

Elements of medical jurisprudence, or a succinct and compendious description of such tokens in the human body as are requisite to determine the judgment of a coroner, and courts of law, in cases of divorce, rape, murder, &c; : to which are added, directions for preserving the public health / By Samuel Farr, M.D.

Contributors

Farr, Samuel, 1741-1795.

Hunter, William, 1718-1783. Observations on the uncertainty of the signs of murder in the case of bastard children.

Francis A. Countway Library of Medicine

Publication/Creation

London : Printed for J. Callow, by Smith and Davy, 1815.

Persistent URL

<https://wellcomecollection.org/works/rta88248>

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**

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



No. ~~34~~ ~~46~~ ~~3~~

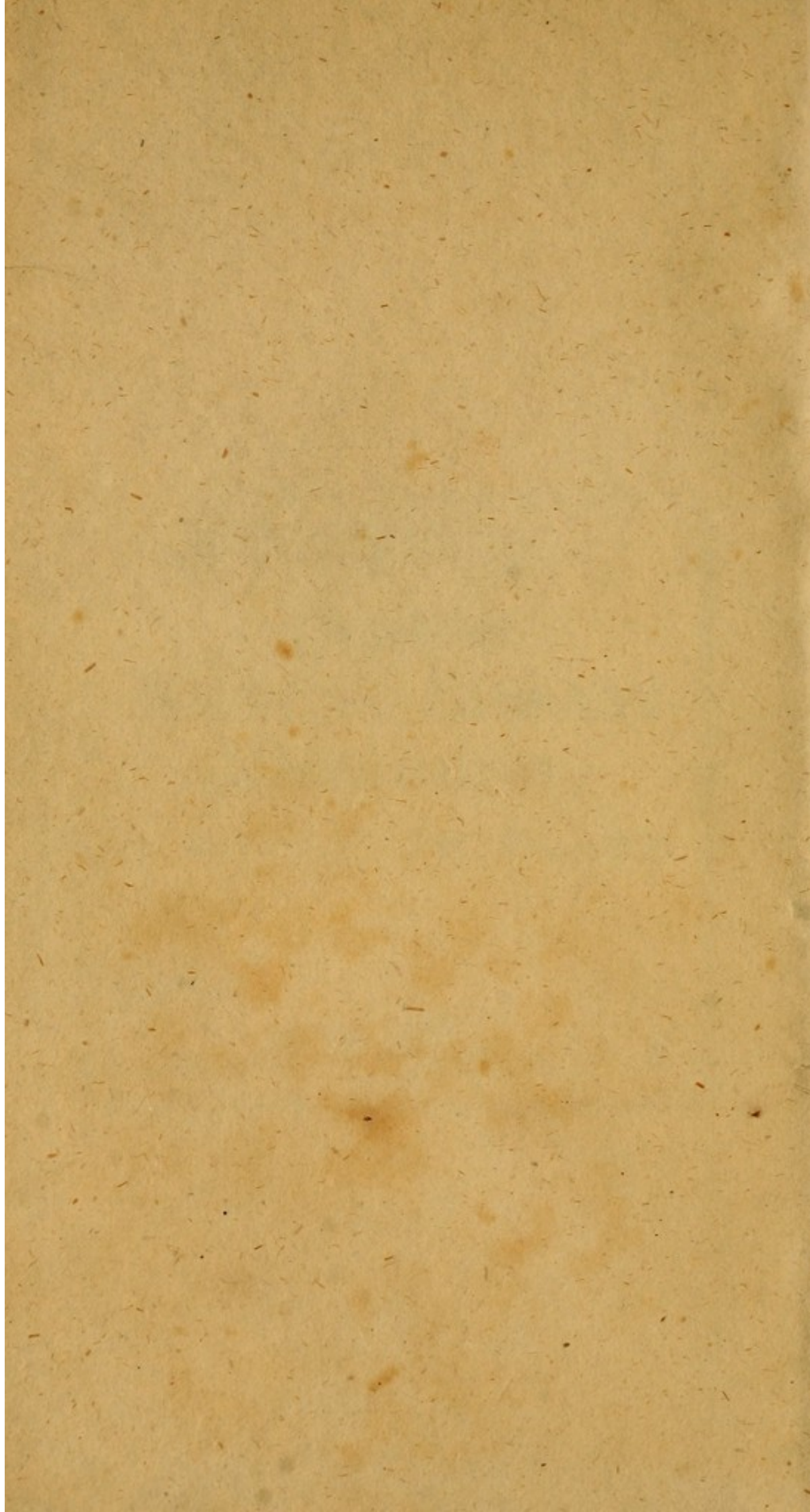
**BOSTON
MEDICAL LIBRARY
ASSOCIATION,
19 BOYLSTON PLACE.**

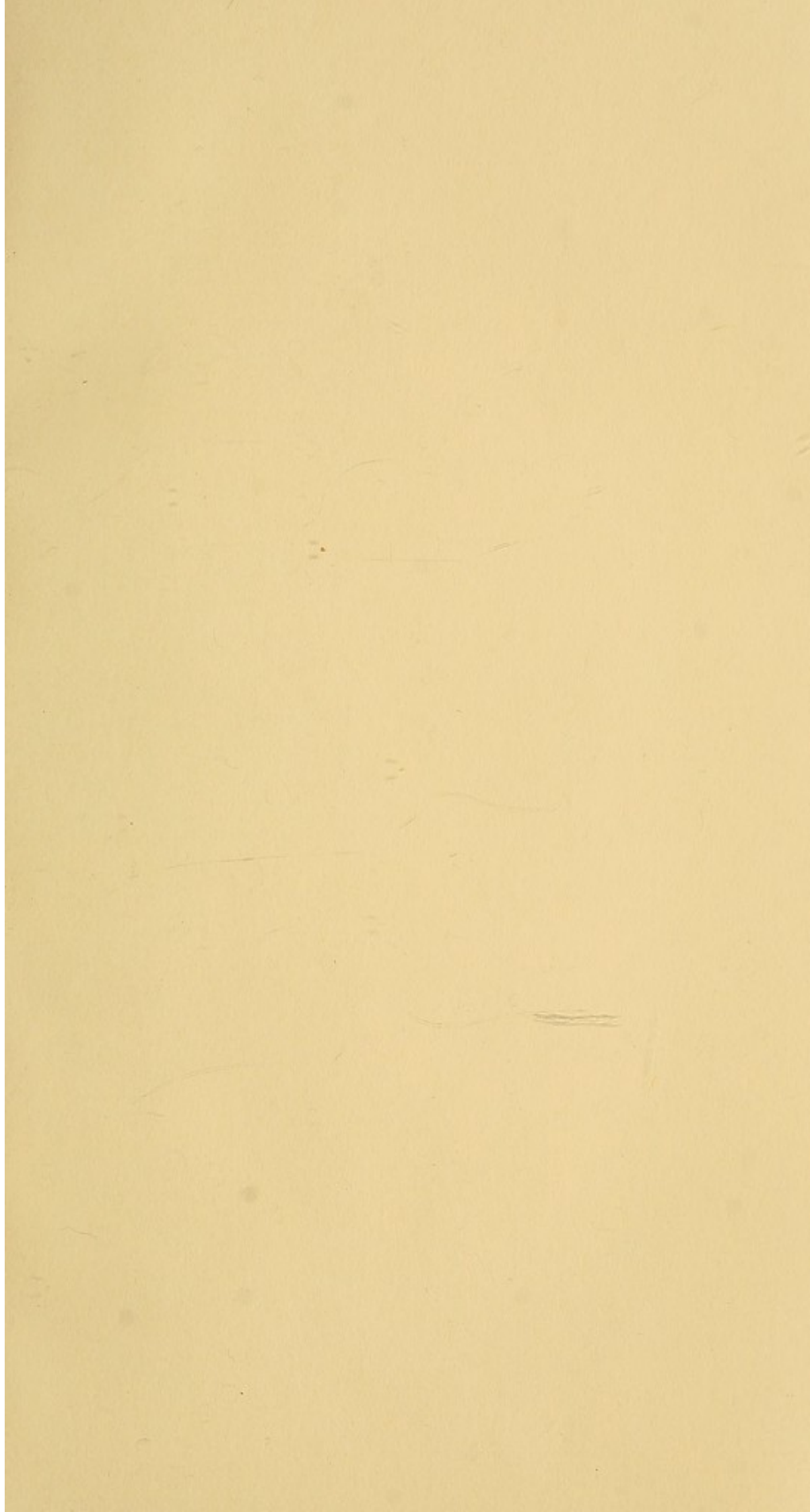
Received.....

