fractured in two places. The Sessions Judge held that there was "nothing satisfactory to his mind

^{*} Vol. i. of 1851, p. 1127.

[†] Nizamut Adawlut Reports, N. W. P., December 21st 1852, p. 1524.

[‡] Ibid, vol. i. of 1851, p. 364.

in the medical evidence. Nothing to show that fracture of bones (soft as those of an infant just born must be) might not have occurred after death, in the process of burying [?] or at the time of birth, during a difficult unprofessional delivery;—while it was apparent that the common offices to new-born infants had been here omitted."*

The following cases deserve attention, as involving points of great practical moment not illustrated in Taylor's Manual. Sub-Assistant Surgeon Bindabun Chatterjee has reported† the case of a Hindu female, aged 32, who was delivered in the Lying-in Ward of the Medical College Hospital, Calcutta, of her second child; the presentation was natural, the labour not unnaturally tedious. The child was born dead, in consequence of a rupture of the scalf and escape of the substance of the brain, which occurred during the second stage. On examination afterwards, the scalp was found much attenuated, and a rupture had taken place posteriorly. The line of rupture was even and horizontal, about the level of the upper part of the occipital bone, and two lines running forward in a straight direction from the extremity of the horizontal line. The rupture was symmetrical; the lambdoidal suture was also ruptured; the child was small, and not of the full term. Some time since, I was requested by the husband of a lady, married about eight months previously, to prescribe for her, as she was suffering from inward uneasiness which might, at first sight, have appeared to be the result of dysentery. Suspecting the real cause, however, I requested him to procure a strong dose of morphia on his way home, and prepared to follow him. Upon reaching the house, which was at a considerable distance from mine, I found that my patient, a slender lady of 18 or 19, had suddenly been

^{*} Nizamut Adawlut Report, N. W, P., December 24th 1852, p. 1541.
† Indian Annals of Medical Science for October 1854, p. 469.

delivered, while in the erect position, the child falling head foremost upon a marble floor. The placenta was still attached. The infant was apparently between the seventh and eight month, and cried lustily. I could find no mark of injury. Having done all that was necessary, I left the house; but was hastily recalled in about an hour, and found the child dying. The face and scalp were now pallid, and a large bruise had become apparent on the forehead and vertex,—the part which had come in contact with the pavement. It will be at once perceived how many points of great Medico-Legal importance these two cases involve.

Suffocation and Strangling.—In 1822, a window was sentenced, upon her own confession, at Bundelkund, to perpetual imprisonment for having destroyed her bastard child, at its birth, by stuffing a cloth into its mouth and burying it in a ditch; she pleaded extreme poverty as an excuse for her crime.*

In 1841, Dr. Pagan, of Midnapore, and Dr. J. S. Smith, of Madras, reported the examination of the body of a full-grown perfect child, with the cord and after-birth attached, the former not having been tied, the face, head and sides of the neck were livid and swollen, the muscles and soft parts of the neck were bruised and contained some extravasated blood; the lungs floated in water and were not diseased, but were somewhat engorged with blood; the wind-pipe was uninjured; the body was somewhat decomposed. The witnesses concurred in the opinion that the above injuries had been inflicted during life; and that they could not have occurred in delivery, or in burying the body.

^{*} Macnaghten's Reports, vol. ii., p. 161.

[†] See also the case of a widow of Patna, found guilty of twisting the neck of her illegitimate child, a few days old, in despair at being turned out of doors by her relatives, and being refused all aid by the father of the child. Nizamut Adawlut Reports, vol. ii., part 1 of 1852, p. 852.

One Musst. Soomarea, of Azimgurh, had been married two years, and had lived with her husband about a year, during which period she was frequently in the habit of passing some time at her father's house, where she formed an illicit intimacy and became pregnant. On discovering this, her father sent her back to her husband, but she shortly afterwards returned to her father who refused to receive her into his house. Her paramour then made her over to a woman in the neighbourhood. Finding that her labour was at hand, and her father absent, she went to his house, where she was delivered, privately, of a male child, which she destroyed, about an hour after its birth, by compressing its windpipe. The native doctor who made an examination of the body deposed, with much confidence, that the child was matured, that it was born alive, and existed for some time afterwards, and that death was caused by compression of the throat with the hand shortly after its birth.*

The body of a female infant, with the navel-string uncut, was found in the town of Kurbal (Mynpooree.) One Musst. Miseea confessed to the Police that, having become pregnant nine months before, in her husband's absence, she was delivered of a child and killed it by squeezing its throat. At trial, she denied her confessions, and said her child was born dead seven months after conception, and that, having no one to bury it, she threw it into the pond. Two of the assessors, a zumindar and a brahmin, acquitted her, the first remarking that a seven months' child, born in such cold weather, would probably have died; the second, that it was clearly a seven months' child, since so much blood flowed! The third, a vakeel, convicted. The infant bore no marks of violence, so far as

^{*} Nizamut Adawlut Reports, N. W. P., September 30th 1852, p. 1102.

the examination of the Civil Surgeon went. He did not, however, suspect violent death, being under an impression, from the mere fact of the navel-string being uncut, that the child was born dead. The Judge held that the slight pressure on the throat of a child necessary to cause death need have left no mark; but, if otherwise, such marks would hardly be visible after two days and nights' immersion of the body in water. With regard tothe navel-string being uncut, that would, he considered, be equally the case with a child born dead or a child murdered as soon born.*

^{*} Nizamut Adawlut Reports, N. W. P., January 28th 1853, p. 123. It is evidently a matter of no small importance that medical men in this country should be well acquainted with the manner in which the umbilical cord is divided and dressed by native women. Such information is especially called for in cases like the following. A female mendicant of weak intellect, at Jaunpore, gave birth to a female infant, which she left in some straw, where she had slept, and went begging. The child was found dead. The Civil Surgeon examined the child's body, and could find no apparent cause of death. He considered it was probably the result of neglect, as the navelstring had not been severed, the after-birth being still attached. The child had breathed, but death probably took place very shortly after its birth. Nizamut Adawlut Reports, N. W. P., February 18th 1853, p. 256. Professor T. W. Wilson has kindly furnished me with some interesting notes on the manner in which the Dhaees of this part of Bengal treat the umbilical cord. He finds that the nurse usually divides the cord, near its insertion to the umbilicus, with a piece of bamboo, sharpened into the form of a rude knife Sometimes the richer classes get a silver instrument, made like a spatula, for the purpose. Only one ligature, of strong thread, is used; it is applied next the child, no ligature is applied to the placental end of the cord. The thumb, heated over fire, is repeatedly placed on the navel, [this continues to be done for many days, and may not unfrequently interfere with the process of healing; in a case which came partly under my own notice, the child's death was attributed (perhaps unfairly) to this practice.] If there is any discharge, the end of the cord is then dressed with burnt rags. Generally the fætal end of the cord is left hanging without any dressing. Dr. Wilson understands that the separation of the placenta is generally hastened by placing a quantity of hair in the woman's mouth,-this causes an effort to vomit, which brings away the after-birth. It is also said that raw rice, mixed with oil and swallowed, assists the discharge of the placenta.

Musst. Syneeal was convicted, at Shajehanpore, of having murdered her female illegitimate child by strangling it with a strip of cloth. She stated that she was binding the cloth on her infant's head; and, being intoxicated by some spirit which she had taken shortly after the birth of the child to relieve a severe internal pain, she did not know if she had bound its head or its foot. The evidence went wholly to disprove her plea of intoxication.*

Musst. Imamee, of Jaunpore, was convicted of the wilful murder of her male illegitimate child by pressing his neck and strangling him. She placed the corpse in an earthen vessel and buried it in a corner of her house.†

It will be observed how large a number of cases of Infanticide occur in Orissa. In one of the latest of these trials,

Dr. Wilson finds that the Dhaces divide the cord before the placenta comes away. There is, probably, a difference in this practice in different parts of the country; and this should be taken into account in medico-legal investigations upon this point. Ward says that, at the moment of birth, various religious ceremonies are performed, which occupy about two hours, and that then the umbilical cord is cut. This is probably the custom among the richer Hindus. Mr. Hodgson states that among the Bodo and Dhimals the mother herself cuts the navel-string, so soon as she has recovered sufficient strength. In a paper on the native practice of midwifery at Bombay,published in the transactions of the Medical and Physical Society of that city, for 1853 and 54, p. 338,-it is mentioned that, after delivery, a binder is applied, and the expulsion of the placenta anxiously looked for, as the cord is not divided until the after-birth comes away. Before the cord is divided, the blood in it is either pressed in the direction of the placenta, or of the child, accordingly as the child is lively or otherwise. After cutting the cord, it is dressed with salt and turmeric, and suspended from the neck, and the child is not bathed until the cord falls off. Mr. Waring mentions that the Burmese tie the cord in the English manner, and divide it by a see-saw motion with a piece of bamboo split up the middle, forming a most rude pair of scissors. I have heard that, in some parts of Bengal, the lower orders divide the cord by rubbing it on the broken edge of an earthern pot. It appears certain that a ragged state of the end of the cord is not an evidence of neglect in this country. Dr. Wilson is informed that the practice of the Mussulmaun Dhaees is very similar to that of the Hindus.

^{*} Nizamut Adawlut Reports, N. W. P., 15th March 1853, p. 366.

[†] Ibid, July 30th 1853, p. 937.

the Sessions Judge remarked upon the prevalence in Cuttack of the offence of murdering new-born children, the fruits of illicit intercourse, or of exposing them with the intent to destroy them. It will be borne in mind, that this latter mode of Infanticide is that practised by the Khonds who, although inhabiting the Hill tracts of Orissa, are, save in this particular, entirely apart from the Hindu Ooriahs in customs and in religion.

It is scarcely necessary to say that the average weight of new-born children in Bengal is probably very much indeed below that of European children at birth. A few accurate statistics upon this subject would also be of great value.

Having paid considerable attention to the study of the abnormal conditions of the fœtal circulation, and the results of my researches having tended to subvert the validity of more than one of the tests of live birth generally insisted upon,* I shall venture to devote one or two pages to this important subject.

Previous to 1846, it was generally considered that—(1) the discovery of contraction of the whole diameter of the ductus Arteriosus would, even after decomposition had obscured the state of the lungs and of other organs, stand as decided evidence that the child had lived for a considerable period: that (2) closure of the Foramen Ovale might be taken as a certain proof that life had been prolonged for, at least, several days: and (3) that an uncontracted state of the arterial duct, foramen ovale, and ductus venosus afforded strong evidence that respiration had not occurred.

In my researches on the morbid conditions of the pulmonary artery,† I succeeded in showing that these opinions were erroneous,—inasmuch as (1) The Arterial Duct may

^{*} See Taylor, p. 400, et seq.

[†] Published in the London Medical Gazette between July 1846, and September 1851.

become closed either before or in a very few hours after birth;
(2) that a child may be born with the foramen ovale closed;
and that (3) the arterial duct and foramen ovale may be found
pervious, even in adult age, without any other discoverable error
in the vascular system. I may now add (4) that the fætal
thoracic openings and the ductus venosus may be found quite
uncontracted several days after birth.

(1). The Arterial Duct may become closed either before or in a very few hours after birth.—In October 1846, the body of a female child was discovered buried in waste ground near Avr, enveloped in a woollen bag. It was in a state of putrefaction, with desquamation of the cuticle. It weighed five pounds, and was twenty inches in length. The scalp was covered with hair, and the nails were full-grown; a large portion of the brain, which had been reduced to a pulpy state, had escaped through the openings of the skull. Its mouth and nostrils were stuffed with flax. The umbilicus was in the centre of the body, the cord was cut close to the abdomen, and left without ligature. There was an extensive ecchymosis all over the fore part of the neck, and an effusion of blood on the exterior of the trachea. The heart and lungs weighed one ounce; the lungs were collapsed; the right was considerably decomposed, and sunk when put into water. The left was of a red colour, and firm in texture, and floated on the surface when immersed in a vessel filled with water; but, on pressure, there was no crepitation. The right side of the heart was filled with coagulated blood; the foramen ovale was partly open, and the ductus arteriosus impervious. The liver was large and of a leaden hue; the ductus venosus almost obliterated: meconium was found in abundance in the lower bowels. Strong circumstantial evidence was adduced, to prove that this infant came into the world shortly before 6 o'clock A. M., and that its body was deposited in the spot where it was subsequently discovered between 10 and 11 o'clock A. M. Admitting that this child was born alive, there was the strongest reason to believe that it did not survive its birth ten minutes.

In January 1847, I laid before the Pathological Society of London the heart of a fœtus, born at seven months and a half, which died fifteen minutes after birth, in consequence of hæmorrhage from the umbilical cord. The arterial duct was nearly closed, being merely capable of admitting the shank of a large pin. The tissues of the duct had altogether an appearance of having undergone a gradual process of contraction. The heart and lungs were normal.

In commenting upon this case, Dr. Taylor remarks that, according to Bernt's rule, the medical inference might have been that the child had lived a week. In bringing these two cases together, it is is certainly worthy of remark that, in the first as well as in the second, hæmorrhage from the navel might have gone far towards determining the early contraction of the arterial duct. This important question will require further investigation,* However, these cases form such marked exceptions to the rule which obtained previous to their publication, that no Medical Jurist can hereafter venture to declare that a child must have lived several days, merely upon the evidence afforded by a closed state of the arterial duct.

(2). A child may be born with the Foramen Ovale closed.

—In 1847, my friend Mr. Ebenezer Smith kindly allowed me an early examination of the heart and lungs of a child which appeared healthy at its birth, but soon afterwards became livid, and died convulsed in about 21 hours. The foramen ovale was completely closed by a firm membrane. The

^{*} It will be very important to observe whether the fœtal passages are conracted in children expelled dead in cases of placenta prævia.

arterial duct was wide, and the right cavities capacious, but the left cavities of the heart were extremely contracted, almost to obliteration, and the mitral valve was merely rudimentary.* I brought this case forward at the time, with the remark that it is impossible to deny that, in the heart of a child which has died within the uterus, and has been expelled in a putrid condition, the foramen ovale may be found completely and permanently closed; but that, in such cases as the above, it would probably be always possible to determine, by an examination of the heart and its appendages, that the closure of the foramen had occurred at some period or other antecedent to birth. Still, it must be remembered that, in investigating a case of supposed Infanticide, the medical man's attention is at once directed to the state of the foramen ovale, and it would not be surprising if, upon discovering that the auricular septum was complete, he should rest satisfied,—seeing that even so good an anatomist as Vieussens does not appear to have considered it necessary to remark any other appearance in the heart where he found the foramen closed thirty hours after birth, except that the pulmonary artery was extraordinarily dilated.

(3). The Arterial Duct and Foramen Ovale may be found pervious, even in adult age, without any other discoverable error in the vascular system.—In October 1837, the body of a woman, aged 32, the mother of eight children, who had died of phthisis of only 3 months' duration, was examined by Mr. Molloy and myself at Guy's Hospital. The heart was small and pale, but perfectly well formed, except that the foramen ovale was sufficiently wide to admit the little finger, and that the arterial duct allowed a large-sized probe

^{*} Mr. Smith has published the full details of this case in the 1st volume of the Transactions of the Pathological Society of London, A similar case is related by Vieussens, another and by Dr. Williams; but Mr. Smith's is the only completely detailed instance of the kind on record.

to be passed from the aorta into the pulmonary artery, but was guarded, on its pulmonary side, by a growth of minute elastic vegetations which, acting completely as a valve in that direction, showed that the permanence of the duct could not have depended, at least during the latter years of life, upon pulmonary obstruction.

(4). The Arterial Duct, Foramen Ovale, and Canalis Venosus may be found uncontracted several days after Birth .-In March 1854, Mr. Lee read before the Pathological Society the particulars of the case of a child, in which jaundice commenced immediately after birth. Six days after the separation of the funis, (in which process there was nothing abnormal), slight hæmorrhage made its appearance. The blood was thin and serous, scarcely discolouring the linen, and, when dry, not stiffening it. The bleeding continued for two days, it then stopped, but the child soon afterwards sank. The Umbilical Vein, one Umbilical Artery, the Ductus Venosus, the Ductus Arteriosus, and the Foramen Ovale were all found open. There was no appearance of inflammation in the structures of the umbilical vein. The blood was without coagula, and appeared entirely deficient in fibrin.* There is a large class of these cases, in which children are destroyed, from 6 or 8 to 18 days after birth, by irrepressible hæmorrhage from the umbilical vein. These infants are usually jaundiced, and an excessive degree of cholemia is, of course, adverse to the closure of any of the fætal communications. Mr. Shircore, of Calcutta, lately mentioned to me the particulars of a case in which there appeared to be every reason to believe that the umbilical vein and a considerable portion of the canalis venosus, remained permanently open in a child three or four years old; that is to say, there was a fistulous-looking opening at the umbilicus, into which a probe could be passed

^{*} Association Journal, April 7th 1854, p. 307.

directly backwards for some inches. The parents disliking the appearance of this opening, although it caused no inconvenience, Mr. Shircore readily succeeded in closing its orifice.

Exposure of Young Infants.—This crime is one of great frequency among the Natives, and appears to be a practice of very ancient standing. Tavernier says,-" When a woman is brought to bed, and the child will not take the teat, they carry it out of the village, and putting it in a linen cloth, which they fasten by the four corners to the boughs of a tree, they there leave it, from morning till evening. By this means, the poor infant is exposed to be tormented by the crows, insomuch that there are some who have their eyes picked out of their heads; which is the reason that, in Bengala, you shall see so many of these idolaters that have but one eye, and some that have lost both." [!] "In the evening, they fetch the child away, to try whether he will suck the next night; and, if he still refuse the teat, they carry him to the same place next morning, which they do for three days together; after which, if the infant after that refuses to suck, they believe him to be a devil, and throw him into the Ganges. Sometimes some charitable people among the English, Hollanders and Portugals, compassionating the misfortune of those children, will take them away from the tree, and give them good education."

Ward has given the following details, regarding the custom of exposing infants in the northern districts of Bengal, without any reference to Tavernier's account.—"If an infant refuse the mother's breast, and decline in health, it is said to be under the influence of some malignant spirit. Such a child is sometimes put into a basket and hung up in a tree where this evil spirit is supposed to reside. It is generally destroyed by ants or birds of prey; but sometimes perishes by neglect, though fed and clothed daily. If it

should not be dead at the expiration of three days, the mother receives it home again, and nurses it, but this seldom happens. The late Mr. Thomas, a missionary, once saved and restored to its mother, an infant which had fallen out of a basket at Bholahatee, near Malda, at the moment a jackal was running away with it. As this gentleman and Mr. Carey were afterwards passing under the same tree, they found a basket hanging in the branches containing the skeleton of another infant, who had been devoured by ants."*

The printed Reports are replete with these sad cases, but they need not be cited here, as points of medico-legal difficulty are seldom involved in such inquiries.

INSANITY.