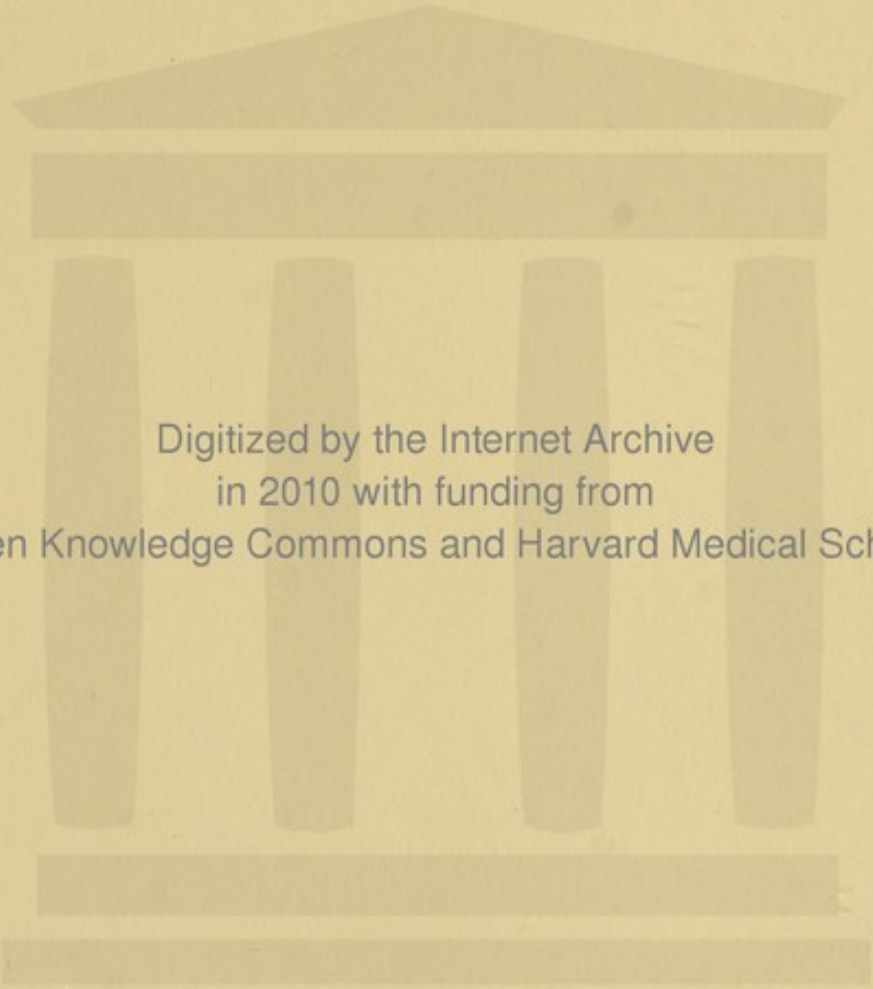
Loaned by.....