The opinions of Medical men in India are often called for in cases of real or apparent mental aberration of the most involved and difficult nature. If it be sometimes found impossible to bring about unanimity of opinion in three or four of the most eminent men, whose lives have been devoted to the study of Insanity in England, with regard to the sanity or unsoundness of mind of an educated fellow-countryman, how much more trying must the task be to a young Civil Surgeon, upon whose fiat depends the life or death of a Native, probably from some remote and almost unknown part of the district, in whose mind a perfect chaos of absurd superstitions stands in the place of imagination and religion

^{*} Vol. ii., 3rd Edition, p. 123.

[†] As recently shown in the case of the unfortunate Buranelli, who was hanged upon a sentence which appears to have rested upon the opinion of two medical men, who only saw him once, two months after the perpetration of the fatal deed; while Drs. Connolly, Winslow and Baly, and two Surgeons, expressed it as their solemn and matured opinion that the prisoner was insane at the time he committed the crime.

and whose every turn of thought and expression is strange and foreign; in whom every attempt to question excites an effort to deceive, and in whom the faculties of cunning and simulation exist in their fullest and most active developement. Notwithstanding these difficulties, the printed reports of our Courts show very clearly that dangerous and untenable opinions are rarely given by Medical Officers in cases of this description.—The chief sets of cases which it appears necessary to mention here are the following.

Mental Aberration resulting from the use of Opium and Hemp. -From very early periods, these two poisons have been made to supply the place of fermented liquors, by some of those who pretend to be the strictest abstainers among both Hindus and Mahomedans. Bernier (1655) describes the Rajputs as great takers of opium, and he has sometimes wondered at the quantity he has seen them take: "They accustom themselves to it from their youth. On the day of battle they double the dose; this drug animating them, and making them insensible of danger; insomuch that they cast themselves into the combat like so many furious beasts, not knowing what it is to run away, but dying at the feet of the Raja, when he stands to it." Dr. Fryer, (1672) says: "The plant of which Bang is made, grows like our Hemp, the juice of whose seed, ground in a bowl like mustard seed, and mixed with any other liquor, is that they equivocate with their prophet instead of the grape."

Late in their miserable career, the gunjah-smoker and the opium-eater become utterly shattered, alike in mind and body; but I have not met with or heard of any case in which true Insanity has been caused by these practices; the opium-eater sinks into the condition of a hopeless driveller, the gunjah smoker and bang-drinker often remain chronically inebriated, and are sometimes excited to acts of frantic violence, but these states may be readily distinguished from true Insanity. In some rare cases, these pernicious habits,

doubtless, hasten the advent of Insanity in individuals otherwise predisposed. This would certainly much embarrass diagnosis. I doubt, however, whether violent Mania would ever occur in an opium eater; or, if it did, the depressing effects which would result from debarring him from the use of the drug would, almost at once, reduce him to a state of fatuity. A madman who had used gunjah would, probably, continue Insane for months, if merely confined without medical treatment; a few days tranquillity will generally be alone sufficient to restore one who has been over-excited by gunjah to his usual state of mind.

Some observations, made by a writer, in 1798,* bear so importantly upon this subject that they deserve to be quoted here.—"The Indian who Runs a Muck [Amok, Amok,-Kill, Kill! is always first driven to desperation by some outrage, and always first revenges himself upon those who have done him wrong; they are generally slaves; who indeed are most subject to insults, and least able to obtain legal redress. It has been usual to attribute Mucks to the consequences of the use of opium; but the words of Mr. Stavorinus, who says, that they are occasioned 'by the swallowing of the opium, or by other means,' seem to confirm the opinion entertained by Marsden, that this should probably rank with the many errors that mankind have been led into by travellers addicted to the marvellous. That these furious quarrels and sanguinary attacks do actually and frequently take place in some parts of the East, cannot be controverted; but it is not equally evident that they proceed from any intoxication, except that of their unruly passions; and many Mucks might, upon scrutiny, be found to be of the nature of one, which Mr. Marsden

^{*} Mr. Wilcocke—Notes to a translation of Stavorinus' Voyage to the East Indies, vol. i., page 293.

particularizes, of a slave who probably never indulged in the use of opium in his life, a man of strong feelings, driven by excess of injury, to domestic rebellion; or that related in Lieutenant Cook's voyage in the Endeavour, of a free inhabitant of Batavia, whose brain was fired more by the maddening fury of jealousy, than by any adventitious intoxication. It is true that the Malays, when bent upon any daring enterprize, fortify themselves with a little opium, in order to become insensible of the danger; as the people of another nation are said to take a dram; but it must be observed, that the resolution for the act precedes, and is not the effect of, the intoxication. They take the same precaution, previous to being led to public execution; but, on these occasions, show greater signs of stupidity than of frenzy." Upon the whole, this writer believed, that-"it may reasonably be concluded, that the sanguinary achievements for which the Malays have been famous, or rather infamous, are more justly derived from the natural ferocity of their disposition, than from the qualities of any drug whatever."

In a highly valuable Report on Singapore, sent in to the Medical Board in 1843, Dr. Oxley, senior surgeon of the Straits Settlements, has given a very useful account of the practice of Running Amok. He considers that what has been so often written of the revengeful spirit of the Malays is much exaggerated. Polite in the extreme, according to their own ideas, they never indulge in abuse one towards the other: the only reply to any deviation from this rule is the Kris, for which they will watch their opportunity, and most certainly not afford their adversary any advantage it is in their power to deprive him of. This is their code of honor; and, being fully aware of it amongst themselves, provocation is seldom given and satisfaction is seldom required. When goaded, however, to the necessity, they become perfectly reckless; and, should discovery attend the deed, they

attempt no refutation, but sell their lives at the utmost cost they can to the captors. Too often has Dr. Oxley known the officers of police compelled to shoot them on these occasions. Such is one species of "Amok," and how offences of this description are to be dealt with, admits of little doubt; but there is another variety of the "Orang Beramok" vastly different, and by no means the least frequent, which requires discrimination on the part of the Medical Jurist, to prevent irresponsible persons suffering the penalty of the injured law. For instance, a man sitting quietly amongst his friends and relatives will, without provocation, suddenly start up, weapon in hand, and slay all within his reach. Dr. Oxley has known as many as eight killed and wounded by a very feeble individual in this manner. Next day, when interrogated whether he was not sorry for the act he had committed, no one could be more contrite. When asked "Why then did you do it?" The answer has invariably been-" The devil entered into me, my eyes were darkened, I did not know what I was about." Dr. Oxley has received this same reply on at least twenty different occasions. On examination of these monomanics, he has generally found them labouring under some gastric disease, or troublesome ulcer, and these fearful ebullitions break out upon some exacerbation of the disorder. Those about them have generally said that they appeared moping and melancholy a few days before the outbreak. He considers that, among the Malays, Monomania almost invariably takes this terrible form. The Bugis, whether from revenge or disease, are by far the most addicted to Amok. He thinks that three-fourths of all the cases he has seen have been by persons of this nation. The Boyans, who come from Pulo Babian, an Island South of Java, are the most quiet and peaceable of all the Malay tribes. He has never heard of any instance of Amok amongst them. Dr. Oxley does not

appear to attribute this practice to the use of intoxicating drugs, although he draws a very painful picture of the miserable effects of opium smoking in Singapore.

The following is not by any means a singular case in India. A respectable up-country Hindu, who had been for some years settled in the employ of a zumindar near Chittagong, upon receiving some abuse from his wife and her mother, took down a heavy tulwar from the wall, and literally hacked the former in pieces, and then ran at the latter who, however, escaped with a severe wound into the elbow-joint. He then pursued another woman who was passing at the time, and succeeded in wounding her, by thrusting his sword under the door of her house, which she had closed upon him. I found him to be a very healthylooking and well-mannered man of 50; he was perfectly rational, but I learned that he was in the habit of eating nine ruttees (131 grains) of opium daily. He appears, however, not to have been guilty of any unusual excess in this way before the crime was committed. As it was necessary to ascertain whether he was, in reality, addicted to opium eating, I kept him without the drug for four or five days, when he displayed that peculiar nervous agitation which is so characteristic in opium-eaters deprived of their usual stimulus. He was then allowed a daily supply, but his strength continued to fail until after his trial and sentence to death, when he was attacked with remittent fever, which assumed an almost typhous character, very unusual in that jail, and destroyed him in a few days.

It appears probable that, had not this man's nervous system been greatly shattered by the vice of opium-eating, the abuse which he received would not have excited a blind and indiscriminating impulse to kill in his apparently otherwise calm and rational mind.

I can offer only a partial demonstration of the fact, but I

am convinced that a very large proportion of the murders by hacking to pieces, which have already been referred to in this Report as prevalent in India, are committed under the influence of intoxicating drugs, which, without doing more than add to and maintain furious excitment, enable the otherwise timid savage to carry out his ruthless purpose. In looking over the Nizamut Reports, I have been struck by the frequency with which medical opinion has been called for to decide upon the evidently disordered and unsettled state of mind of these criminals. In a few such cases it has been decided that the prisoners were Insane, in others, attempts to feign Insanity were detected; while, in a third class, there were, at first, marked evidences of something nearly approaching to Insanity, which gradually disappeared in the course of a week or two. The following example may be selected from many. In 1845, Dr. Wilkie, then of Dinagepore, examined the dead body of a woman and the persons of a boy, and of a second woman,* who had been wounded with some cutting instrument. The first woman must have died immediately, the boy recovered; the other woman was so severely injured by sword cuts, that it was at one time apprehended that she would be maimed for life. The Mussulmann who was tried for this outrage appeared to Dr. Wilkie, on his admission to jail, to be suffering from mental derangement. There were suffusion of the eyes, much cerebral excitement, and fever. All these symptoms, however, subsided within a week, and Dr. Wilkie then considered him sane. In reply to the question whether, if temporary Insanity was produced by fever and nervous ex-

^{*} It is one of the marked features of these cases of wounding, where jealously is the cause, that a child often shares the puuishment of his unfortunate mother See also a case (Nizamut Adawlut Reports of the N. W. Provinces for July 1854, p. 124,) in which one Nokeh was convicted of murdering his wife and infant, 2 years old, with a heavy chopper (gundasa). He merely stated that he had had a trifling dispute with his wife.

citement, (as stated by the witnesses in this case,) would it probably be likely to recur—or could such a person be set at large without danger to the community?—Dr. Wilkie said that, as this man's temporary Insanity was induced by no appreciable motive or cause, he was inclined to believe that it must be owing to some peculiarity in the brain and nervous system; he therefore was afraid that mental derangement might recur, and that, consequently, his release was not advisable.

The cause upon which this person's mental excitement depended was evidently physical, and I have observed a precisely similar condition in one who, having become over-excited by the use of gunjah, was tied and beaten by those about him in the brutal manner generally adopted by Natives, with a view to drive away the devils by which they believe the Insane to be possessed. We need a very careful investigation of this class of cases. It would, of course, materially alter the complexion of a violent act, apparently committed in sudden rage, if it were discovered that the culprit had previously drugged himself with the deliberate purpose of maintaining his barbarous impulse.

The following instances in which it appeared that the criminal was nerved with Wine or Spirits previous to carrying out his sanguinary purpose, are worthy of notice.

It appeared, in a trial at Allahabad, that one Chotooa, having endeavoured to persuade a prostitute who was under his master's protection to carry on an intrigue with him, she replied derisively, that "she would ride on an elephant, not on an ass." He then left her house and went to a neighbouring spirit shop, where he drank two pice worth of spirits, and returned with a sword, which he probably took from his own house on the way;—seizing the unfortunate woman by the hair, he hacked at her until her body was disfigured by twenty wounds, and the deadly weapon was bent out of shape.*

^{*} Nizamut Adawlut Reports, N. W. P., October 27th 1852, p. 1246.

In a case already cited, which occurred at Budaon, where a man killed five persons, his relatives, by cutting their throats with a sword. it appeared that an open bottle of port wine was found on the table of a room in which the prisoner slept. It was believed by the Sessions Judge that the murderer had taken what wine was consumed to give himself nerve for the deed; or, if vengeance supplied that, to give himself heart to inflict a wound which was found on his own person.*

It is a matter of popular notoriety, both in Bengal and in the North-Western Provinces, that persons intoxicated with Gunjah are liable to commit acts of homidal violence, hence we find several cases in the Reports, in which prisoners made the plea of intoxication by Gunjah as a mitigation of their crimes; thus—

A man of Jessore, having been irritated by abuse from a woman who had lived with him for some years, killed her by striking her over the head with a kooralee. In his Foujdaree confession, he stated that he had eaten Gunjah during the night, but could not state if he was labouring under the effects of it at the time. To a certain degree, this assertion was supported by the evidence of two witnesses, who found him, shortly after the murder, lying down in some thatching grass with his teeth clenched, and stupefied. The Judges considered that the crime was committed in the heat of blood and passed sentence accordingly.† One Nund Lall, of Jubbulpore, when on trial for hacking his wife to death with a sword, stated that, labouring under an attack of fever, he asked his wife for some water; upon her not replying. and he having taken gunjah, a fight took place, upon which he killed her with the sword. This plea was, however, fully

^{*} Nizamut Adawlut Reports, N. W. P., February 25th 1853, p. 823.

[†] Nizamut Adawlut Reports, November 25th 1851, p. 668.

disproved by the evidence of witnesses, who represented him as not exhibiting any trace of either illness or intoxication on their arrival at the scene of the murder.*

Three sepoys went over from Bhurtpore to witness the religious ceremonies at Goburdhun. Suddenly and, as far as could be ascertained, without any provocation, one of them, named Rambuksh, drew his sword, slew one of his comrades by striking his head from his body, and then, rushing forward, decapitated three harmless women entirely strangers to him. He was not arrested until his left forearm had been cut off. He pleaded that he was not aware of what he had done; and, in defence, stated that he had taken bhang, and was beside himself. His comrades, who had known him for five or six years, stated that he was a quiet inoffensive man, and was not intoxicated at the time of committing this act, nor was he ever suspected of being Insane. Before the Magistrate he had said that the men whom he killed had threatened to strike him. He was sentenced to Death.†

One Ruttee, of Nursingpore, who had intrigued with another man's mistress, was tried and found guilty of having killed the woman in a jungle, dismembering the body, and robbing it of its ornaments. In his foundaree confession, he said that he killed his victim under Gunjah,—'Gunjah peekar mara.'‡

One Madar Buksh, of Mirzapore, hacked his wife to pieces, inflicting 22 wounds with a sword, probably under the influence of jealousy; he confessed the crime, saying that he suspected the woman of infidelity, and that, before his return home, on the fatal night, a man gave him a pill to eat, it was maajum or bhang, and was very powerful. The person

^{*} Nizamut Adawlut Reports, N. W. P., 14th January 1854, p. 29.

[†] Ibid, May 23rd 1854, p. 575.

[‡] *Ibid*, November 29th 1853, p. 1420.

named denied altogether that he had given the pill to the prisoner. The Judge thought it not improbable that intoxication was resorted to, purposely to gain heart for the deed which was meditated.*

It will be seen, from the foregoing details, that instances of Running Amok are scarcely less prevalent in this presidency than in Singapore.

In some of these cases, the crime appears to have been committed upon some grounds of provocation, as in that of the Up-country man at Chittagong, which I have already given, and in the following instances:—A Dacca man invited four boys to dine with him. The dinner not being ready, he sat down to smoke, when one of the lads snatched his hookah out of his hand. Upon this, he seized a piece of wood, struck two of the boys on the head with it and killed them; he then chased the other two into a house where he killed two other persons. He was sentenced to death.†

A man of Behar had words with his brother, about the division of some property, and, suddenly drawing his sword, wounded him. He then ran into the females' apartments and there killed his sister, his uncle's wife, and his brother's wife. Thence he rushed into a house opposite, and, wounding the wife of the owner, took to the roof, where he defended himself with his sword for some time, but at last gave himself up to the Government vakeel, to whom alone he said he would surrender. His nephews, a few days before, had informed the jemadar,

^{*} Nizamut Adawlut Reports, N. W. P., April 22nd 1854, p. 436. See also a case in which one Kumla, a burkundauze, of Boolundshuhur, killed, without any evidence of sufficient provocation, two boatmen who were ferrying him across the river. The Sessions Judge believed that, having been at a religious festival at Belown, the prisoner had probably indulged in bhang, or some intoxicating liquor—and, being temporarily excited, was irritated by the slowness of the men. He was sentenced to death.—Ibid, July 16th 1853, p. 853.

[†] Police Report, L. P., 1846, p. 47.

that his uncle was insane; but, on the jemadar going to him, he did not find anything apparently the matter with him.*

One Mudhoo Pandah, a Brahmin of Cuttack, having been prohibited by a bawd from cohabiting with a common prostitute in her house, entered the house armed with a sword, killed the bawd and one of her women, and injured three others, hacking them in a frightful manner.†

Ram Singh, havildar in the Kumaon Battalion, stationed at Dehra in the Doon, being seated in the orderly room with the other native officers of the regiment, where they were writing their daily report, suddenly rose and struck one Nardeb, acting havildar, three blows from behind with a kookree. Nardeb died on the spot. The prisoner then rushed about and wounded two sepoys of the corps. At the urgent appeal of the other sepoys, he threw down his weapon and surrendered. It was alleged that the deceased had debauched the prisoner's wife, and thus dishonored his house. After his arrest, prisoner said—"I have killed one, another yet remains."‡

Kullooa, of Allyghur, confessed, when apprehended, that he had killed his wife with a sword, (cutting her almost to pieces,) because he suspected her of an intrigue with his brother; the immediate cause of his committing the act being, that she had mixed some excrement in water which she gave him to drink. He also wounded his nephew very severely, merely, he said, because he happened to be away at the time, and that had any other person come in his way, he should have attacked him also.

A very remarkable case of Running Amok in which no motive could be discovered, was tried, a few years since, at

^{*} Police Reports, Lower Provinces, 1848, p. 12.

[†] Nizamut Adawlut Reports, October 25th 1853, p. 710.

[†] Nizamut Adawlut Reports, N. W. P., December 2nd 1852, p. 1428.

[§] Ibid, December 2nd 1852, p. 1431.

Moradabad. It appeared that, a number of persons being assembled at about mid-day within the enclosure of the cutcherry of Amroah, one Bhow seized the sword of a burkundauz and rushed round the building, cutting at every person whom he met. He, in this way, wounded no less than fifteen persons, -chuprassees, prisoners, mohurrers, and witnesses, with none of whom he had any enmity-three of them, however, endeavoured to stop him. He was seized, with some difficulty, by two men, one of whom wounded him with a bayonet. The Sessions Judge postponed the trial three months; the medical officer was thus enabled to watch the prisoner for five months, and deposed that he considered him to be sane; that the only peculiarity he ever observed in him was a disinclination to enter into conversation; that he usually sat in a silent and sullen manner, as he was sitting in Court at the time of his (witness) being examined; that nothing had ever passed which would lead him to suppose that the prisoner, in so sitting silent and sullen, was acting a part; and that, as far as he had opportunities of judging, (and he saw the prisoner within half an hour of the assault,) he was capable of knowing that, in wounding the persons in question, he was committing acts forbidden by the law of the land. [The Superior Court observed that the Sessions Judge should not have questioned the medical officer as to whether the prisoner was or was not responsible for his actions. This was a point for legal decision on the evidence.

The prisoner, on being examined by the Magistrate, deposed, that the deity had made him use the sword; that the deity likewise wounded him; that a taweez found on his person was made, two years previously, to give him bravery; and that he had had an addition made to this taweez lately. He afterwards said that he wished to kill the Magistrate, and again, that he intended to kill that officer's

Sheristadar. On trial, he denied everything. Various witnesses, living in the same village with the prisoner, and in those adjacent, and, amongst them, his own brother, deposed to his sanity-the brother added, however, that he was in the habit of absenting himself occasionally four or five days without cause-another brother deposed to his not being sane. Certain prisoners stated that, on being first admitted to the jail, the prisoner did not appear to be sane, but that, after some time, he became so. It was shown that, previous to Running Amok, the prisoner had taken off his upper clothing and girded up his loins, as though about to wrestle. One of the witnesses deposed that he saw the prisoner cut a tree with his sword; the Judges concurred in believing that the prisoner was perfectly sane at the time he committed the crimes, and sentenced him to imprisonment for life in transportation. It does not appear to have become a matter of inquiry whether this man was in the habit of smoking hemp, or was under the influence of drugs when this outbreak occurred.*

The most singular feature in this class of cases, is the impulse which, almost invariably, urges the prisoners, after having satiated their vengeance, to continue their havor upon unoffending persons. It is evident that no peculiar opinions of religion, or custom, or class can prevail in these cases; for we find the crime perpetrated, under precisely similar circumstances, by the Up-country Rajpoot, the Bengalee, and the Malay of Singapore. All that these men can be said to have in common is, that their natures are revengeful, that they live under a tropical sun, and are habituated to excess in the use of intoxicating drugs. Carefully sifted, it is probable that the generality of these cases would be found to be dependent upon the last mentioned fact.

^{*} Nizamut Adawlut Report, N. W. P., 1st May 1852, p. 383.

I find, in the printed Reports, several cases of trial for Murder both in Bengal and Up-country, committed by known Gunjah Smokers. In 1853, a Mussulmaun was tried, at Backergunge, for murdering his wife, by frequent blows with a pole armed at one end with a flat piece of iron. His mother and all the neighbours said that the prisoner had not been in his right mind for 8 or 10 days previous to the murder. He was, however, quite capable of giving his own defence, and was sufficiently in his right mind to plead Insanity, and to assert that jealousy had unsettled his mind. The confessions, before the darogah and before the magistrate, were so nearly similar that a translation of either of them would suffice.* This man remained, for two years, in the Dacca Lunatic Asylum. Dr. Green stated that, upon the man's admission there, he thought him quite insane. He suffered from Cholera and Dysentery about 8 months subsequent to the murder, after which he began to answer when addressed, (which he did not do at first,) and left off his previous mad actions, and, for some months previous to his discharge, behaved himself quietly and rationally. Dr. Green therefore recommended him for release. Dr. Green understood that he was a Gunjah Smoker, and thought it probable that he was subject to fits of madness before admission into the Insane Hospital. The prisoner was acquitted.+

In 1852, a Native policeman was tried at Moorshedabad, for the murder of another burkundauz, his companion, with

My pulse as your's doth temperately keep time,
And makes as healthful music. It is not madness
That I have uttered: bring me to the test,
And I the matter will re-word, which madness
Would gambol from!—Hamlet, Act iii., Scene 4.
† Nizamut Adawlut Reports, vol. iv., p. 258.

whom he appears to have had no previous quarrel. A man who was in his custody stated that the prisoner, and deceased were sleeping in a thannah, when the prisoner suddenly called out that he (prisoner) had been bitten by a snake. The witness saw a snake pass by his bed near to the charpage of the prisoner, who cut it into pieces with a sword; after which, at his request, the witness prepared tobacco for the prisoner to smoke, and returned to bed. Before he was asleep, he heard deceased give an alarm that he was murdered, and, getting up, saw the prisoner strike deceased with a sword. The deceased died from his wounds fifteen days subsequently. Dr. Keane examined the prisoner, and reported him to be sane. The judges decided that it was in evidence that the prisoner was addicted to smoking Gunjah, and that, shortly before the murder was committed, a chillum of tobacco had been prepared for him. Whether there was Gunjah or other stupefying drug in the tobacco was not known, but that he was probably under the influence of this drug at the time, and that the sight and effort of killing the snake may have added to his excitement. In the absence of any ascertainable motive for the act, it was regarded as committed in a temporary fit of insanity, arising from excessive smoking of gunjah. The prisoner was therefore sentenced to be imprisoned in transportation for life.*

One Baba Ramdoss, an aged byragee of Saugor, without any ascertainable reason, attacked a young child, which was lying sick, with a knotted stick and beat it to death, fracturing its skull. It appeared, from the evidence of the Kotwar, that the byragee was in the habit of using intoxicating drugs, and it was stated that, when the stick was taken away from him, he appeared to be infuriated. The

^{*} Nizamut Adawlut Reports, vol. ii., part 2, p. 676.

prisoner was placed under the observation of the Civil Surgeon, who deposed that the man's intellect had become considerably clouded by continued indulgence in intoxicating drugs; and that, indeed, he was almost an imbecile. He was sentenced to imprisonment for life in irons.*

Drugging with Datoorah.—We have seen that, apart from the numerous cases of Thuggee by Poison, which occur in India, it is probable that Datoorah is occasionally employed by designing persons as a means of controlling the actions of those against whom they entertain nefarious designs. It is a matter of common report, although I have not been able to obtain any perfectly indisputable evidence of the existence of such a custom, that slow poisoning by Datoorah is practised by unprincipled Natives upon aged and weak-minded relatives and others whom, on account of their wealth or for other reasons, they are anxious to reduce to a state of utter helplessness and imbecility. Cases of this description would, of course, demand the physician's utmost caution and acumen.

The following remarkable case was reported in 1853, by Baboo Buddenchunder Chowdree, of Hooghly.—"Bhuttacharjee, a student, a resident of Umbika, in East Burdwan, passed his early days in the enjoyment of gay and pleasant company, his chief engagement being music, singing, &c. He, like his companions, was in the habit of smoking hemp in repeated chillums till intoxication was produced. On the 31st of December 1848, while under the effect of the drug, a cousin of his took advantage of his state, and administered to him some Datoorah seeds, to deepen and prolong the inebriation, perhaps to serve some evil motive arising from family disputes then existing between them. The deed being immediately brought to light, he was carried out of the inner apartments in a senseless state and treated with some sooth-

^{*} Nizamut Adawlut Reports, N. W. P., February 2nd 1854, p. 98.

ing medicines and a cold bath. From that time, he passed restless nights. His ideas were confused, thoughts roving, all indicating mental derangement. The finest music and songs, in which he bad once taken the greatest pleasure. were disliked, nothing could comfort him, he showed some liking for solitude, laughed at one time and became violently furious at another, tearing and biting the pillows and cloths, and frequently attempted to injure any person who ventured to go near him. He was brought here in irons, and showed every symptom of violence, biting the irons, spitting, grinning, barking, howling and shouting. The success which had attended the treatment adopted in some of my former cases induced me to try it also in the present instance. I accordingly had the patient's head shaved and directed him to be put in a gumla of warm water, and several kulsees of cold water, from the drain of a terrace, to be poured over his head twice a day, morning and evening; two drops of croton oil, with a little sugar, to be swallowed every morning until he could be easily prevailed upon to take other medicines, and a grain of morphia to be repeated every night at intervals of two hours, until he should fall asleep. During the first week, the state of the patient was almost stationary; but, at the end of that time, there were evident marks of improvement, his mind began to regain its reasoning power, and he commenced sleeping some nights without the opiate."*

Investigation of crimes alleged to have been committed in the Delirium of Fever, under the Irritation of Severe Pain, &c.—Allusion has been already made, in the account of Dr. Wilkie's case, p. 539 and at p. 290, to instances in which the alleged

^{*} See a remarkable case in which a man of Gorruckpore was convicted of drugging a whole household with Datoorah, under pretence of curing a member of the family who was Insane—Nizamut Adawlut Reports, N. W. P., April 22nd 1854, p. 441.

fact of the crime being committed under the delirium of fever was pleaded in mitigation. In 1814, a man killed his wife, at Moradabad, by striking her on the neck with a sword, nearly severing her head from her body. He soon afterwards made a confused and incoherent confession, stating that he had been ill with fever for 10 days, and that he had killed his wife because she had refused to bring him some water. Before the magistrate, his confession was more clear and circumstantial. His wife, he said, had several times absconded from him, and was in the habit of sleeping at the houses of other people; that she behaved disobediently to him on all occasions, but especially so on the day of her death, when he asked her to do something and she refused; that, being afflicted at the time, with a fever and ague, which affected his senses, and being greatly irritated at her insulting behaviour, he seized a sword, and struck her on the back of the neck The Judges, being of opinion that the prisoner was under the influence of a paroxysm of fever at the time of his committing the homicide, directed that he should be immediately released.*

In March 1854, a man was sentenced to 6 months' imprisonment for having thrown a billet of light wood at his wife, (who was inattentive to his request to light a fire for him) when he was suffering from fever, and ruptured her spleen, which was diseased.†

One Dataram was tried at Delhi for the murder of his mother and cousin, and with wounding with intent to murder his two brothers, with a sword. It was obscurely shown, that there had been a family quarrel about the prisoner's wife; with whose behaviour, apparently in connection with one of his brothers, he would seem to have been dissatisfied. Amongst the principal witnesses were his two brothers, the man whom he attempted to kill, and his aunt, the mother of the little

^{*} Macnaghten, vol. i., p., 301.

girl, his cousin, whom he murdered. These, on the other hand, deposed that he had been suffering from fever, and that, in the delirium of fever, he had used his sword against the members of his own family, with whom he had no quarrel whatever. The witnesses at the thannah confession of the prisoner declared that he was in the full possession of his senses at the time he appeared before them; the plea of delirium was not advanced until aftewards. The Civil Surgeon deposed that he was decidedly of sound mind, and that, having had him under his observation from within a few days after the perpetration of the crime up to the time of trial, he did not think it likely that he had been delirious simply from fever, and had, in consequence, been impelled to murder his mother and cousin. He did not think it probable that a man in the delirium of fever would commit a murder which he would not have committed if he had been in health; because a patient, labouring under fever, and delirious at the same time, is almost always so debilitated that he cannot get up or walk steadily; and, if he had the desire to commit murder, he could not have the necessary degree of physical strength or cunning to effect it. This man got up in the night, took a sword, and nearly severed from her body the head of his cousin, a little girl eight or nine years of age, and inflicted one other wound on her person. He then murdered his mother, wounding her in six places with the same sword; and, after rushing from the house, wounded his two brothers, and was immediately apprehended. [It must be noted here, however, that, taking into account the various acute disorders of the brain, which might be characterised, in non-medical evidence, as "Fever" and "Delirium," it would not be safe to attempt to establish it as a general rule that persons actually so affected could neither will nor execute deeds of frantic violence.] The plea of Delirium was not credited—Sentence—Death.*

^{*} Nizamut Adawlut Reports, N. W. P., August 19th 1853, p. 1014.

The practical questions involved in these cases are—1st. Whether it is to be considered that the mental and bodily distress, attending upon Fever, may be such as to justify the commission of homicide upon comparatively slight causes of irritation?—2d. Whether it is to be concluded that murder may be committed, either with or without additional causes of excitement, in the delirium attending the Fevers of this or of other countries?—And 3. Whether it can be proved that the individual was actually labouring under the delirium of Fever at the time when he inflicted the injury?

- (1.) Every one who has suffered from the Fever of this country must retain a vivid recollection of the great mental distress and irritability which accompanied the attack; still it would, assuredly, be dangerous to establish the precedent that murder,—inflicted upon slight causes of irritation by persons suffering from Fever, but who are not absolutely delirious,—is excusable.
- (2.) A person who is actually delirious in Fever cannot, of course, be held responsible for his actions. It is not generally considered by medical men, in this or in other countries, that persons suffering from Fever are dangerous to others. In our Jails and in the Hospital wards at home, such patients lie beside other sick; and, although it occasionally happens that a fever patient rises from his bed, in the height of delirium, and becomes unruly, even this is not very frequent—and instances of dangerous violence to others are extremely rare. The violence committed by delirious persons probably bears with it, in all cases, the manifest evidences of irrationality and delusion; and is scarcely, if at all, remembered by the patients when the attack passes off. The plea of delirium, as an excuse for undue retaliation upon a real offence, the nature of which the individual clearly recollects, must, therefore, be received with great caution and suspicion. There are, however, an

unfortunate class of cases, in which excess, exposure, undue mental excitement, slight or commencing inflammation of the membranes of the brain, or ordinary Fever, acting upon a constitution in which Insanity is lurking, may lead to frightful violence, even while the evidences of bodily and even of mental disorder are very far indeed short of those displayed in ordinary febrile delirium. In a case where there was reason to believe that nearly the whole of the above causes were operative, my patient answered questions correctly, and appeared to have considerable power of self-control, but his ideas were truculent, and he so frequently alluded to spearing and stabbing, that I thought it right to place all weapons out of his way, and to take measures for coercing him, if necessary,—which, however, was fortunately not the case.

In cases of this kind, however, the physical cause of mental aberration will remain, for some days at least, after the violence has been committed. The evidences of Insanity may be temporary and of short duration, but those of arachnitis or brain fever will only pass off under treatment.

(3.) Should it happen that an act of homicidal violence had been committed in the delirium of Fever, it will be necessary, and could rarely be difficult to prove, that the Fever had continued subsequently to that act, and the characteristic features of the disease should distinguish it, in the judgment of any medical man, from the excitement remaining after intemperance or drugging, and from that agitation which may be expected to exist, for a short time, in a weak, timid, or remorseful culprit, whose passions have lately been excited to the commission of a great outrage.

There are one or two remarkable cases in the Records in which the circumstance of the accused being in great Pain, at or about the time at which he committed the violence has been regarded as mitigatory. In 1822, a man,—who had

been long suffering under the tortures of rheumatism,* and was unable to move about, having asked his wife for some water to drink, which she refused to give, at the same time making use of very gross and improper language towards him,—was provoked to such a degree that he took up a pinrah, (a wooden stool on which the lower class of Natives sit,) and threw it at her; it struck her on the head and killed her. They appeared to have lived happily before this affair occurred. It was decided that there did not seem to have been an intention to kill. The prisoner was crippled with rheumatism at the time, and still remained in a sickly state; the act, however, was rather a savage one. He was sentenced to five years' imprisonment.†

In 1851, a similar case occurred at Rajshahye, in which a man was tried for killing a girl, six or seven years old, who had teazed him, by fracturing her skull with a piece of wood or board used as a stool for sitting on, and commonly called a " pinrah." It was proved that the prisoner had, for four or five years previously, been labouring under severe gnawing pains, in the interior and lower part of the abdomen, (probably the peet shool so well described by Dr. T. W. Wilson) which Mr. Bedford the Civil Surgeon was satisfied were not feigned. His relations all deposed that, since the pain came on, he had done no business, and that he was in the habit of applying or pressing the pinrah to his stomach when the pain was excessive. Mr. Bedford considered that, on a periodical exacerbation of disease, in a state of intense irritability, the prisoner might lose his self-command, and be guilty of an act which, at another time, he would not have committed. He was sentenced to seven years' imprisonment. 1

^{*} The pain in the chronic rheumatism of this country is generally neuralgic in its character.

[†] Macnaghten, vol. ii., p. 155. ‡ N. A. Reports, vol. i. of 1851, p. 1155.

The Plea of Intoxication.—In cases of homicide and wounding, a plea of Intoxication is not admitted by the Mahomedan Law to bar exemplary punishment; but, under special circumstances, it is considered a ground of mitigation by the Nizamut.*

Drunkenness in the Army.—Article 17 of the Articles of War of the East India Company directs that—

"Any Officer who shall be found Drunk on any duty under arms, shall, on conviction thereof before a General Court Martial, be cashiered."

The Military Law makes no reservation with regard to the cause of the Intoxication. Captain Simmons† says, "It is held that the offence of being Drunk on Duty is complete when an Officer or Soldier is found Drunk, whether under the influence of liquor, opium, or other intoxicating drug or thing." Major Hough adds, that—"It matters not what the quantity taken may be, if ever so little, and the Soldier be drunk, he is punishable."‡

It is, however, doubtless, open to the judgment of every Court to receive circumstances in mitigation of such charges, as grounds for recommendation to mercy.

A line of defence not unfrequently adhered to in trials for Drunkenness, especially in tropical countries is, that the accused have previously suffered from injury to the head, or from sun stroke or brain fever, the result of exposure to the intense heat of the climate; and that, consequently, they have become liable to Intoxication after taking exceedingly small or moderate quantities of wine or spirit. § I am aware that many

^{*} Macnaghten, vol. i., Index.

[†] Page 283 as quoted by Hough, p. 208. ‡ Ibid.

[§] Dr. Taylor says that, "In those cases where the head has received any physical injury, as it often happens with soldiers and sailors, Drunkenness, even when existing to a slight extent, produces sometimes a fit of Temporary Insanity, leaving the mind clear when the drunken fit is over. The law makes no distinction between this state and ordinary Drunkennness, although juries occasionally show, by their verdicts, that some difference ought to be made." (See cases in Alison 653.)

strict officers entirely ignore the validity of this plea—maintaining that men thus circumstanced, knowing that their own characters and the welfare of the service are at stake, should altogether abstain. On the other hand, facts are, from time to time, observed which render it questionable whether certain of these unfortunate cases should not, on medical grounds, meet with a more lenient judgment: thus—

It will be generally admitted that persons who have suffered from severe injuries to the head, coup de soleil, or arachnitis, are frequently left extremely susceptible to the operation of all causes of cerebral excitement, and especially to that by alcoholic drinks. To this principle may, undoubtedly, be added the fact, that there is a set of cases in which the patient suffers from a morbid and irresistible propensity for alcoholic liquors. I have adduced the most recent observations upon this "Oinomania," in the subjoined note and in the Appendix.* The occurrence of this abnormal condition does not appear to be very frequent. Still the facts adduced by Dr. Guislain and others deserve the careful attention of

^{* &}quot;Drunkenness," says Dr. Guislain, "may present itself as an essential affection, that is, it may be a true morbid impulse, and constitute a monomania, in all the force of the term. I first saw this affection in a music-master who, every year, or sometimes every two years, abruptly quitted his studies to abandon himself to excessive drinking. He was, at these times, in a state of continual drunkenness, lasting to 3 or 4 months, until it disappeared, as it were suddenly. Then this man became averse to every excess, drank nothing but water, and avoided with extreme care everything that might compromise his health or his dignity. In one of these periods of lucidity, feeling the approach of his disease, he destroyed himself. It is therefore important to distinguish Mania Ebriosa from the maniacal exaltation which is the sequela of habitual drunkenness. It cannot be confounded with the love of drink, which is a vice of manners. It differs entirely from these conditions; for what characterises this affection is a morbid inclination, its appearance under the form of monomania, and its periodical attacks, the frequency of the pulse, and the marked debility of the intelligence during the entire periods of the disease .- Dr. Guislain's work on Insanity. Pschycological Journal, April 1854, p. 269 .-See also APPENDIX N.

every naval and military surgeon. Beyond this, there is, I am confident, a set of cases in which a morbid appetite for alcoholic drinks occurs as a symptom of cerebral disorder. I have had under my own treatment two cases in which this was distinctly observed. Both patients were men between 30 and 40 years of age, one a military officer, the other a civil engineer; one had resided in India for several years, the other but for a short time; both, and I was particular in ascertaining this point, were habitually moderate in their potations; one had suffered, some years previously, from an extensive wound upon the vertex, the other from cerebral symptoms which were evidently severe, but of which there was no record. I was acquainted with both; -in their usual state, they were quiet and apparently little excitable. Both were attacked, in consequence of undue exposure to the sun, during the hot season, with symptoms of cerebral excitement closely bordering upon acute mania; and in both also the incessant and peremptory desire for beer was the most troublesome symptom. Both patients were sent to England. One of them has returned to India, apparently in good bodily and mental health. I am not aware of the ultimate issue of the other's case. These were evidently marked, though not extreme, cases of Dipsomania—dependent upon a physical cause.