G. C. Shattuck, M. D.

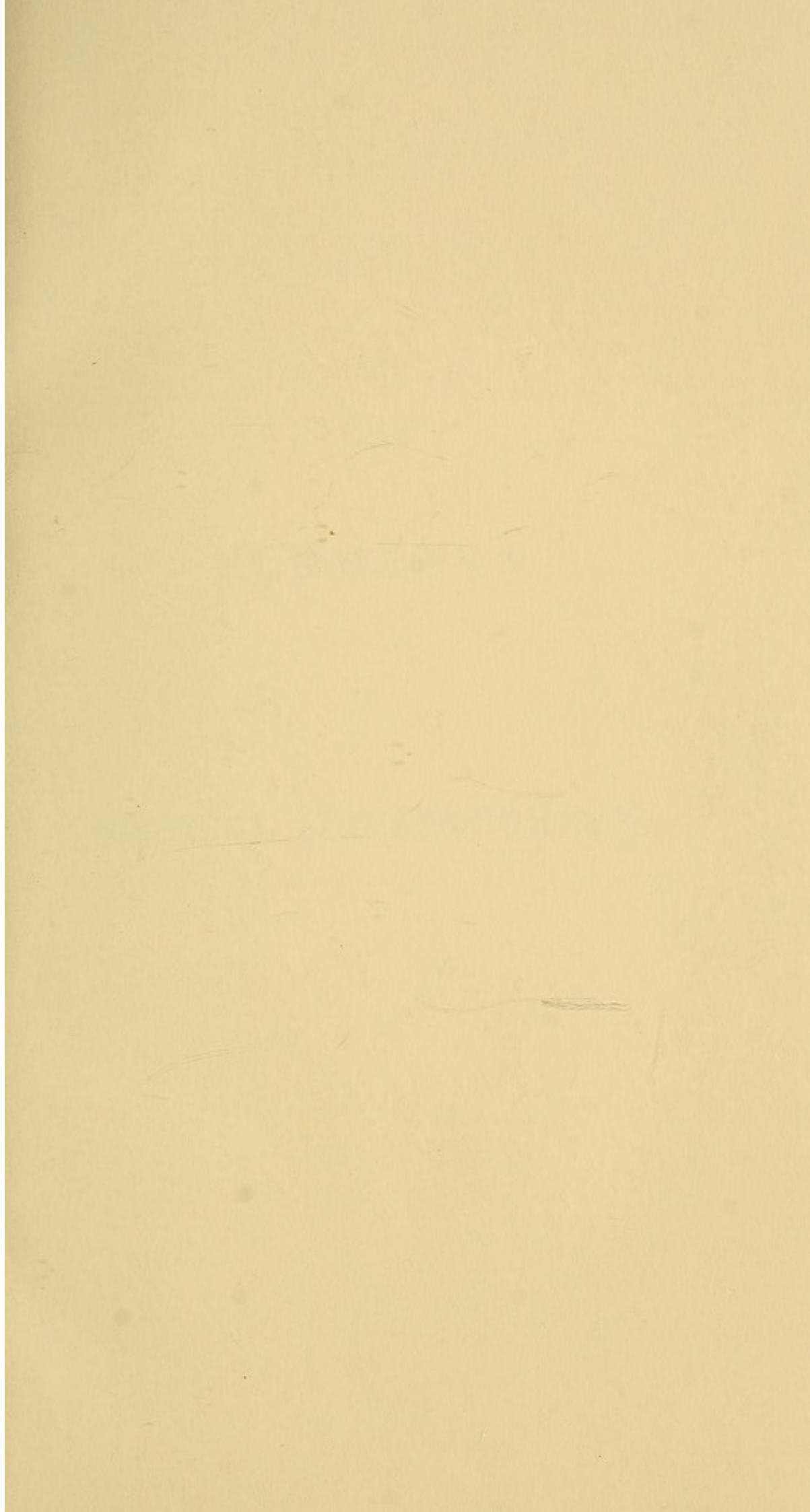


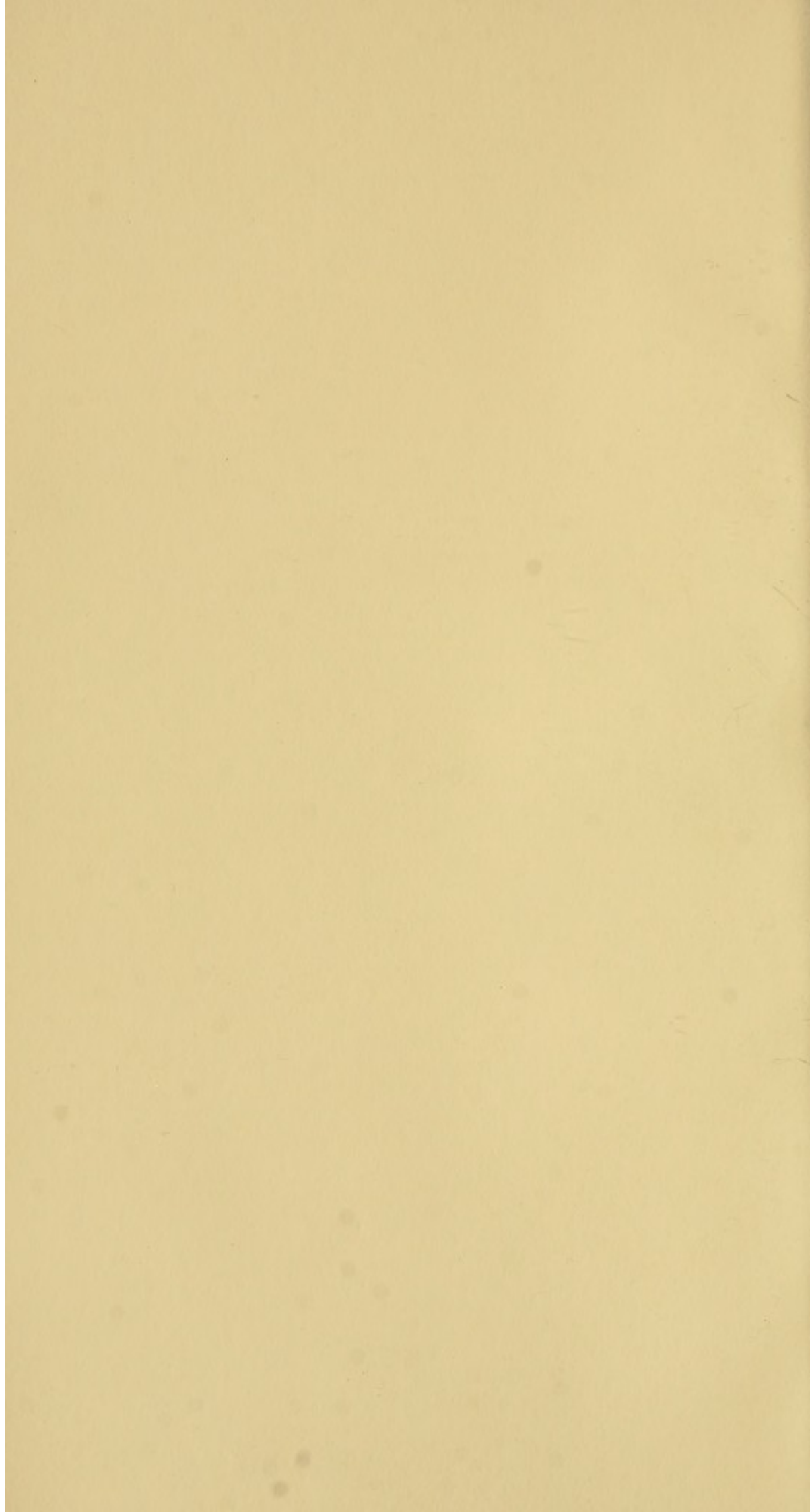






Digitized by the Internet Archive
in 2010 with funding from
Open Knowledge Commons and Harvard Medical School





ELEMENTS

OF

MEDICAL JURISPRUDENCE.

ELEMENTS

OF

MEDICAL JURISPRUDENCE.

ELEMENTS
OF
MEDICAL JURISPRUDENCE;
OR
A SUCCINCT AND COMPENDIOUS
Description
OF SUCH TOKENS IN THE HUMAN BODY
As are requisite to determine the
Judgment of a Coroner, and Courts of Law,
IN CASES OF
DIVORCE, RAPE, MURDER, &c.
To which are added,
Directions for preserving the Public Health.
BY SAMUEL FARR, M. D.