These cases are not given here as precedents. The point requires further attention, still I know that they are not solitary instances, and the very important medico-legal question which they involve should not be overlooked.

It cannot, for a moment, be questioned that an officer, who is liable to be drunk on duty, is wholly unfit to remain in the effective arm of the service; where, however, it can be made apparent, upon clear and satisfactory medical evidence, that the individual, by no fault or culpability of his own, has become the subject of a diseased craving for alcoholic stimulants, it may be fairly held that a lenient sentence, plac-

ing him upon half-pay, or upon the non-effective list, will fully meet all the exigencies of the case.*

It would be wrong to omit here a caution which I have occasionally had to observe, -in criminal cases, where the Plea of Insanity is likely to be made, -with regard to the necessity for reserve in attempting, previous to trial, to cure or remove the cause of excitement, whether it be the result of Drugging, Cerebral Disorder evidently dependent upon organic causes, or Acute Mania. Upon committing an act of frantic violence, a native of this country, having undergone examination at the thannah and at the Magistrate's court, is generally placed, as soon as possible, in the jail under the observation of the Civil Surgeon. Here it, of course, becomes the duty of the latter at once to endeavour to distinguish how much of any disorder of the intellectual faculties which the culprit may present is dependent upon physical, and how much upon mental causes. He has either been brought in, very shortly after the deed of violence, heated, panting, and almost wild with rage or terror; or pale, tremulous, prostrated and horror stricken; -or, where the act has been done at a distance, he has been hurried in on foot, from thannah to thannah, perhaps a distance of from thirty to fifty miles, exposed to the scorching mid-day sun, and to the night cold, roughly treated, and, in short, the subject of nearly all those causes which would most tend to unsettle, for a time, the steadiest intellect;-he, in fact, appears before the Medical Officer more like a wild beast just dragged from the jungle, than the quiet-mannered common-place native that he ordinarily is. These circumstances being carefully looked to and discriminated, the Medical officer may, upon observing that his eyes are inflamed, his head hot, his tongue foul, and his pulse excited, and, upon learning that

^{*} By G. O. of the G. Genl. 13th June 1846, Officers applying for transfer to the Invalids have to produce Medical evidence that their disqualification "has not been occasioned by Intemperance, or other Irregular Habits."

he is sleepless at night, feel disposed to exercise the remedial portion of his art, and to prescribe purgatives, nauseants, sedatives, low diet and cold affusion. I allude especially to this point, as I have seen such a course inconsiderately adopted, under such circumstances, by men of experience and judgment; and have felt myself bound to counsel against it. In these cases,-unless the physician be convinced, either that treatment is necessary to save the individual's life (which will very rarely indeed happen) or that the experiment of treatment will aid him in forming or confirming his diagnosis (a dangerous course which can only be undertaken by those who possess unusual tact in the investigation of such cases),-it is always safer and fairer towards the subject of our scrutiny to leave his case untreated-under the most careful watching. In fact, with regard to food, lodging, dress, opportunities of ablution, &c., he should be permitted to remain, as far as the fact of his being in a jail will admit of, as nearly as possible under the circumstances to which he has been accustomed. Indeed, if it can be clearly proved that he has been in the habit of drinking spirits or of using drugs, these should be allowed him, in moderate quantities, -with very cautious observation of their effects. Under these circumstances, it may fairly be expected that the effects of intoxication, whether by sharab or gunja, will gradually pass off, and that all unwonted excitement, the result of terror or ill-usage, will be calmed down; but cerebral irritation, depending upon actual vascular changes, will not be removed; fever will run its course, (and may be allowed to do so until the medical man has fully recognised its presence, and has judged whether it did or did not probably exist previous to the crime,) and true mania will probably remain unaffected, except in character and degree. It appears to be generally stated, by those medical men who conduct asyla near large towns, where recent cases are brought in at once, that instances of acute mania are remarkably common, and are, in a very large proportion of cases, highly remediable. It is only after the Trial that the physician can be justified in treating the criminal lunatic; it can neither be an act of justice nor of humanity to place one who has committed a maniacal act sane before a jury who are to try him for Murder. I confidently believe that there are some who have been hanged in consequence of this nimia diligentia medicorum.

There is no country in which the line between Outrageous Fanaticism and Religious Monomania is so indistinct as we find it to be in India. Whether the religious impostor is knave or madman, or a compound of both; or whether superstitious enthusiasm, acting upon a weak mind and oriental imagination, may not occasionally prompt the rarely very scrupulous Native to the commission of wild atrocities, are questions of no small difficulty, which can only be decided by weighing carefully the facts of each case as it occurs. Eccentricity, especially when displayed in the quasi religious beggars of India, will rarely be viewed as Insanity in the present day. In any other country than India, the wretches called Aghorpunts would be regarded and treated as dangerous maniacs. Here, however, all such persons would be held responsible for their crimes.

A modern writer thus depicts these wretches in colours which I am informed, on other and good authority, are not unduly heightened.—"The most loathsome sight at the ghats are the Aghorpunt fukeers (Anglice, Ogres,) practical philosophers, who affect to disbelieve that there is any difference between things, and who avow that any difference depends upon the imagination. A cuff, or a kick is as immaterial to them as a blessing. They go about in puris naturalibus, with a fresh human skull in their hands, (off which they have previously eaten the putrid flesh, and from which afterwards they have, with their fingers, scooped out the brain

and eyes,) into which is poured whatsoever is given them to drink. They pretend to be indifferent whether it be ardent spirits, or milk, or foul water. Their food is the first thing that offers, whether it be a putrid corpse, cooked food, or ordure. With matted hair, blood-red eyes, and body covered with filth and vermin, the Aghorpunt is an object of terror and disgust to every body. He looks rather a wolf, ready to destroy and then devour his prey, than a human being. I once saw a wretch of this fraternity, eating the head of a putrid corpse; and, as I passed by, he howled and pointed to me; and then scooped out the eyes and ate them before me!"

These wretches, although not very numerous, are spread over the whole country. Mr. McCosh mentions that, during his residence at Goalpara, two men of this caste were caught gnawing the flesh from a human bone, and were taken up by the police. They were sent to him by the Magistrate for his opinion as to their sanity. One of them was not exactly compos mentis, but the other was of sound mind, and told Mr. McCosh that he had been in the habit of eating human flesh for many years. This author accounts for the abominable practices of these cannibals in a very clear manner,—viz. that their object, in walking about the bazars picking a putrid thigh bone, is to extort money from the inhabitants, who preferred paying them a few pice to get rid of the annoyance, and it was formerly even considered justifiable to shoot them like wild beasts whenever they were found.*

Mention has already been made of wild crimes committed by religious mendicants and impostors.† To these may be

^{*} Topography of Assam, p. 87.

[†] See cases in which a Byragee killed a child by striking it on the head with a club, p. 548; one in which a fanatic twice cut off the right hands of unoffending persons, p. 331; and another in which a brahmin slaughtered his pregnant wife to bring her blood upon one who had offended him, p. 274 (Note.)

added an instance in which one Ram Singh, a devotee of the brahmacharee class, suddenly rushed upon an unoffending girl of fourteen, thrust her into the river, and flung himself in upon her. The girl was drowned and her body was not discovered. The Medical Officer, having had the murderer for some time under observation, stated that, in his opinion, the prisoner was sane; that he had remarked nothing during the interval which led him to think that he had been subject to temporary Insanity, or that he had been in the habit of taking intoxicating drugs in large quantities. The prisoner stated at the thannah, that he had taken bhang; but, on trial, said, in a wild and wandering manner, that he never took bhang and knew not what had occurred. The Sessions Judge remarked that madness amongst fukeers, from their solitary habits, and their being accustomed to take intoxicating drugs, and perhaps from the very idiosyncrasy which led to their adopting the character, is very common. In the face, however, of the Medical Officer's evidence he was constrained to think him sane. He was sentenced to imprisonment for life.*

This was probably an instance of murder under the influence of gunjah—We have abundant evidence of the fact, that byragees and fukeers keep themselves almost constantly under the influence of Hemp, the excuse of the former being that this mode of intoxication abstracts their thoughts from the objects of sense, and assists their absorption into the deity.†

^{*} Nizamut Adawlut Reports, N. W. P., September 12th 1854, p. 353.

[†] According to Ward,—" A great number of the Hindu modern Saints live in a state of perpetual intoxication; and call this stupefaction, which arises from smoking intoxicating herbs, fixing the mind on God."—" Now and then a poor wretch is seen, naked, covered with ashes, and his hair clotted with dirt; whose vacant, brutish looks indicate that he is approaching a state of complete abstraction, and that he may soon hope to enter into this perfect state, viz.—to live in a world of wonders, without a single passion left to be affected by them. Yet even this abstraction, or contempt of the

There is, certainly,—apart from their dress and other disfigurements, a peculiar gauntness of person, and a wild expression of countenance, in the generality of religious mendicants, which mark them, in common with a majority of the Mheter, Moochee, and Chumar classes, as habitual consumers of Hemp and other intoxicating drugs. The face of an habitual gunjah smoker can scarcely be mistaken. The expression of the countenance forcibly carries with it the idea that reason has been partially unseated.

In September last, one Sreenibas was tried, at Hazareebaugh, for killing an unmarried girl, ten years old, (towards whom ill-will on his part was neither ascribed nor was probable,) with a tanjee or axe. The girl's father deposed that he saw his daughter pursued by the prisoner, who cut her down, and she died on the spot. On being seized, the prisoner said, "Oh ho! I have killed your daughter to-day, kill you me." He considered the prisoner to be a respectable man, having no quarrel with himself. The prisoner confessed that, having eaten and drank, he was sitting in the house, when suddenly a voice on the wind said to him, "Your uncles have taken your sister Aunie to bury her in the forest, go you there," wherefore, taking the axe in his hand, he went to the forest and, after a little, being inspired, he heard a spirit voice in the wind say, "cut off the heads of your brethren, or else take off any one's head." Then, as he went homewards, he met the girl coming with water from the pond to her home; and, being possessed, he, with that very axe, struck her two or three blows. She fell and died.

world, if it can deserve such a name, is brought on by shunning the presence of man, and continually smoking intoxicating herbs." The same author describes that—in a Pantomimical entertainment popular among the Bengalese, the *Manu-Bhunga*—Krishna is represented as assuming the form of a mendicant yogee, his body covered with ashes, and his eyes inflamed with intoxicating drugs. We have already seen that Siva is described as being commonly under the influence of Dhatoora and Gunjah.

After a little, he was seized by his own father and others, who took away his axe and bound him. He confessed to them, and asked them to save him. Now also he was making confession voluntarily. The prisoner's father deposed that prisoner was once out of his mind, when his mother died; since then he had been sometimes well and at other times he was idle. Another of those who winessed the fatal act and took him into custody deposed to the same effect, and stated that he was a quiet man. Major Hannyngton, who tried the case, decided that the prisoner was evidently of sound mind, not only when under trial, but at the time of the murder. His prior insanity, he considered, was not well made out, but it gave a colour to the story of an imaginary demoniac possession. The belief of a Hindu respecting such incursions cannot be measured by our own belief in them, but he was not disposed to view such cases with leniency. The immolation of a victim to a sanguinary demon is, he was persuaded, the real motive in many such instances, and the supposed merit of such an action is held to be cheaply purchased by any punishment incurred. The crime is, however, not so frequent as to require its repression by taking life for life; but, of minor punishments, the highest is most applicable. He, therefore, recommended that the prisoner should be sentenced to be transported for life with hard labour in irons. The Sudder concurred in this verdict.

Allusion has been already made, at page 244, to the rather recent case of a Hindu priest who, according to his own declaration, cut off the head of a woman in obedience to the command of the thakoor (deity) Saligram. The Medical Officer testified his belief that the prisoner was not in his right senses, and was an irresponsible agent, and added that his opinion was grounded on the prisoner's personal appearance, and the circumstance of his persisting in declaring that, in taking the woman's life, he was only acting in con-

formity with the orders of the thakoor, whom he was bound to obey; indicating thereby, that he was labouring under some extraordinary delusion. All other evidence, however, went to show that the prisoner was in his right senses. The plea that he was prompted by a vision of the Deity was urged after the murder had been committed. The Sessions Judge, therefore, recommended a sentence of death. The Judges of the Nizamut observed that the Medical Officer had not been examined by the Sessions Judge with sufficient care and particularity in this case. The legal test of Insanity in the courts of this country, they remarked, is laid down in Section I. Act IV. of 1849. No person can be acquitted for unsoundness of mind, unless it can be proved that-" By reason of unsoundness of mind, not wilfully caused by himself, he was unconscious, and incapable of knowing, in doing the act, that he was doing an act forbidden by the law of the land." The Medical Officer should, they were of opinion, have been examined as to whether, and on what precise grounds, he considered the prisoner to have been, at the time when he took the life of the woman, within the description above set forth. "The witnesses to the prisoner's habitual state of mind should have been examined in the presence of the Medical Officer, and he should have been invited to propose any questions on his own part. He should then have been carefully questioned as to the number of times he had himself seen the prisoner, the nature of his conversations with him, and all the circumstances from which, apart from the prisoner's real or professed religious delusions, he was led to regard him as of unsound mind. The questions should have been expressed so as to elicit an opinion of the Medical Officer, after his having had the advantage of hearing the statements of the members of the prisoner's family, his neighbours, and other parties, as to the state of the prisoner's mind both previously to, and at

the time of the murder, and subsequently up to the time of the trial. The Sessions Judge ought not to have referred, as he has done in his report, to the Medical Officer having only visited the prisoner twice, and for short intervals, without directly questioning that gentleman upon the point." They, therefore, directed that the trial must be re-opened, the witnesses to the state of the prisoner's mind being again closely re-examined in the presence of the Medical Officer, together with that officer himself, as above explained, and the Prisoner being called on for a fresh defence, and the Law Officer for a fresh futwa. Consequently, the Sessions Judge reported that, in compliance with the above instructions, the whole of the witnesses for the prosecution, together with other neighbours, religious followers of the prisoner, who had known him for some years past, had been examined in the presence of the Civil Assistant Surgeon, who had himself questioned them. That officer had also watched and examined the prisoner in jail; every opportunity had been afforded him to arrive at a correct judgment, and the result was his conviction that the prisoner was not, and never had been, of unsound mind. The Sessions Judge fully concurred in the Medical Officer's opinion. The evidence as to the habits and manner of the prisoner for the preceding ten years, up to that present time, was clear, consistent and corroborative of his sanity; and, as the Medical Officer remarked, the only possible reason for suspecting the soundness of the prisoner's mind, was the fact of his committing murder without good apparent cause. Some of the witnesses, however, stated that the true motive of the prisoner's act was revenge, excited by deceased's intriguing conduct with his wife. Both courts concurred in finding the prisoner guilty of wilful murder, and in sentencing him to Death.*

^{*} Nizamut Adawlut Reports, vol. iv. of 1851, p. 24.

The valuable teaching of the above case is self-evident. Doubtless the minds of Natives are not free from tendency to Religious Monomania. Indeed, constant brooding upon the laws and fables of a wild and bloody superstition*

^{*} The revelations of gross superstition in this country are often so ridiculous and unnatural that, even those tolerably well acquainted with the native modes of thought and expression, are liable to be startled, and to question whether these wild fancies are not the ravings of Monomania. It, therefore, appears to be very desirable that judicial and medical officers should have some insight into the opinions of the natives regarding Sorcery, Incantations, and other kinds of Jaddho. For instance, it was certainly not Insanity which prompted certain of the good folk of Edinburgh to testify, in 1670, that they had beheld the walking staff of Major Weir, the Wizard, solemnly pacing, all alone, down the Bow, at high noon, upon its master's errands; or which led the men of Boston to declare, at about the same time, that a woman tore from the back of a spectre an invisible sheet, which then immediately became visible before a room full of spectators.—Neither is the Bengalee to be considered mad when he protests that his enemy insensibly drew all the blood out of his body while seated beside him, or withered his mango trees by shooting charmed arrows into them ;-or the Hindustanee who declares that he has eaten a cock which crows in his belly, that a Gond witch has placed a devil in him, which has devoured his liver; or that she has turned the juice of his sugar canes into blood! Much curious and instructive information upon the subject of Witchcraft in India, will be found in the following Works. In Bengal, Ward, vol. i. Ed. of 1852 p. 210. Police Reports, Lower Provinces, 1838, p. 14. Ibid for 1843, p. 19. Ibid for 1844, p. 9. Ibid for 1849, p. 19. In the North-West Provinces. Sleeman's Rambles and Recollections of an Indian Official vol. i. p. 89. Nizamut Adawlut Reports, N. W. P., January 13th 1855, p. 39. Among the Bheels, East India Army Magazine, October 1854, p. 530. The Koles-Lieut. Tickell, Journal of the Asiatic Society, vol. ix. p. 709. The Bodos and Dhimáls-Mr. Hodgson. Ibid, vol. xviii. p. 732. The Assamese-McCosh's Topography of Assam, p. 23. Chota Nagpore, Kumaon, and among the Garrows, -Beaufort, paras. 2888 and 2933; Nizamut Adawlut Reports, November 28th 1854, p. 682. On the Magic practised by the Pana Vrastha Brahmans, and still in use among the Hindus, The Abbe Dubois, chap. xxxvi. p. 341. In Guzerat Mr. Gibson, Trans. of the Med. and Physical Society of Bombay, vol. i. p. 27. By the ancient Mahomedan Law, Sorcerers, proved to have done serious injury by their sorcery, might be put to death or imprisoned, according to the circum-

must, unquestionably, sometimes unhinge the narrow intellects of these wretched fanatics. Still, where the crime assumes the character of any one of a set of barbarous practices, which it has long been the steady purpose of our law-givers to extirpate from the land; and especially where, as in the case of Human Sacrifice, the perpetrator cannot deny that, even upon his own explanation of his motives, he has committed the act with a direct view to his own advantage, (see page 238), it is evident that a plea of Insanity must not be met with any yielding of misplaced compassion.