The THIRD EDITION, corrected, and various NOTES added,
BY A PHYSICIAN.

To which are annexed,
The late Dr. WILLIAM HUNTER'S OBSERVATIONS
ON THE
UNCERTAINTY of the SIGNS of MURDER
IN THE CASE OF BASTARD CHILDREN.

London:

PRINTED FOR J. CALLOW, MEDICAL BOOKSELLER,
10, CROWN COURT, PRINCES STREET, SOHO;
By Smith and Davy, Queen Street, Seven Dials.

1815.

ELEMENTS

OF

MEDICAL JURISPRUDENCE;

OR

A SUGGEST AND COMPENDIOUS

DESCRIPTION

OF SUCH TORTS AS AFFECT THE HUMAN BODY



Directions for preserving the Public Health

BY SAMUEL TAYLOR, M.D.

The Third Edition, corrected, and with an Appendix

BY A PHYSICIAN

It weighs 250 pages

The Case of WILLIAM HUNTER'S OPERATION

URGENTLY IN CASES OF MURDER

IN THE CASE OF BASTARD CHILDREN

London

PRINTED FOR J. CALLEY, MEDICAL BOOKSELLER

IN GREAT COURT, TRINITY STREET, LONDON

By the Author, George Taylor, Esq.

1816

PREFACE

TO THE THIRD EDITION.



THIS useful *Manual of Medical Jurisprudence*, the first upon this important subject published in England, had been long out of print, till a copy fell into the hands of the present publisher last year, when he was induced to reprint it.

The demand for this second edition, however, soon exhausted the small impression; a third edition is therefore now submitted to the public, which differs from the former only in a very slight degree. In a very few instances an attempt has been made to render the language more clear and explicit; and a note is occasionally in-

serted either in illustration of the text, or to shew a variance of opinion.

To this *Compendium*, it has been judged expedient to join Dr. Hunter's "Paper on the Uncertainty of the Signs of Murder in the Case of Bastard Children," originally published in the "*Medical Observations and Enquiries*, vol. vi." This Paper has been long held in deserved estimation, and has probably contributed to prevent the condemnation of several unfortunate women upon insufficient evidence. It is, however, but candid to remark, that some very just strictures upon this paper have been lately published by Mr. Christopher Johnson, Surgeon of Lancaster,* who considers it as tending to impress upon the mind senti-

* Preface to "an Essay on the Signs of Murder in New-born Children, translated from the French of Dr. P. A. O. Mahon, &c. 1813."

ments too lenient respecting this atrocious crime.

There is indeed reason to fear, that juries, from the very censurable practice which formerly obtained, of convicting upon insufficient evidence, poor unfortunate women charged with child murder, have passed into the opposite extreme of too readily acquitting them ; at least it seems demonstrable, that many acquittals have taken place, where proofs of guilt might have been procured.

Among many very extraordinary verdicts upon the subjects of suicide and child-murder, which have of late years been promulgated, the following seems deserving of deep consideration.

Morning Chronicle, Tuesday, Jan. 24, 1815.

“ *Coroner’s Inquest.* — Yesterday
“ evening an inquest was held at the
“ Lion and Lamb, Lower Grosvenor

“ Street, before A. Gell, Esq. coroner
“ for Westminster, on the body of
“ Sarah Sylvester, a cook in the fa-
“ mily of the Rev. Dr. Robert Hodg-
“ son, Rector of St. George, Hano-
“ ver Square, who put an end to her
“ existence by cutting her throat with
“ a razor, in a hay-loft over the sta-
“ ble, in the rear of the house in
“ Lower Grosvenor Street, after ha-
“ ving delivered herself of a male
“ child, whose body was found lying
“ dead near her, with a silk handker-
“ chief tied round its neck, and the
“ body covered round with hay-bands.
“ It appeared in evidence, that be-
“ tween ten and eleven o’clock on
“ Thursday morning the deceased was
“ missed from her master’s house; it
“ was then supposed she was gone out
“ on some business of her own, but
“ not returning as the dinner hour
“ drew near, the butler enquired for
“ her at the houses of several persons

“ where she used to frequent, but she
“ was not to be found. Between se-
“ ven and eight o'clock in the evening,
“ the butler and kitchen-maid com-
“ menced a fresh search for her, and,
“ after looking over every part of the
“ house, they searched the out-offices:
“ on their going up to the loft over
“ the stable, they found the door
“ shut close to; the butler knocked
“ at the door and called, but receiving
“ no answer, he pushed it hard, and
“ found that it was unlocked, but kept
“ shut by something being placed
“ against it on the inside. He forced
“ open the door so far as to admit
“ his head, and looking in, saw the
“ deceased lying against the door,
“ with her throat cut, and the floor
“ covered with blood. He turned
“ away horror-struck, and made the
“ circumstance known to his master,
“ who sent for Mr. Barrow, a sur-
“ geon. Dr. Hodgson, Mr. Barrow,

“ and several of the domestics pro-
“ ceeded to the hay-loft. The de-
“ ceased was quite dead, with her
“ throat cut from ear to ear, an open
“ razor was lying by her side, and at
“ her feet was the body of a new-
“ born infant, also dead, with a silk
“ handkerchief tied round its neck,
“ and the body wrapped up in a hay-
“ band.

“ *No particular acts of insanity,*
“ *on the part of the deceased, were*
“ *laid before the jury; but it ap-*
“ *peared [how did it appear?] that*
“ *her having the razor in her posses-*
“ *sion, might be accounted for, as it*
“ *was necessary for a woman to have*
“ *a sharp instrument for the purpose*
“ *of delivery; [who ever before heard*
“ *of this necessity of a sharp instru-*
“ *ment on such occasions?] “ that she*
“ *might so have it without any idea*
“ *of committing suicide; and, that her*
“ *pains, and the want of proper assist-*

“ance at the time, might bring on a
“momentary derangement. On the
“body of the infant there appeared
“no particular marks of violence, and
“the jury were led to suppose, that
“the cause of the handkerchief being
“tied round the child’s neck, was for
“the purpose of delivering herself!!!

“The enquiry was long and minute,
“from the various reports in circula-
“tion; *at length the jury, under di-
“rection of the coroner, returned a
“verdict of lunacy; —they gave a ver-
“dict of found dead on the body of
“the child. The deceased was 36
“years of age, and had lived between
“seven and eight years in the family.”*

It seems greatly to be regretted, that some other method of marking our detestation of self-murder is not adopted, short of the disgusting ceremony of burying the body in a cross-road, and with a stake driven through it. It is too shocking to the feelings of men,

to condemn, except on very strong grounds, the disfigured corpse of a suicide to this opprobrious interment. Would it not be better to repeal this law altogether, and to have a particular form of burial service read over those, who thus daringly and infatuatedly snatch from the Almighty the prerogative of life and death?

PREFACE.

THE foundation of this little Work is taken from a Publication made at Geneva, in the year 1767, called 'Joh. Fred. Faselii Elementa Medicinæ Forensis.' This was a class-book of a learned Professor; but I imagined such a form, and the endless divisions which he has adopted, would appear tedious to an English reader, who generally admires works more in detail. I have therefore admitted only the materials of that publication, and have digested them into regular chapters, in which I have endeavoured as much as possible, to follow the order of nature, beginning with births, and ending with the dissolution of our frame.

By altering the form too, I have not been obliged to adhere strictly to the text, but have varied from it very considerably; and some chapters I have

entirely added, as that upon Madness, &c. whilst others I have omitted as useless in this country, as particularly one on Tortures, &c. But I hope I have neither added what is tedious, nor omitted what is necessary to be known. As nothing of the kind hath ever been published in this country, I was willing to take the assistance of a learned foreigner, rather than travel a tract un-beaten by myself. I need say nothing concerning the utility of such a Work; it will be readily pointed out to every serious mind. Life and death are objects too important to be sported with in the manner they are sometimes; nor should the valuable connections of our fellow-citizens be ever sacrificed to the ignorance of the faculty, the caprice of a court, or the artifices of revenge and disappointment.