Allusion has already been made to the cruelty with which Insane persons are usually treated by the natives of this country, with an idea that blows, stripes, starvation, and bonds, will drive the evil spirits out of their possession. A case of great importance, arising out of this practice, was tried at Cawnpore in 1853. It appeared that one Girdharee had, for some months, been placed under restraint by his father and other near relatives, in consequence of his extravagant conduct, caused, as they considered, by disordered

stances of the case. Numerous very remarkable coincidences will be found between the superstitions regarding Witches formerly entertained in the north of Europe, and now prevalent in Bengal. For example-the meddler in the Arts of Physic and Alchemy, is generally reputed as a Wizard; the Ordeals for Witchcraft have been identically the same in both quarters of the world, and many of the minuter details of superstition have singularly corresponded. Thus Ward mentions that, in Bengal, a person sometimes takes a bamboo, which has been used to keep down a dead body during its incremation, and, making a bow and arrow with it, repeats incantations over it. He then makes an image of his enemy with clay, and lets fly the arrow into this image. The person whose image is thus pierced is said to be immediately seized with a pain in the breast (vol. i. p. 100, Ed. of 1822.)-So also, in Lodge's Illustrations of British History, vol. ii., p. 460, we read, among the "Reasons and Conjectures which caused many to suppose that his Honour [the Earl of Derby, who died in 1594, was Bewitched," we find that - "There was found in my Lord's chamber, by one Mr. Hansall, an image of wax with a hair drawn through the belly thereof, as he reported upon his oath."

intellect. It was also shown by the villagers that he had, for a short time before the murder, been regarded by them as subject to fits of derangement. Contriving to escape, he rushed with a drawn sword into a shrine where some women were making their offerings, and killed one of the females by several wounds, any one of which would have caused death. He then laid down the sword and went to his own house. It could not be shown that he had any cause for malice against this woman; but it appeared, from his statement made on the day on which the act was done, that, exasperated at the restraint to which he had been subjected, and enraged at the taunts which had been cast upon him, he had resolved to commit some violence which might bring his relatives into disgrace, and free himself from their guardianship. He appears then to have denied that he was insane. His statement made in the foujdaree, four days afterwards, showed a connected recollection of all that had passed before, at, and after the murder. On trial, he made a full confession, but pleaded that he was mad at the time when the act was perpetrated; that he had been confined and loaded with irons, which was his reason for committing the murderous assault. The jury, giving the prisoner the benefit of the above evidence, returned a special verdict that he was insane when the act was committed. The Sessions Judge was convinced that the man was not mad when under trial, and the Magistrate "appeared to have satisfied himself of his sanity before committing him." While admitting that the prisoner's intellect might have been disordered, the Judge did not arrive at the conclusion that he was suffering under such unsoundness of mind as would render him "incapable of knowing at the time of doing the act, that he was doing an act forbidden by the law of the land;" on the contrary, he was inclined to believe, from the prisoner's appearance and manner, that there was more of

cunning than of Insanity about him. He was, in the Judge's opinion, undoubtedly, not a subject for a capital sentence; but that officer did not think that the evidence showed him to have been the subject of such unsoundness of mind as to make him irresponsible for such an act as murder. He therefore recommended a sentence of imprisonment for life. The Judge of the Superior Court held that, whatever may have been the prisoner's mental delusions, (on which point, he remarked, the information to be extracted from the examination at the trial was very defective,) there could be no doubt that he had sufficient reason, with respect to the fatal act, to render him a responsible agent, and as one capable of distinguishing right from wrong. He, therefore, convicted the prisoner; but, in compliance with the recommendation of the Sessions Judge, and with reference to the circumstances of the case, sentenced him to imprisonment for life with light labour."* It does not appear, in the printed report, that a medical opinion was taken in this case.

The above facts will have sufficiently shown that, in the examination of important cases, what may appear to the European observer as absolutely irrational Singularity of Conduct on the part of a Native, is not to be viewed as Insanity, except upon a full consideration of the customs and modes of thinking of the Natives, as well as of the minute details of the particular cases under scrutiny.

One of the most important Regulations on this subject directs that, "All Insane persons, apprehended by the Police, shall be sent to the Division Hospital with a full report upon their cases."† In the absence of such information, the Medical Officer's means of forming a correct opinion are dangerously and unnecessarily narrowed. I was, on one occasion, very

^{*} Nizamut Adawlut Reports, N. W. P., July 20th 1853, p. 896. † Skipwith, 490.

strongly convinced of the importance of this rule. Having been merely requested to examine a prisoner, and to report upon the state of his mind, I visited and conversed with him more than once, and could discover no evidence of Insanity whatever, except that afforded by the circumstances of his crime, as known by common rumour. He was reported to have attempted an imposition, by forgery, in a manner, to all appearance, so unskilful and purposeless, that I could not bring myself to believe that a person of his education and intelligence would have so acted, except under an insane delusion. Before reporting to this effect, however, I requested permission to examine the forged documents, and inquired fully into the particulars of the case. I then, at once, perceived that the crime, although clumsily managed, bore with it evidences of deliberation and reason; and that want of principle and rashness were probably the leading defects of the prisoner's mind.

Although all human desires probably tend towards nearly the same objects, the purposes of a Native are wont to be effected by trains of thought and action, so utterly dissimilar to those by which our own are wrought out, that we must not always expect to be able to follow him in his mental operations, or allow ourselves to charge him with Madness, when his singularity or his craft takes his conduct somewhat beyond the scrutiny of our reason.

As the cause was, I believe, long since decided, and as every particular of the trial appeared in the newspapers of the time, I feel at liberty to detail the following illustrative case. A Calcutta Brahmin, possessing considerable property, having brought his health into a desperate condition by spirit-drinking, determined to leave the bulk of his property to a friend, to the exclusion of the members of his own family. He appears to have been keenly aware of the fact, that an act of caprice on the part of one

generally known to have destroyed himself by intemperance, might easily be interpreted as an evidence of Insanity or fatuity; he, therefore, (for it is necessary to say that he appears never to have acted under coercion,) took careful measures for carrying out his purpose. He removed to a house on the other side of the river, where, without any attempt at secresy, he could remain apart from his own family -requested that I would attend him, (although evidently by no means a believer in the efficacy of English medical treatment,) and, shortly afterwards, called in two or three of the most eminent solicitors in Calcutta to make his will. was done, after my written opinion had been obtained by those gentlemen to the effect that, although I could not, from what I had seen of him, undertake to declare that he was of sane and disposing mind, I had seen nothing that could lead me to think to the contrary. He died in about a month after this; and, upon the production of his will, the fact that he,a bigoted and by no means unusually enlightened Native,had devised considerable sums to one or two of our religious charities, and to one of his legal advisers, leaving the bulk of his property to a comparative stranger, to the prejudice of his near relations, must have appeared, to many who had not watched his proceedings, to be the act of one who was either mad or besotted. His was, however, merely the reasonable craft of a Native, -which had been practised before under like circumstances. Knowing that his relations would attempt to overthrow the will, and trusting no one, he, doubtless, considered that he rendered the matter secure by binding up certain powerful interests with that of his principal legatee. Hence, it was not difficult to perceive the rationality with which a Brahmin left his money to those Christian charities, which were, in all probability, next to his relations, the especial objects of his aversion.

This very important question has probably never been

more strongly illustrated than in the long agitated inquiry into the state of mind of Dyce Sombre. In the course of this investigation it was stated, on the one hand, that this individual latterly acted with the most outrageous and revolting indecency; that, among other instances of such conduct, he would receive visitors and others in his apartment in a state of nudity, or having only a shirt on, and would exhibit himself out of his apartment in the same state, acting as if unconscious of any impropriety. That he laboured under the insane delusion that his wife was habitually unchaste, and that she was frequently guilty of adultery with different persons. That he had threatened to cut off her nose. he kept a mistress in India, and often admitted Englishmen into her apartments while she was therein, and was unveiled ;that being a practice wholly at variance with the habits and feelings of oriental countries with respect to women. That he had falsely alleged that his wife had been unchaste before as well as after marriage; that she had been abetted in her unchastity by her father and mother; that she had been an opera dancer, and that she had concealed the fact. That he would not suffer her to be out of his sight for a moment,-for fear, as he said, that she should commit some act of adultery in his absence. That, at other times, he behaved with the greatest affection towards her, and expressed regret for his misconduct. That he talked of being visited by two spirits, one of a benevolent the other of a malign character; one desiring him to murder his wife, and the other forbidding it, and telling him that he would be happy with her at last. That he declared his sister, the Baroness Solaroli, to be illegitimate. That he was suspicious that his food had been poisoned .- On the other part it was responded that in none of these opinions or actions was there anything that could be regarded as evidencing Insanity in an individual born and educated in India. It was shown

that Mr. Sombre resided with the Begum Sumroo from early childhood, and lived with her down to the period of her death, save only during the time when, as a boy, he resided with the Revd. Mr. Fisher, to whose habits and manners he then temporarily conformed; that such residence produced no permanent change in his habits and feelings, which were essentially those of a native of India, in the condition of life to which he belonged; that, in regard to his habits and conduct, there was no change at any time prior to his decease. That, although he had to some extent acquired an English education, so as to be in a measure acquainted with the manners and habits of Europeans, yet he was strongly imbued with the feelings peculiar to the natives of oriental countries with respect to the treatment, demeanour, and conduct of women; and retained such feelings, amounting occasionally to fits of uncontrollable passion and jealousy, to the time of his death; and that he was naturally of an irritable and suspicious temperament. That the indecencies which had been charged against him, as proofs of Insanity, were really to be referred to his early habits and his Indian notions of dress; and that, occasionally, while resident in the Upper Provinces, he had appeared in his dwelling-house, and in places of public resort in a state of nudity, or without any article of clothing except a "lungotee," fastened round his loins and hips. That he was always of a jealous disposition, and frequently complained of the usages of English society, [certainly most abhorrent to the prejudices of a native of India, which compelled him to allow his wife to go into company where she received the attentions of other men. That his distrust of General Ventura arose from the General having expressed himself in terms of strong admiration of Mrs. Dyce Sombre.* A reference to p. 336 et seq.

^{* &}quot;One is never asked how his wife does. Such an inquiry would be considered impertinent, and be felt by the husband as an insult. It is still more

will show that, however much brutality it might evidence. there was, in a man of this description, nothing whatever irrational in Mr. Sombre's threat of cutting off his wife's nose as the punishment of her supposed unchastity; neither was there anything remarkable in the fact that a native of India, living in Calcutta, and anxious to imitate the customs of Englishmen, should have thought it unnecessary to seclude his kept mistress, as he would probably have done a purdah female of respectability united to him in marriage. That there was nothing whatever unusual in the use, by a native of India, of the expression "Nautch Girl", or public dancing girl, to an Englishwoman, whom he accused of light conduct. That the natives of India were habitually superstitious, and had faith in the intervention of spirits and supernatural agency in human affairs. That he was really doubtful with regard to his father's marriage with his mother, and, consequently, as to the legitimacy of his sisters; that it was the custom of married Hindu ladies of rank to keep slave girls in the zenanas; that the cohabitation of their husbands with these girls did not involve any violation of the strictest notions of propriety; and that the children of these slave girls were usually brought up with those of their mistress, and that they acknowledged each other as brothers and sisters. That the destruction of human life, by the mixture of fatal ingredients with food,

requisite that, when one visits his friends, he should never show any desire to see the wife, or even speak to her if they meet, unless they be near relations." "What idea can he"—(the Native of India) "form of Europeans, when he sees them bring their females to mix in their intemperance, and beholds women shamelessly laugh, play, and toy with men, and even join them, without blushing, in the dance; he, whose wife dares not sit down in his presence, and who has never known or imagined that persons of that sex, with the exception of the common girls and prostitutes, could take it in their heads to amble and caper."—Description of the Character, Manners, and Customs of the People of India, by the Abbe Dubois, published 1817, pp. 188-194.

was a common occurrence among the natives of India; that the upper classes were habitually apprehensive of such a death, and, in case of temporary illness, commonly attributed it to poison given to kill or injure them; that Mr. Sombre was, at an early age, led to believe that his life was in danger, more especially by the Begum, who frequently warned him to take precautions against divers individuals, and advised him not to eat anything that might be given him by any person, even by the husbands of his sisters.*

It was alleged also that, up to the year 1843, Mr. Sombre had never expressed any respect or gratitude to the East India Company; but that, on the contrary, he had often bitterly complained of their conduct to him. This was met by the statement that, previous to his leaving India, in 1838, he had declared that it was his intention, in accordance with what he knew to have been the desire of the Begum, to bequeath the bulk of the property which he had acquired from her to the East India Company, for the purpose of founding a College for the upper classes of natives. The not dissimilar act of the Calcutta Brahmin, whose case has been given above, illustrates the fact that the giving or bequeathing of property, by a native, is by no means a certain evidence of friendship on the part of the donor or testator towards the recipient.

The Reports contain various cases which, out of India, would be regarded as undoubted instances of *Homicidal Monomania*. As, for instance, that of a woman of Purnea, who confessed that, her sister-in-law having come to her house and accused her of theft, and being exceedingly indignant, and under the influence of an evil spirit, she, as soon as her relative left the house, cut the throat of her

^{* &}quot;The old Rajah, Bikarmajeet, died in June 1834; and, though his death had been some time expected, he no sooner breathed his last than charges of Deenace, slow poison, were got up as usual in the zenana."—Sleeman's Rambles and Recollections, vol. i. p. 183.

own infant, only 15 days old, from ear to ear; and then, being seized with remorse, began to cry loudly, by which means the act which she had committed was first discovered.* Or that of a Hindu, at Allahabad, who, finding a neighbour cutting grass in his field, and inattentive to remonstrance, returned home in anger, and, forming an intention to murder his own child, a girl of two, drove the inmates of his house out of doors, shut the dooor, and cut off his daughter's head with a koolhari, or axe.† In neither of these cases was there any evidence of Insanity about the criminals, whose atrocity was precisely that already described at page 422 of this Manual.

Insanity is not unfrequently Feigned by natives of this country. Notwithstanding the extraordinary tact, powers of imitation and simulation, and unwearied patience in carrying out nefarious purposes which mark the native character, there can rarely occur any cases in this country where such simulation ought to baffle the scrutiny of a medical man accustomed to watch the Insane. In fact, it appears to be a very safe general rule that no one can pass himself off as Insane to a medical man, who observes carefully, unless he has studied the subject of Insanity more closely than the physician has done. - This is scarcely likely to happen in India. Cases of some difficulty do, however, occur here from time to time. Dr. Kenneth Mackinnon has favored me with the very interesting case of a Rajahthe lineal descendant of Seetah, the celebrated heroine of the Ramayanah,—who feigned Insanity. Dr. Mackinnon was offered large bribes in this case; and, as he steadily pronounced the Rajah to be an impostor, he was accused by the Rajah's people of having taken them from the opposite party. His decision, however, proved correct; for when the Rajah found that the Courts were acting upon Dr. Mackinnon's

^{*} Macnaghten, vol. i, p. 258.

opinion, he threw off the cloak of imposture, and resumed the transaction of his own affairs.

One Sheodutta was tried at Banda for the murder of a police duffadar, (who had taken him into custody,) by striking him on the head from behind with a heavy lattee. Subsequently to the commitment of his case to the Sessions, the prisoner's brother represented that he had, for some time previously, been Insane, and had committed the deed in a fit of madness. The Judge, therefore, directed that the prisoner should be examined by the Civil Surgeon, to ascertain the state of his mind. This officer reported that the man was of sound mind, and quite rational in all he didthat he had had frequent opportunities of examining Sheodutta, and of putting such questions to him as he thought requisite, and that he had noticed no Insanity; that, though his demeanor when answering questions was peculiar, his actions seemed perfectly rational, and he believed him to be quite capable of judging right from wrong. While the Judge was reading over the above deposition for the information of the jury and the prisoner—the latter gradually approached a thick walking-stick lying on the Judge's table. Upon the medical officer snatching the stick away, the prisoner made a dash for his own formidable lattee, which was in a corner of the room. He was stopped by a chuprassee, whom he struck violently before he could be secured. He had remained perfectly calm until the Judge began reading the Surgeon's deposition. There was no other evidence of Insanity. He was sentenced to death.*

Kenkaroo Noshya, of Rungpore, confessed, upon being apprehended on suspicion of having murdered his wife, that, being seized when working in the fields with an attack of batick rog, (that is, literally, flatulency, considered in this case to be "a kind of hypochondria") to which he had been

^{*} Nizamut Adawlut Reports, N. W. P., November 2nd 1852, p. 1282.

liable for about a year, and which he implied made him ignorant of what he did when under its influence, he went home and cut his wife's throat. The prisoner's mother attempted to make out that he used to have attacks of this disease occasionally, during which he used to beat her and his brother; and when, on recovery, he observed their sulkiness and was told the cause, he said he knew nothing about it. None of the other witnesses had ever seen him under the influence of this disease; they were only told by his mother that prisoner beat her when he had the disease. They stated that he was exceedingly passionate, getting into a violent rage when anything annoyed him; that he went about alone, did not like talking, &c., they called him a "pagul," or half a "pagul," or boura. When in jail, he was seized, or pretended to be seized, with an attack of the disease, and was sent to the hospital, where he remained 32 days. The Civil Surgeon considered the prisoner's madness to be feigned. He was violent at first, but, upon being tied and kept upon low diet, and threatened with punishment if he made a disturbance, he very soon became quiet. On the first day of trial, when required to plead, he did so at once. On the second day, when asked what he had to say in defence, he would not speak, made circles in the air with his hand and other gesticulations, stopping suddenly and becoming quiet; and, after each stoppage, casting a rapid glance at the law officer and the Judge, which said plainly,-" what do you think of that;"-After being once or twice told that an answer was required, he gave it slowly and hesitatingly, as if apparently the act of recollection required an effort. The Judge considered that, as stated by the Civil Surgeon, he was certainly a man of a very low grade of intellect, but that there was no reason whatever to believe that he then was, or had been, at any time, in such a state as to be incapable of judging between right and wrong. This authority sentenced him to

imprisonment for life with labour and irons. The Judges of the Higher Court held, that the medical evidence, and the facts on record, left no doubt in their minds as to the perfect sanity of the prisoner; and that the mere effect of bodily disease, in irritating his temper, could not be regarded as forming any sufficient ground for mitigation of punishment in a crime of that nature: they, therefore, sentenced him to Death.*

The above cases are cited, not on account of any very remarkable features of Medico-Legal interest which they present, but as affording a fair idea of the kind and amount of feigning which is likely to come under investigation in the criminal courts of India.

The most difficult class of cases met with in this country is probably that in which individuals of decidedly and conspicuously weak intellect, but gifted with a degree of cunning, almost compensatory to the higher faculties in which they are deficient, having been made tools of by dangerous persons in effecting their nefarious designs, fall into the hands of the authorities, who demand reports upon the state of their minds as accountable beings. Here, however, the contest between the intellect of the Surgeon, and that of the idiot should, of course, terminate in favor of the former—especially as these impostors, if watched sufficiently long, rarely fail to neglect or over-act their parts.

The chief modes of judging of the Insanity or Sanity of Natives is, by observing whether they adhere to their rules of caste, or the customs laid down in their religion; by having surveillance maintained upon them by the Native doctors and by their fellow prisoners (an unsafe practice); by watching them when they are unconscious of observation; by noticing whether they are sleepless at night; and also by employing most of the other plans of investigation which we have recourse to in England.

^{*} Nizamut Adawlut Reports, November 17th 1854, p. 611.

APPENDIX A.

LIST OF POISONS PROCURABLE IN INDIAN BAZARS.

Compiled from the Works of O'Shaughnessy, Royle, Fleming, Piddington, Honigberger, S.c., and from the Chemical Examiners' Reports.

BOTANICAL OR ENGLISH NAME. Helleborus Niger, (also Cobra Poison and Aconice Root.) Lactuca Sativa. Anamirta Cocculus (or Cocculus Indicus.) Vitis Carnosa. Cucumis Indicus, (wild species.) Mucuna Pruriens. Viscum of the Nux Vomica. Strychnos Nux Vomica. Nerium Odorum. Bitter Almond. Camphora Officinarum. Root of Gloriosa Superba. A Snake Poison? Plumbago Rosea. Euphorbia Tirucalli. Trichosanthes Palmata. Realgar. Meconopsis Aculeata.	Acontum Ferox F Root of Aconitum, Ferox or Gloriosa Superba? Litharge, Calotropis Gigantea. Euphorbia Ligularia. Strychnos Colubrina. Hydrochloric Acid. Gloriosa Superba. Strychnos Ignatia. Calomel with 10 per cent. of Corrosive Sublimate. Red Lead. Euphorbia Thymifolia. Argemone Mexicana. Nitric Acid. Hermodactyl, (Colchicum.) Colchicum Autumnale. White Arsenic, Nicotiana Tabacum. Meloe, Milabris Cichorei, (Blistering Fly.) Sulphatia Agallocha. Exceraria Agallocha. Physalis Somnifera. Walsura Piscidia. Acetate of Copper.
Kalikootkie, Kahoo, (Hind.,) Kakmari, (Sans.) Kakmari-ke-Beenje, (the seeds.) Kanapa-tiga, (Tel.,) Kerula, (Hind.,) Kiwach, Kuchila-ke-Melung, Kuchila-ke-Melung, Kuchila-ke-Melung, Kuchila, &c., &c., Kunnar, Kaner, Kurwe-Badam, (Beng.,)	Mishmee Bish, Mohoora, Mohoora, Mudar, Mudar, Mudar, Naga Musada, (Tel.,) Nimuk-ke-tesab, Nunguiuleeah or Nooangooleah, Papita, Raskapur, Sendur, Shvet Keerooi, (Beng.,) Shial-Kanta, (Beng.,) Shora-ke-tesah, Seorinjan, (two varieties,) Suranjan Shirin, Trelini, Trelini, Tutiya, Neel-Tutiya, Ugooroo, Usgund, Caknaj, (Hind.,) Wallursi, (Teling.) Wal-ura, (Tamul.,) Zangar Pitrai,
BOTANICAL OR ENGLISH NAME. Actea Acuminata. Hyoscyamus Niger. Juice of the Calatropis Gigantea. Emphorbia Officinarum. Concrete juice of the Papaver Somniferum. Dulcamara Nigrum. Jatropha Curcas. Lagenaria Vulgaris. Semecarpus Anacardium. Tragia Involucrata. Acomitum Ferox. P Cannabis Indica. Bryonia Dioica. Cerasus Laurocerasus. Thevetia Neriifolia. Clematis Gouriana. Acomitum Ferox. Ammabnia Vesicatoria.	Preparation of Arsenic? Datura Fastuosa. —— Alba. Arum Orixense. Hebradendron Cambogioides. Abrus Precatorius. Sulphuric Acid. Raumculus Acris. Camabis Indica. Orpiment. Sulphase of Iron. Cashew. Sapium Indicum. Root of the Aconite or of the Gloriosa Superba? P. Cucumis Colocynthis. P. Cucumis Colocynthis. P. Creton Tiglium. Janipha Manihot, Tapioca Plant.
Ajwain, Khorasani or Banj, Afarbiyun, Farfiyun, Afarbiyun, Farfiyun, Aferen, (Duk.) Ulyoon, (Arab.) Sheer-i-kush-kush, (Pers.) Apaynum, (Sans.,) Arrub-ul-Salib, Bag-Barendee, (Beng.) Napatain, (Tel.,) Belaxine or Bhela, (Duk.) Belader, (Arab.,) Bish, Bish, Bish, Bish, Dadmaree, Bunmurich, (Beng.,) Dadmaree, Bunmurich, (Beng.,) Dampel, (Beng. and Hind.,)	Darmooz, Dhatoora, (Kala,) Ghet-kol, Ghet-kuchoo, (Beng.,) Gokatu or Kana-goraka, (Cing.,) Goonch, Gunduck-ke-tesab, (atr) Gungla, Shulghum, Gunjah, Hartal, Hartal, Hidgelee Badam, (Hind. and Beng.,) Hooronaigattah, Hooronaigattah, Hooronaigattah, Hooronaigattah, Hooronaigattah, Horowa, (Beng.,) Hurreeana or Hurinah, Hulla Hull, Hutteah, Indrain, (Hind.) Vishala, (Sans.) Hunzil. Iraa, (Pers. and Arab.,) Ishlonga, Jamalgbota, (Hind.) Jayapœla, (Sans.) Dund, (Pers. Arab.,)

It will be observed that the above List is evidently incomplete. It probably also contains some errors. Additions and corrections will be received, with many thanks, by the author, and will be carefully embodied in a Revised List, a copy of which will be circulated to all who receive copies of this Manual.

A 1.-Page 70.

In the Quarterly Journal of the Calcutta Medical and Physical Society, for July 1838, Dr. Duncan Stewart published some observations showing The Injurious effects of Arsenic employed in the Manufacture of Shell Lac. He showed that the employment of the Yellow Sulphuret of Arsenic in the manufacture produced upon the bodies of the work-people an eruption of a miliary, dry, and papular character. [Eczema Arsenicale?]

B.-Page 89.

The Detection of Aconitine

Is a matter of such great importance to the Toxicologist in this country, that I have thought it right to reprint the following observations upon a general method for detecting the Organic Alkaloids in cases of Poisoning, by Professor Stas, of Brussels, from the American Journal of Medical Sciences, January 1854.

Whatever certain authors may have said on the subject, it is possible to discover in a suspected liquid all the alkaloids, in whatever state they may be. I am quite convinced that every chemist, who has kept up his knowledge as to analysis, will not only succeed in detecting their presence, but even in determining the nature of that of bodies, the properties of which have been suitably studied. Thus he will be able to discover conia, nicotine, aniline, picoline, petinine, morphine, codeine, narcotine, strychnine, brucine, veratrine, colchicine, delphine, emetine, solanine, aconitine, atropine, and hyoscyamine. I do not pretend to say that the chemical study of all these alkaloids has been sufficiently well made to enable the experimenter who detects one of them to know it immediately, and affirm that it is such an alkaloid, and not such another. Nevertheless, in those even which he cannot positively determine or specify, he may be able to say that it belongs to such a family of vegetables-the Solanaceæ, for example. In a case of poisoning by such agents, even this will be of much importance. The method which I now propose for detecting the alkaloids in suspected matters is nearly the same as that employed for extracting those bodies from the vegetables which contain them. The only difference consists in the manner of setting them free, and of presenting them to the action of solvents. We know that the alkaloids form acid salts, which are equally soluble in water and alcohol; we know also that a solution of these acid salts can be decomposed, so that the base set at liberty remains either

that all the solid and fixed alkaloids above enumerated, when maintained in a free state and in solution in a liquid, can be taken up by either when this solvent is in sufficient quantity. Thus, to extract an alkaloid from a suspected substance, the only problem to resolve consists in separating, by the aid of simple means, the foreign matters, and then to find a base which, in rendering the alkaloid free, retains it in solution, in order that the ether may extract it from the liquid. Successive treatment, by water and alcohol of different degrees of concentration, suffices for separating the foreign matters, and obtaining in a small bulk a solution in which the alkaloid can be found. The bicarbonates of potash or soda, or these alkalies in a caustic state, are convenient bases for setting the alkaloids at liberty, at the same time keeping them wholly in solution, especially if the alkaloids have been combined with an excess of tartaric or of oxalic acid.

To separate foreign substances, animal or otherwise, from the suspected matters, recourse is commonly had to the tribasic acetate of lead, and precipitating the lead afterwards by a current of sulphuretted hydrogen. As I have several times witnessed, this procedure has many and very serious inconveniences. In the first place, the tribasic acetate of lead, even when used in large excess, comes far short of precipitating all the foreign matters; secondly, the sulphuretted hydrogen, which is used to precipitate the lead, remains in combination with certain organic matters which undergo great changes by the action of the air and of even a moderate heat; so that animal liquids which have been precipitated by the tribasic acetate of lead, and from which the lead has been separated afterwards by hydrosulphuric acid, colour rapidly on exposure to the air, and exhale at the same time a putrid odour, which adheres firmly to the matters which we extract afterwards from these liquids. The use of a salt of lead presents another inconvenience, viz. the introduction of foreign metals into the suspected matters, so that that portion of the suspected substance is rendered unfit for testing for mineral substances. The successive and combined use of water and alcohol at different states of concentration, permits us to search for mineral substances, whatever be their nature, so that in this way nothing is compromised, which is of immense advantage when the analyst does not know what poison he is to look for.

It is hardly necessary to say that, in medico-legal researches for the alkaloids, we ought never to use animal charcoal for decolorizing the liquids, because we may lose all the alkaloid in the suspected matters. It is generally known that animal charcoal absorbs these substances at the same time that it fixes the colouring and odoriferous matters.*

The above observations do not proceed from speculative ideas only, but are the result of a pretty long series of experiments which I have several times employed for discovering these organic alkaloids. To put in practice the principles which I have thus explained, the following is the method in which I propose to set about such an analysis: I suppose that we wish to look for an alkoloid in the contents of the stomach or intestines; we commence by adding to these matters twice their weight of pure and very strong alcohol; twe add afterwards, according to the quantity and nature of the suspected matter, from ten to thirty grains of tartaric or oxalic acid-in preference tartaric; we introduce the mixture into a flask, and heat it to 160° or 170° Fahrenheit. After it has completely cooled it is to be filtered, the insoluble residue washed with strong alcohol, and the filtered liquid evaporated in vacuo. If the operator has not an air-pump, the liquid is to be exposed to a strong current of air at a temperature of not more than 90° Fahrenheit. If, after the volatilization of the alcohol, the residue contains fatty or other insoluble matters, the liquid is to be filtered a second time, and then the filtrate and washings of the filter evaporated in the air-pump till nearly dry. If we have no air-pump, it is to be placed under a bell-jar over a vessel containing concentrated sulphuric acid. We are then to treat the residue with cold anhydrous alcohol, taking care to exhaust the substance thoroughly; we evaporate the alcohol in the open air at the ordinary temperature, or, still better, in vacuo; we now dissolve the acid residue in the smallest possible quantity of water, and introduce the solution into a small test-tube, and add little by little pure powdered bicarbonate of soda or potash, till a fresh quantity produces no farther effervescence of carbonic acid. We then agitate the whole with four or five times its bulk of pure ether, and leave it to

^{* [}This is no doubt true; we must not use animal charcoal to decolorize, and then look for the alkaloid in the liquid, but we may use it, at least in the case of strychnia and some of the non-volatile alkaloids, to separate them, and then we look for them in the charcoal. See notice of Graham and Hofmann's Process for Detecting Strychnine Monthly Journal, August, 1852, p. 140; Pharmaceutical Journal. vol. xi. p. 504, May 1852.]

[†] When we wish to look for an alkaloid in the tissue of an organ, as the liver, heart, or lungs, we must first divide the organ into very small fragments, moisten the mass with pure strong alcohol, then express strongly, and by after treatment with alcohol exhaust the tissue of everything soluble. The liquid so obtained is to be treated in the same way as a mixture of suspected matter and alcohol.

settle. When the ether swimming on the top is perfectly clear, then decant some of it into a capsule, and leave it in a very dry place to spontaneous evaporation.

Now two orders of things may present themselves; either the alkaloid contained in the suspected matter is liquid and volatile, or solid and fixed. I shall now consider these two hypotheses.

Examination for a Liquid and Volatile Alkali.—We suppose there exists a liquid and volatile alkaloid. In such a case, by the evaporation of the ether, there remains in the inside of the capsule some small liquid striæ which fall to the bottom of the vessel. In this case, under the influence of the heat of the hand, the contents of the capsule exhale an odour, more or less disagreeable, which becomes, according to the nature of the alkaloid, more or less pungent, suffocating, irritant; it presents, in short, a smell like that of a volatile alkali masked by an animal odour. If we discover any traces of the presence of a volatile alkaloid, we add then to the contents of the vessel, from which we have decanted a small quantity of ether, one or two fluid drachms of a strong solution of caustic potash or soda, and agitate the mixture. After a sufficient time, we draw off the ether into a test-tube; we exhaust the mixture by two or three treatments with ether, and unite all the ethereal fluids. We pour afterwards into this ether, holding the alkaloid in solution, one or two drachms of water, acidulated with a fifth part of its weight of pure sulphuric acid, agitate it for some time, leave it to settle, pour off the ether swimming on the top, and wash the acid liquid at the bottom with a new quantity of ether. As the sulphates of ammonia, of nicotine, aniline, quinoleine, picoline, and petinine, are entirely insoluble in ether, the water acidulated with sulphuric acid contains the alkaloid in a small bulk, and in the state of a pure sulphate; but as the sulphate of conia is soluble in ether, the ether may contain a small quantity of this alkali, but the greater part remains in the acidulated watery solution. The ether, on the other hand, retains all the animal matters which it has taken from the alkaline solutions. If it, on spontaneous evaporation, leaves a small quantity of a feeblycoloured yellowish residue, of a repulsive animal odour, mixed with a certain quantity of sulphate of conine, this alkaloid exists in the suspected matter under analysis. To extract the alkaloid from the solution of the acid sulphate, we add to the latter an aqueous and concentrated solution of potash or caustic soda, and agitate and exhaust the mixture with pure ether; the ether dissolves ammonia, and the alkaloid is now free. We expose the ethereal solution at the lowest possible temper.

ature to spontaneous evaporation; almost all the ammonia volatilizes with the ether, whilst the alkaloid remains as residue. To eliminate the last traces of ammonia, we place for a few minutes the vessel containing the alkaloid in a vacuum over sulphuric acid, and obtain the organic alkaloid with the chemical and physical characters which belong to it, and which it is now the chemist's duty to determine positively.

I applied, on the 3rd of March, 1851, the process which I have prescribed, to the detection of nicotine in the blood from the heart of a dog poisoned by two cubic centimetres [0.78 C.I.] of nicotine introduced into the æsophagus, and I was able in a most positive manner to determine the presence of nicotine in the blood. I was able to determine its physical characters; its odour, taste, and alkalinity. I succeeded in obtaining the chloro-platinate of the base perfectly crystallized in quadrilateral rhomboidal prisms of a rather dark yellow colour, and to ascertain their insolubility in alcohol and ether.

I have applied the same process for the detection of conia in a very old tincture of hemlock, which my friend and colleague M. de Hemptinne was so kind as to put at my disposal; and I was equally successful in extracting from the liquid colourless conia, presenting all the physical and chemical properties of this alkali. I was also able to prove that the ether which holds conia in solution, carries off a notable portion of this alkaloid when the solvent is exposed to spontaneous evaporation.

Examination for a Solid and Fixed Alkaloid.—Let us now suppose that the alkali is solid and fixed; in that case, according to the nature of the alkali, it may happen that the evaporation of the ether resulting from the treatment of the acid matter, to which we have added bicarbonate of soda, may leave or not a residue, containing an alkaloid. If it does, we add a solution of caustic potash or soda to the liquid, and agitate it briskly with ether. This dissolves the vegetable alkaloid, now free, and remaining in the solution of potash or soda. In either case, exhaust the matter with ether. Whatever be the agent which has set the alkaloid free, whether it be the bicarbonate of soda or potash, caustic soda or potash, it remains, by the evaporation of the ether, on the side of the capsule as a solid body, but more commonly a colourless milky liquid holding solid matters in suspension. The odour of the substance is animal, disagreeable, but not pungent. It turns litmus paper permanently blue.

When we thus discover a solid alkaloid, the first thing to do is to try and obtain it in a crystalline state so as to be able to determine its

form. Put some drops of alcohol in the capsule which contains the alkaloid, and leave the solution to spontaneous evaporation. It is however, very rare that the alkaloid obtained by the above process is pure enough to crystallize. Almost always it is soiled by foreign matters. To isolate these substances, some drops of water, feebly acidulated with sulphuric acid, are poured into the capsule, and then moved over its surface, so as to bring it in contact with the matter in the capsule. Generally we observe that the acid water does not moisten the sides of the vessel. The matter which is contained in it separates into two parts, one formed of greasy matter, which remains adherent to the sides—the other alkaline, which dissolves and forms an acid sulphate We cautiously decant the acid liquid, which ought to be limpid and colourless, if the process has been well executed; the capsule is well washed with some drops of acidulated water, added to the first liquid, and the whole is evaporated to three-fourths in vacuo, or under a belljar over sulphuric acid. We put into the residue a very concentrated solution of pure carbonate of potash, and treat the whole liquid with absolute alcohol. This dissolves the alkaloid, while it leaves untouched the sulphate of potash and excess of carbonate of potash. The evaporation of the alcoholic solution give us the alkaloid in crystals.

It is now the chemist's business to determine its properties, to be able to prove its individuality. I have applied the principles which I have just expounded to the detection of morphine, iodine, strychnine, brucine veratrine, emetine, colchicine, aconitine, atropine, hyoscyamine—and I have succeeded in isolating, without the least difficulty, these different alkalies, previously mixed with foreign matters.

I have thus been able to extract, by this process, morphine from, opium, strychnine and brucine from nux vomica, veratrine from extract of veratrum, emetine from extract of ipecacuanha, colchicine from tincture of colchicum, aconitine from an aqueous extract of aconite, hyoscyamine from a very old extract of henbane, and atropine from an equally old tincture of belladonna. Thus it is in all confidence that I submit this process to the consideration of chemists who undertake medico-legal researches.—American Journal of Pharmacy, January 1853, from Bulletin de l'Académie Royale de Médecine de Belgique Tom. vi. No. 2; Edinburgh Monthly Journal of Medical Science, and Pharm. Journ.

C .- Page 89.

REMARKABLE CASE OF POISONING BY ACONITE.

Mr. Peet, of Bombay, has recorded* the case of a Hindu priest, aged 50, who stated that, for twenty-four days, he had been taking daily fifteen grains of a native drug called bishnak (root of the Aconitum ferox) as a remedy for leprosy. Until the morning of the day of his admission, he had been using the black variety of the drug (probably altered and weakened by keeping or by some sodahna process), but at the recommendation of a friend, he substituted the white variety (doubtless a fresher kind), in the expectation that it would be more effective than the former, which did not appear to have much influence either upon the system or the disease. The dose was fifteen grains, and was taken in the morning about 10 o'clock. He soon afterwards began to feel uneasy, had a disagreeable burning sensation in the mouth and fauces, a sense of formication, and some confusion of mind. A friend recommended milk, of which he drank a large quantity; soon afterwards he vomited freely, and about an hour after the vomiting came on, and about four hours from the time of taking the drug, he was brought to the Hospital. He was then sensible, had a stupid expression of face, and walked with an unsteady gait, like a drunken person; he complained of heat and burning in the throat, some confusion of mind, and of a sense of formication over the surface generally. There was almost constant vomiting. Pulse feeble and rapid, skin coldish, and covered with moisture; pupils natural. A sinapism was applied to the epigastrium, and stimulants of Ammonia were administered. The vomiting continued till 12 o'clock at night, after which he fell asleep. On the following morning, the skin had regained its warmth, and the pulse was better. The sense of heat about the throat had subsided, but he still walked with much difficulty. There was no return of vomiting. He was urgent for his discharge, and went home in the course of the day.

Some years since, considerable attention appears to have been paid by some of the members of the Medical and Physical Society of Calcutta, in inquiring into the nature of a poison used in Assam by hunters—called *Mismee Bish*. It does not appear to have been absolutely demonstrated, but there seems to be every reason to believe that this is the root of the *Aconitum Ferox*. Dr. Griffiths sent some

^{*} Transactions of the Medical and Physical Society of Bombay for 1853 and 54, p. 309.

specimens down to the Society in February 1837. He stated that, as far as he could learn from the native accounts, the Assam poison resembles closely the Nipal plant, (Aconite). He believed it to be a very powerful drug, and attributed the failure of the experiments made with Dr. Wallich's specimens, (brought down the previous year) to the age of the roots, which speedily become inert by keeping. He stated that the apparatus employed for destroying animals with this poison consists of a short arrow, the head of which is plentifully smeared with the powdered root made up into a paste, by help of the Ollengo juice, as described by Dr. Wallich. This arrow is inserted into the barrel of a musket, the head projecting externally, and the gun is discharged in the ordinary way. It is said by the Mishmees that an elephant, wounded in the shoulder by this empoisoned weapon, dies in a few minutes; but, when struck in the hinder parts of the body, he lives till next day.

This is evidently the poison alluded to by Dr. McCosh in his Topography of Assam—published during the same year. He describes it as being grown only by the Abors, a mountain tribe inhabiting the banks of the Sampoo. Its cultivation is kept a great secret, and they carry their precaution so far as to boil it before leaving their country so as to destroy all vegetation [we have already seen that, in Bengal the root of the Aconitum ferox is generally made to undergo some soaking or sodhana process.] It is brought into Suddia by the Abors, tied up in little bundles, and has the appearance of a small fibrous root. It is prepared for use by pounding the roots to powder, and mixing it into a paste with the juice of a tree called Olenga, so as to give it tenacity, and make it adhere to the arrow head. So fatal are its effects, that even a scratch from an arrow, so poisoned, is followed by almost instant death. This is the poison used by all Tiger-killers for poisoning their arrows.*

C. 1.-Page 138.

ON THE SYMPTOMS OF POISONING BY THE INDIAN SPECIES OF DHATOORA—BY DR. H. GIRAUD.

From the 1st January 1848 to the present date (20th January 1849,) fifty-one cases of poisoning by dhatoora have been treated in the Jamsetjee Jeejeebhoy Hospital; the general character of their symptoms have closely resembled those induced by *Datura stramonium*, in several instances exhibiting the three distinct stages, 1st of primary delirium:—

2nd of sopor or even coma—and 3rd of final delirium, which have been observed to mark the action of henbane, belladonna, and other solanaceous plants, as well as that of the stramonium. It is seldom however that patients are brought to hospital before the 2nd stage—(that of sopor) has commenced, and very frequently, not until the 3rd stage—that of secondary delirium has supervened; and, in the great majority of cases, either from the small quantity of the poison, from the large amount of food ingested with it, or from peculiarity of constitution, one single stage of delirium is alone observed.

The following is the general course of those cases in which the full effects of the poison are manifested :- The patient, in the primary stage of delirium, is found in a state of extreme restlessness, usually attempting to wander about as if in search of something, but frequently from giddiness and extreme muscular weakness he is unable to walk or even to stand; he either vociferates loudly or is garrulous and talks incoherently; -sometimes he is mirthful and laughs wildly, or is sad and moans as if in great distress; most generally he is observed to be very timid, and when most troublesome and unruly, can always be cowed by an angry word, frequently putting up his hands in a supplicating posture. When approached, he suddenly shrinks back, as if apprehensive of being struck, and frequently he moves about, as if to avoid spectra. But the most invariable accompaniment of this, and of the final stage of delirium and frequently also of that of sopor, is the incessant picking at real and imaginary objects. At one time the patient seizes hold of parts of his clothes or bedding, pulls at his fingers and toes, takes up dirt and stones from the ground, or as often catches at imaginary objects in the air, on his body, or on any thing near him ;very frequently he appears as if amusing himself by drawing out imaginary threads from the ends of his fingers; and occasionally his antics are so varied and ridiculous, that I have seen his near relatives, although apprehensive of danger, unable to restrain their laughter. Many of these singular movements appear to originate in a curiously impaired or disordered state of vision in which distant objects seem to the patient as if very close to him, and those that are near as if highly magnified; for, frequently, after gazing for some time at a distant object, he will attempt to grasp it as if it were close at hand; and he starts back, when approached, as if he thought the person approaching would the next moment touch him. This state of vision may, in part, depend upon the widely dilated pupil, which, as in poisoning by other solanaceous plants, is an invariable symptom in all cases, and is persistent through each

stage, and even continues for some time after complete recovery. With the foregoing symptoms, great diversity in the state of the circulation is met with in different individuals, and even in the same individual, at different periods. In the greater number of cases, the temperature of the surface and the strength of the pulse are natural:—although the rate of the latter is usually somewhat accelerated (90 or 100). In other instances the pulse is much quicker than natural, (112 or 120), full, firm, or even sharp;—the temples throb—the respiration is hurried, and the surface of the body is hot. Whilst, as a third and less frequent condition, the pulse is quick, small, and feeble, the respiration slow, and the surface cold.

The 2nd stage, that of sopor, is the state in which a great number of cases are first brought under notice. They are then found either in a state of profound sopor, or in one of excessive drowsiness, from which they may be partially and momentarily aroused to some degree of consciousness; there is low muttering delirium, tremor, subsultus tendinum, and most usually the characteristic catching at objects, although the patient's eyes may be closed at the time. In four cases only have I met with deep coma, utter insensibility and stertorous breathing, and in two of these there was a remarkable tympanitic state of the abdomen.

These all appeared to be in great danger; but like the milder cases, ultimately recovered after passing through the final stage of delirium.

As great a diversity in the state of the circulation has been observed in this 2nd as in the preceding stage of the operation of the poison—the pulse being frequently quick, full, and firm, with throbbing temples, and heat of surface; whilst, in other cases, a cold damp skin has accompanied a small feeble pulse, scarcely perceptible at the wrist; and this without any corresponding difference in the nature of the other symptoms.

The 3rd stage of final delirium has not been observed to differ, in any respect, either in regard to the nature of the delirium or to the condition of the circulation, from the primary stage.

The most numerous cases are those in which neither sopor nor coma is observed, but only the symptoms common to both stages of delirium.

The following is a statement of the condition of the patients at the time of their admission into the Jamsetjee Jeejeebhoy Hospital:

In a state of excitem	ent—afterwards comatose	 2
In a comatose state		 2

In a state of sopor	18
In a delirious state without sopor or coma	29
	-
Total	51

The patients, on recovery, usually state that they have little or no recollection of any thing that occurred subsequent to their last meal, which may be supposed to have contained the poison; so quickly does it appear to take effect. In one instance, however, I ascertained that a coachman drove his horses very steadily two hours after taking a meal which had been drugged; but, at the expiration of the third hour, active delirium came on, and continued for about eight hours. It would be interesting to discover the general duration of each of the stages above indicated; but this is rendered extremely difficult from the varied periods that elapse before the patients come under treatment; and the final stage of delirium is that only in which I have been able to arrive at even an approximate conclusion on this point. When the patient revives from the state of sopor, he recovers through that of final delirium usually in from six to ten hours; and this appears to be the general duration of the delirium of those milder cases in which neither coma nor sopor occur; doubtless, the action of the poison is prolonged in some cases by the quantity of food ingested with it.

The treatment of these cases of poisoning by Datura must, of course, be guided both by the nature of the general symptoms, and by the particular state of circulation, which, as before mentioned, may be very varied under the same train of general symptoms. If the patient be seen soon after the poison has been taken, a promptly acting emetic, as sulphate of zinc, may be administered; and, where sopor with cold clammy skin and feeble pulse has supervened, an emetic of Ipecacuan and Sesquicarbonate of Ammonia seldom fails thoroughly to evacuate the stomach. In the stage of coma or even of sopor attended with heat of skin, throbbing temples, and full firm pulse, emetics, I think, should not be employed; both because their operation might favour cerebral congestion, and because, when the case has advanced to this stage, the poison has probably left the stomach. In the stages of delirium where this is of an active kind and attended with much excitement of the circulation, great relief is usually obtained by the application of a few leeches (1 to 2 dozen) to the temples; the exhibition of the cold affusion once or twice, and the use of small doses of tartar emetic and opium. This combination, in doses of from

half a grain to a grain of tartar emetic with 20 or 30 minimus of laudanum, repeated every 2 or 3 hours, generally proves as efficacious as in the analogous state of excitement that occurs in delirium tremens. On the other hand, when either the delirium or the sopor is accompanied by coldness of the surface of the body and a small feeble pulse, the use of the stimulants, as ammonia and ether, will be indicated As it probably occurs in many cases that the action of the poison is prolonged by its being taken with large quantities of food and that being only gradually absorbed in its passage through the intestined canal, the early administration of an aperient, as castor oil, is obvious."

E.-Page 142.

An important case of Poisoning by twelve grains of Nux Vomica (taken by a native—" to cure an ulcer on the back,") recovered from, will be found in the Transactions of the Bombay Medical and Physical Society, for 1853-54, p. 321,

Mr. A. Gibson mentions having heard that some of the more debauched among the Rajoots of the Province of Guzerat, use the Nux vomica as a stimulus, and this to the extent of two seeds daily—but the practice is not general. Sketch of the Province of Guzerat. Transactions of the Medical and Physical Society of Bombay, No. 1, p. 35.

Professor T. W. Wilson, of Calcutta, has mentioned to me a very remarkable and important case of one of his own native doctors; who, being a great sufferer from chronic rheumatism, was in the habit of grating the Nux Vomica Nut into water in sufficient quantity to produce rigidity of the body. When his body became rigid, he remained quite sensible, and the pain of the Rheumatism ceased.—A fact well deserving of attention, as showing, I believe for the first time, that nearly the full action of the drug may be produced upon the nervous system without necessarily endangering life.

Dr. W. N. Pindell has recently made some observations which would tend to show that, in dogs at least, Lard swallowed in large quantities acts as an antidote to Strychnia. The subject, however, appears to call for further observation, American Journal of Medical Sciences, for October 1855, p. 541.

F.-Page 155.

A case in which a man swallowed a considerable quantity of Acetate of Copper, and afterwards about half an ounce of Essential Oil of Peppermint pital in a perfectly comatose state; breathing stertorous; pupils dilated to the utmost possible extent; pulse slow, hard, labouring, but not full, countenance bloated and purple; foam issued from the mouth. Skin warm, all mental and voluntary power completely suspended. The case was at first believed to be one of apoplexy, and was treated accordingly. On the following day, he became perfectly sensible, and began to suffer from marked symptons of irritant poisoning. Under treatment, the irritable state of the stomach abated on the fifth day, and considerable inflammation of the fauces and lining membrane of the trachea supervened, which continued to trouble him more or less for about a month. The earlier symptons in this case appear to have been attributable to Poisoning with the Oil of Peppermint.

Dr. Schrader, of Gottingen, having undertaken an experimental investigation into the subject of the Action of Antidotes to Poisoning by Copper, arrives at the following conclusions:—

Hydrated Magnesia is just as little of an antidote as the Alkaline Carbonates, the hydrated oxide of copper that is formed being gradually dissolved by the stomachal and intestinal acids. Magnesia may, however, retard the effects of the poison, although it cannot entirely counteract them.

The Hydrated Sulphuret of Iron decomposes the salts of copper immediately, and the sulphuret of copper is well nightinsoluble in the juices of the alimentary canal. How far the sulphuret of iron may act injuriously, by liberating sulphuretted hydrogen gas, further experience is required to show,

The reductive power of Sugar takes place, at the temperature of our bodies, far too slowly to be available in acute copper poisoning. It may be useful when taken abundantly in water, to excite or favor vomiting.

Of all pharmaceutical substances Ferrocyanide of Potass is the best, large quantities may be taken without material disadvantage to the economy; the Ferrocyanide of Copper, which is immediately produced, being very insoluble; milk and white of egg neutralize poisonous salts of copper, and have the advantage of being easily obtained, care should be taken to evacuate, as rapidly as possible, the albuminates and cascates of copper thus produced—Bulmer Repertorium, 1855, No. 2, and American Journal of the Medical Sciences, October 1855, p. 540.

^{*} Transactions of the Medical and Physical Society of Calcutta, vol. v. p. 129.

G.-Page 155.

Two cases of Colica Pictonum in Natives have been reported by Dr. W. S. Charters.* The patients were two Suwars, who had been some time previously under Dr. Charters' treatment for syphilis, but who had recently (each) taken three white powders, one on three successive days, prescribed for them by a Fukeer. This man made no secret of his prescription, and said that he had been constantly in the habit of giving such medicine with impunity, prescribing, at the same time, certain rules and restrictions regarding diet, which, he said, they had neglected to follow, and had suffered in consequence, His receipt was as follows:

1 Tola (about 3 drachms) of "Bans Lochun" "Bamboo Eyes," small nodules found in the pith of some species of bamboo.

2 Tolas of "Moorda Sung," (Litharge) rubbed up together, and made into three powders. One powder given daily, in a portion of rice and ghee, for three successive days. Dr. A. Smith has published an account of An Epidemic of Colic, apparently caused by the presence of Lead in the Sugar and Arrach served out to the men of H. M. 37th Regiment, at Newera-Ellia, Ceylon, in 1852. Monthly Medical Journal, March 1853, p. 202.

H.-Page 170.

Case of Poisoning by Gamboge.

Mr. A. Jamsetjee has published the case of a delicate Parsee female, aged 19, who took about three drachms of Pipe Gamboge (value three pie) for the purpose of self-destruction. When, some five hours afterwards, she was collapsed from the violent vomiting and purging which commenced about two hours after taking the drug. The matters passed were of a deep yellow colour, and the pain and suffering were very great; stimulants were given, and frictions employed, and the collapse passed off; but the evacuations continued frequent, with straining and griping, and were chiefly of yellow mucus for some days after. She recovered slowly.

H. 1.—Page 170.

A case in which a singular vesicular eruption was produced by the external application of the juice of Anacardium Orientale, or Marking

^{*} Transactions Medical and Physical Society of Bombay, 1853-54, p. 340.

Nut will be found recorded by Mr. A. Gibson, in the Transactions of the Medical and Physical Society of Bombay, vol. i. p. 332.

I.-Page 180.

Dr. R, Tytler has given some account* of a Disease named Leera, which affects Barley during its growth in the Upper Provinces, and which is said to destroy an immense quantity of grain annually. The vitiated substance is supposed to be an organized body, which makes its appearance in the earliest stage of the grain's growth, and gradually increases until the ear is fully formed, and filled with a black matter. The disease does not resemble that called the "black rust" in Scotland; but is more like the ergot on the rye, when the spur is short and affects nearly all the pickles of the ear. The diseased grain is represented as being extremely poisonous. Several chickens having eaten of it, all died in about 24 hours. It does not appear in the wheat of India, but an analogous disease is observed in Oats, and occasionally in the cones of Bajrah (Holcus Spicatus) in which latter case it is named Kindol.

I. a .- Page 213.

Ward thus describes the Ordeal by Fire, as practised by the Hindus.—
"The accused person makes nine square marks in the ground, each sixteen fingers wide, leaving betwixt each square an empty space, sixteen fingers wide; he then, through a brahmin, worships a certain god, and afterwards makes an iron ball red hot, and worships it; after the bathing, and clothing himself in new apparel, he sits with his face to the east, near the brahmin who performs the ceremonies, who puts into his hands some ushwutthu leaves, barley corns, and dooroa grass, and then the red hot ball; taking which, in his open hands, he walks through seven of the nine squares, and then, putting his foot in the eighth square, he lets the ball fall upon some kooshu grass in the ninth. After this, he rubs some grains of rice between his hands, and, if the skin break, or his hands appear sore, he is supposed to be guilty; if not, he is declared innocent. In the latter case he entertains the brahmins."

A gentleman of this author's acquaintance, in the year 1814, saw, at Sirdhana, a man who had been charged with embezzling the property of the Begum, go safely through the trial by fire; but this man did not retain the ball in his hand a second of time. The most common

^{*} Calcutta Medical and Physical Transactions, vol. v, p. 441.

ordeal, according to Ward, is the Trial by Hot Clarified Butter, (Ghee.) In 1807, a trial by this mode of ordeal took place at a village near Nuddea. A young married woman was charged with a criminal intrigue, in the absence of her husband, but denied the charge, and offered to undergo the tupta-mashuku ordeal, the husband prepared the requisite articles, and invited the brahmins; when, in the presence of seven thousand spectators, she underwent the ordeal, by putting her hand into the boiling ghee, without receiving, as is said, the least injury, though a drop of the hot liquid, falling on the hand of a brahmin to whom she was to give the golden ball which she had raised from the pan, raised a blister on his hand. A circumstance of the same nature is related in the 395th page of the 1st volume of the Asiatic Researches.

By the Hindu law, if a Soodra sat upon the carpet of a brahmin, the magistrate, having thrust a red hot iron into his fundament, and branded him, was to banish him the kingdom.

J.-Page 216.

Suspension by the Feet.—The following description of the tortures inflicted upon women suspected of witchcraft among the Bheels is from an article published in the East India Army Magazine for October 1854. "The sentence of the Bhoopa (witch-finder) being gone forth, twenty or thirty men, the foremost carrying a few grains of the sacred 'oorud' (a small grain used in divination for the discovery of witches) as a chance against further evil, approach courteously the unfortunate woman's dwelling. She is seized, if possible, before her curse or evil eye can fall on any one present, and over her dim eyes is instantly bound a cloth, containing finely pounded chillies. Tied hands and feet, she is carried away to a neighbouring tree, where a crowd are assembled, to eat and drink at the sick man's or his relatives' expense, and witness or assist in the disgusting ceremony. Two strong ropes, 15 or 20 feet long, are tied to the woman's ankles, and two others are fastened round her waist: she is then hoisted up to a branch of the tree, and, amidst the yells of the assembly, the ordeal commences. From early morn to sunset, her head hanging downwards, she is swung to and fro with great violence; and, should she that day not confess to having bewitched the sick man, the same brutal work commences next morning, and is continued for three, four, or even five days. Generally, however, long before the first day has passed, the burning of the eyes, the cutting of her feet, or the agonies caused from determination of blood

to the head, forces her to confess that she has coveted a piece of land belonging to the patient, or that she has received some injury or insult at his hand; and that, to procure the one or revenge the other, she is eating away his heart. She must then request that a particular goat be brought, in the throat of which a vein is opened, and frequently, when still bandaged and swinging, she drinks every drop of blood which comes from the struggling animal. This is a substitute for the sick man's life, and the witch's craving for blood being satisfied, a friend now proceeds to ascertain if the sick man be better. If he reports favorably, the woman is generally released from her tortures, and brought into the patient's room. With a bunch of neem leaves, she continues for some time making passes over the invalid, particularly his head; a lock of hair is also cut from the crown of the witch's head and buried in the ground, that the last link between her and her former powers may be broken. Her influence is also destroyed by counter-charms of the Bhoopa, and she may be received by her family: but more frequently she becomes an outcast, and dies as painful a death as that from which she has just escaped. This is the wildest ordeal through which the Bheel witch can pass. Should, unfortunately, her senses forsake her, the ravings of madness and groanings of pain are considered true evidences of her guilt. Her inability to make the usual confessions is imputed to the secret influence of the devil or her own obstinacy; the angry and intoxicated crowd become greedy for revenge, and the senseless body is soon cut to pieces, or a fire is hastily kindled under her head, and the innocent woman is burnt alive."

K.-Page 319.

In addition to those already cited, a case of Spontaneous Rupture of the Spleen occurring in a native, æt. 28, suffering from "common continued fever" has been reported by Mr. J. M. Browne, of Hydrabad, in the Transactions of the Medical and Physical Society of Bombay, for 1853-54,—p. 318.

L. 1.-Page 336.

Mutilation.—According to the Hindu law, if a person of Sudra caste plucked a brahmin by the hair, or by the beard, or seized him by

^{*} Calcutta Medical and Physical Transactions vol. v, p. 155.

the neck, the magistrate was to cut off both his Hands. If a Sudra, through pride, spat upon a brahmin, his Lips were to be cut off.—Ward.

It has been recently stated that the late Coorg Raja was in the habit of keeping those in his presence constantly in an attitude of supplication; and that, if their Hands dropped, he ordered those members to be struck off. If any complaint was uttered, the offending Lips were to be cut away.

Dr. Gibson mentions, in his account of the Province of Guzerat, published in the 1st Number of the Transactions of the Medical and Physical Society of Bombay, that, among the Doonjas, the crime of sorcery is very common, and that many women may be seen throughout the country whose Noses have been cut off, as the punishment of their witchcraft.

Dr. Chuckerbutty tells me that, some years since, a person of Tipperah, discovering that his brother was intriguing with his wife, emasculated the man, and cut off the woman's breasts.

A gentleman, who has been long resident in Nipal, informs me that Mutilation was, a few years since, one of the commonest judicial punishments in Katmandu. He has frequently known the Nose cut off for adultery and public shame, the Hands for theft, and the Testicles for rape and bestiality. Under the present more enlightened native government, Mutilation is almost wholly prohibited by law. A case, however, occurred not long since, in which a woman, formerly of good caste, having repeatedly broken the caste of men of respectability by intriguing with them, was at length seized, deprived of the end of her nose, and turned out of the country.

L.—Page 350.

Detection of Blood-Stains on a Knife covered with Rust.—M. Daubrawa was requested to ascertain the existence of Blood-Stains on a knife which was suspected to have been used in the commission of a murder. The knife, having lain a long time in a damp place, was rusted; but certain bright rust free spots could be distinguished amid the rust. On heating the point of the blade, these spots scaled off, while the rust remained adherent; on the other hand, on immersing the knife in dilute hydrochloric acid, the bright spots remained untouched, although the rust was readily dissolved. It was probable that these bright spots were blood-stains; but, as some non-nitrogenous

organic acids will produce similar marks, some of the detached scales were heated in a test-tube, and, by the disengagement of Ammonia from the hematine of the blood, caused a blue colour on reddened litmus paper. The whole blade was then macerated for a long time in distilled water, which acquired a reddish discoloration; and, by the aid of a lens, fibrin could be seen adhering to the blade in the situation of the bright spots. Ammonia, added to the solution, caused no precipitate; nitric acid gave a white precipitate; it became turbid by heat; solution of chlorine at first produced a green tint, this colour then disappeared, and white flocculi were deposited. These different fluids having been evaporated to dryness and burnt, and the residue dissolved in hydrochloric acid, demonstrated the presence of iron by its appropriate reagents—Journal de Chemie Médicale, and American Journal of Medical Science, October 1854, p. 574.

M. -Page 373.

At a meeting of the Medical and Physical Society of Bombay, in November 1855, Mr. Sylvester pointed out that Harmless could readily be distinguisded from Venomous Snakes by an examination of their teeth. The poisonous kinds are deficient in an outer or marginal row of teeth in the upper jaw, which are present in the harmless varieties, and are fixed to the maxillary and pre-mandibular bones; but,-their place is supplied by the grooved poison fang. Both varieties have two palatal rows of teeth, which run from before backwards, a little outside the median line of the roof of the mouth, and are embedded in the palatal and pterygoid bones. A few exceptions, however, occur,as in the genera " Dryophis," " Dipsus," and " Bucephalus," where the marginal teeth increase in size backwards, and several of them are traversed by a groove through which an acrid saliva is injected; but no true poison gland exists. Mr. Sylvester remarked that, in making an examination of poisonous snakes, some little care is necessary, as they have the power of concealing the poison fang in the lax gum, by a rotation backwards of the superior maxillary bone; and thus they effect a change in the direction of this large tooth, which would, otherwise, impede the passage of the food through the mouth.

N.—Page 557.

The following recent observations on *Oinomania* deserve careful attention: Another form of drunkenness remains to be described,—namely, the paroxysmal. This is the form which has been mentioned by writers

(first by Hufeland, who termed it Dipsomania) as a true mania, and which is recognised to be such by all practically acquainted with Insanity. Erdmann first observed this affection in Russia, where it is termed sapoi (sauf-sucht, drinking disease, or mania). Brühl-Kramer, Erdmann, Friedreich, Henke, Guislain, and others, have also treated of it. Broussais and Rayer adopted the term Oinomania. Many writers have, however, treated of the affection as if it were a form of delirium tremens, to which it is undoubtedly generically allied, but from which, nevertheless, it is specifically distinct. Persons affected with the paroxysmal form are for the most part of temperate or even abstinent habits, and are only attacked at intervals with the disorder, which consists in the gratification of an impulse to swallow stimulants in enormous doses for a period of definite duration; when the paroxysm ceases and the individual resumes his temperate or abstinent mode of life. Dr. Hutcheson, of the Glasgow Lunatic Asylum (Report for 1842), has given the best detailed account of the disease in the English language. He notes three forms,—the acute, the periodic, and the chronic. The acute is the rarest of the three, and occurs as a sequel of exhausting causes, as fevers, puerperal or uterine hæmorrhage, excessive venereal indulgence, &c., or in certain forms of dyspepsia; in the latter case it is very apt to become chronic. The periodic form is met with in persons who have experienced injury of the head, or who have overworked the brain, or who are the offspring, directly or collaterally, of drunkards or lunatics. Women are apt to become the subjects of it during pregnancy. The chronic is simply the paroxysmal form changed into continuous drunkenness.

When a person is about to have a paroxysm of Oinomania, and it is not induced by any manifest excitant, as alcohol, fatigue, &c., he feels listless, uneasy, restless, and depressed, and is incapable of steady application. These feelings are accompanied by a gradually increasing craving for stimulants, which at last is yielded to. The individual, perhaps, then disappears from his home or usual place of business, and spends his days and nights in alternate sleep and intoxication, haunting the lowest dram-shops, and associating with depraved persons. Or perhaps he shuts himself up in his room, never leaving it for any purpose, and rapidly gulps down glass after glass of liquor he has procured, reckless of all consequences to himself, his family, or his affairs. The paroxysm being exhausted, a stage of apathy and depression succeeds, in which bitter regrets for his folly, and resolutions never again to yield to temptation, are prominent. This period of temperance may

continue for some months, when, after an apparently trivial circumstance, the morbid cerebral condition which constitutes the paroxysm is again developed.

Friedreich notes five stages of the affection, as follows:-1. The premonitary stage. After a period of apparent health, and moderate use of stimulants, the eyes present a wild expression, there is spasmodic action of the muscles of the orbit, a winking of the eyelids, photophobia, flushing of the face, headache, disturbed sleep, loss of appetite, indigestion, flatulence, anxiety, and dread. This stage continues for from a few hours to a few days. 2. The commencement of the attack. Increased desire for spirituous drinks, which relieve the restlessness for a short time, and to this end the patient takes them, but always more and more rapidly. 3. Stage of development. The desire for spirits is now more than ever urgent, and the relief given by them less in time and extent; if the attempts to take them be forcibly resisted, so that, if the supply is cut off, the want is immediately followed by great distress, and feelings of anguish, fainting, and suffocation; indeed, not unfrequently, persons thus deprived of the desired stimulants became actually insane or maniacal. 4. The crisis occurs in 3, 5, 7, 9, 11, 13, or 21 days. It is characterized by feelings of intense distress, so that the patient loudly bewails his state, or groans deeply, until at last urgent vomiting supervenes, when either "corrupted" bile, or in many cases a watery fluid, is thrown up. To this succeeds the greatest disgust for spirituous drinks, so that the person who but a short time before urgently demanded brandy, now shudders at the bare idea of it. 5. The stage of convalescence is marked by the sequelæ of the affection, amongst which an excited condition of the entire system is the principal. There are also sleeplessness, frightful or disagreeable spectral illusions, and depressing and distressing sensations,—the phenomena more or less, in short, of delirium tremens.

The leading symptoms, in the typical form of the disease, are those which show themselves in the thoracic viscera in connexion with the appetite for stimulants,—namely, the feelings of anguish, restlessness, and impending death by suffocation, and those which are more purely mental, and in which the insatiable appetite is the most prominent. To these may be added the direct results of the alcoholic poisoning. In discussing the pathology of paroxysmal drunkenness, it is necessary to determine carefully the order of causation. Now, it is undeniably certain that, in every case, whether it be acute or periodic, there is a special condition of the cerebrum which predisposes the

individual to the paroxysm. This may be termed the predisposing cause. Without this, those circumstances upon which the outbreak immediately supervenes, or in other words, the exciting causes, could never take effect. The proximate cause is that condition of the cerebrum which is developed by the exciting causes in a person duly predisposed, which condition is necessary to the manifestation of the paroxysm. The operation of these causes is best illustrated by cases. A member of a liberal profession is subject to paroxysms of Oinomania. He is fully aware of his infirmity, and is a water-drinker on principle; for, so long as he abstains from alcoholic stimuli, he is safe. If, however, he yields to temptation ever so little, -if he takes but a single glass of wine,-he is lost. The irresistible appetite is excited, and all the misery and disgrace of a paroxysm of drunken madness follows. This individual has a near blood-relative, a man of superior talents, who is equally predisposed to Oinomania, and who, when attacked by a paroxysm, disappears from his family and home, and is found in the lowest haunts of vice and depravity, drinking with the most depraved. Both these examples are members of a family in which Insanity is hereditary. In another similar case of an individual-a member of an artistic profession-there is great natural talent and aptitude for business, so that he gives the highest satisfaction to his employers; but, at varying intervals of time-from a few weeks to several months-the oinomaniac is absent from his office for several days on a drunken "spree." When he returns, great is his remorse, bitter his self-condemnation, loud and resolutely expressed his promises to resist temptation. For a while all goes on well; but, sooner or later, the temptation comes, the alcoholic stimulant is presented, is irresistible, and a paroxysm is the result, to end as before. Now the brother of this impulsive oinomaniac is the victim of continuous drunkenness; the father of both was a continuous drunkard, who believed himself to be a tea-pot, to be made of glass, &c., and who, in a paroxysm of inebriate fury, burnt a cat alive; and the grandmother's brother was also an impulsive and finally a continuous oinomaniac. It is related of this grand-uncle, that his friends having taken away his clothes on a Sunday morning, hoping to confine him to the house by the want of clothing, he went into his warehouse, and donning a funeral-cloak, made his way to the dram-shop! These cases illustrate the hereditary transmission of the predisposition from generation to generation.

Like insanity, epilepsy, and other analogous affections of the cerebrum, Oinomania may be periodic. Brühl-Kramer mentions a case in

which the paroxysm occurred regularly every four weeks, at the new moon, and Most remarks that he thinks he has observed, in several instances, that the impulse to drink was the most urgent about the same time. In Henke's "Zeitschrift für Staatsarzneikunde" (vol. 34), a case is related of monthly periodic drunkenness prolonged for seven years; each attack occupied eight days. The patient was a mechanic; orderly, industrious, and moral, until he was thirty-four, when he became subject to paroxysms of oinomania, during which his whole character underwent a change. After being for three weeks most industrious and steady, he would return home of an evening in apparently his usual health, but on going to bed he could not sleep on account of great depression and a peculiar sensation in the head. About one o'clock he would leap out of bed, run about the house, rush into the street, in nothing more than his shirt, and shout and rave so violently for spirit at the dram-shops, that the people were compelled to supply him; this he would drink greedily and in large quantities, until he lost the use of his limbs. Towards morning, he would be taken home unconscious, where he would be confined and bound. After lying in that state, with half-closed eyes, for a length of time, he would raise himself up, look round with a wild, melancholy look, the veins of the forehead starting, his face bathed in perspiration, his pulse quick and full, his hair dishevelled, his body almost naked: he would first be abusive, twist about, and make violent efforts to free himself from restraint, and then would piteously beg and implore for spirits, his voice gradually becoming weaker. He rejected all food and drink except coffee, demanding brandy only, for without it he felt he must perish. He was usually given to drink, for the purpose of quieting him, brandy-and-water, in the proportion of one of brandy to three of water, which he would drink off with the utmost eagerness, and immediately ask for more. In this way he would go on without resting or sleeping for one moment for eight days, having brandy-and-water given to him two or three times a day, and taking hardly anything else. During this time, he became gradually weaker, and his voice more and more feeble, and at last he would fall asleep, exhausted. On awaking, he had no recollection of what had happened, felt weak, and trembled a good deal. The appetite for food then returned; he would drink water only, abhorred brandy, went back to his employment, and was an industrious, steady, temperate man until the next paroxysm. This would return at the regular period, whether he took brandy or not, and continued whether his desire for brandy was gratified or not. As years went on, the duration of the paroxysms became gradually shortened to six, five, and four days. There was no very striking decay of the intellect, although, at last, the termination of the case in imbecility began to threaten. He died unexpectedly during a paroxysm on the third day, appearing as if he had fallen asleep. During the paroxysms his room was more like that of an insane person than of a rational being, had a very offensive smell, and was very filthy. The patient himself, also, looked like a maniac. The father of this man was a confirmed drunkard, and committed suicide by hanging; two of his brothers were drunkards,—only a sister and himself of the family remained free from the vice; and he showed no symptoms of oinomania until he was thirty-four.

This case illustrates the disease in the acute form described by Friedreich, and is specially interesting, inasmuch as by the character of regular periodicity which it presented, it brings Oinomania into the general category of cerebral and cerebro-spinal affections, the majority of which are thus periodic. It will occur at longer intervals, however, than the month, just as mania, epilepsy, somnambulism, &c., will. Cases continuing for one week, and recurring at intervals of twelve weeks, have been observed.* In the first case which Guislain saw, the paroxysm occurred at still longer intervals; it was that of a music-master, who every year, or every two years, suddenly ceased to practice his profession, and for about three months would be continually intoxicated. The paroxysm would then suddenly cease, and the patient become scrupulously temperate, drinking nothing but water, and avoiding all chances of tempation. Feeling during one of these lucid intervals the premonitory symptoms of a paroxysm, he committed suicide. In another case (a woman) mentioned by Guislain, the paroxysms came on after lucid intervals of from three to four years.

O.—Page 581.

LEGAL DEFINITIONS OF SOUNDNESS AND UNSOUNDNESS OF MIND.

"A Sound Mind,"—says Shelford, "is wholly free from delusion" [all popular delusions of course being excepted] "all the intellectual faculties existing in a certain degree of vigour and harmony, the propensities, affections, and passions being under the subordination of the

^{*} Most's "Ausführliche Encyclopädie der gesammten Staatsarzneikunde," vol. ii., p. 995.

judgment and will, the former being the controlling power with a just perception of the natural connexion or repugnancy of ideas. Weak minds, again, differ from strong in the extent and power of their faculties; but, unless they betray symptoms of a total loss of understanding, and of idiocy, or of delusions, they cannot be considered unsound. "An Unsound Mind, on the contrary, is marked by delusions" [which are not popularly entertained] "mingles ideas of imagination with those of reality, those of reflection with those of sensation, and mistakes the one for the other; and such delusion is often accompanied with an apparent insensibility to, or perversion of those feelings which are peculiarly characteristic of our nature. Some lunatics, for instance, are callous to a just sense of affection, decency or honour; they hate those, without cause, who were formerly most dear to them; others take delight in cruelty; many are more or less affected, at not receiving that attention to which their delusions persuade them they are entitled. Retention of memory, display of talents, enjoyment of amusing games, and an appearance of nationality on various subjects, are not inconsistent with unsoundness of mind; hence sometimes arises the difficulty of distiguishing between sanity and insanity. The man of insane mind, from disease, having been once non compos mentis, pertinaciously adheres to some delusive idea, in opposition to the plainest evidence of its falsity, and endeavours by the most ingenious arguments, however fallacious they may be, to support his opinions .- On the Law of Lunacy, 1847.

F. CARBERY, BENGAL MILITARY ORPHAN PRESS.