SAMUEL FARR.

*Curry-Rivel,
Nov. 22, 1787.*

CONTENTS.

	PAGE.
INTRODUCTION	1
CHAP. I.	
On Pregnancy	3
CHAP. II.	
Of Parturition, or Child-birth	11
CHAP. III.	
On Divorces	35
CHAP. IV.	
On Rapes	44
CHAP. V.	
Of the Murder of Infants	52
CHAP. VI.	
On Homicide	77
CHAP. VII.	
Of Idiotism and Insanity	121
CHAP. VIII.	
Of Impostors	126
CHAP. IX.	
On the Means of preserving the Public Health	131

CONTENTS

PAGE	INTRODUCTION.....
	CHAP. I.
3	On Pregnancy.....
	CHAP. II.
11	Of Parturition or Child birth.....
	CHAP. III.
33	On Divorce.....
	CHAP. IV.
44	On Rape.....
	CHAP. V.
62	Of the Murder of Infants.....
	CHAP. VI.
77	On Homicide.....
	CHAP. VII.
121	Of Madness and Insanity.....
	CHAP. VIII.
126	Of Impostors.....
	CHAP. IX.
131	On the Means of preserving the Public Health.....

INSTITUTES, &c.

INTRODUCTION.

THERE is a kind of medical knowledge which is not so much concerned in the cure of diseases, as in the detection of error, and the conviction of guilt. A physician, a surgeon, or a coroner, is often called upon to make a deposition of what he knows concerning some particular transactions in a court of judicature. Such persons then should be well acquainted with the animal œconomy; and with those views of the science, which, in foreign countries, have been dignified with a peculiar name, as the medicine of the courts, legal medicine, or medical jurisprudence.

What part
of the study
of physic.

When em-
ployed.

Where exhi-
bited.

Name.

How divided.

Judicial causes.

Health of community.

Natural division.

This knowledge, in its more extensive sense, is divided into two different kinds, in one of which is explained those rules by which a judge may form in a court of judicature, an accurate opinion of the cause which comes before him: in the other, an acquaintance is acquired with the best methods of preserving the health of our fellow citizens. The first part is again divided into three, as the deposition is made in the civil courts, in the criminal courts, or in the ecclesiastical courts. But as the courts of foreign countries are constituted upon different principles from those of this kingdom, I shall not follow the example of our learned professor, in arranging the rules of this business in that division, but shall give them in different chapters, according to the order of Nature, and let the reader apply them as he shall think proper.

CHAP. I.

OF PREGNANCY.

THERE are so many decisions, both in civil and criminal courts dependent upon pregnancy, that an accurate knowledge of this affection is absolutely necessary to be acquired before a determination is made. And notwithstanding there may be an apparent indecency in the exposition, yet truth, property, and perhaps a life, are not to be sacrificed to a false delicacy, a mistaken modesty, or a love of ease.

Many decisions depend on a knowledge of it.

A greater expansion of the abdomen than common, as it creates in a female the idea of pregnancy, may depend upon a foetus, or any other body filling up the womb, or parts adjacent. If it be any foreign body, it is called a mole, or false concep-

Marks of pregnancy.

Distinguished from other appearances.

Mole what.

Ordinary.

Extraordi-
nary.

tion; if a foetus, true pregnancy. This too is of two kinds, ordinary and extraordinary. The first, when one or more foetuses are lodged in the hollow of the womb itself; the latter, when they are deposited in the ovary, the fallopian tube, or the general cavity of the abdomen. The ovary is that substance in the female body, which answers to the testicle in that of the male, and is supposed to contain the germen of the future animal. The fallopian tube is a duct which conveys the male semen from the womb to the ovarium, and is supposed to embrace the ovarium in the time of conception. It is natural to suppose then, that sometimes the foetus may be lodged in these bodies, and seek an exit which it can never obtain.*

* This is not a supposition, it is as well ascertained a fact, as any with which we are acquainted.

It is not uncommon for women of abandoned characters, or even married women, to conceal and deny their state of pregnancy; and in such cases, no accurate judgment can be formed till a proper examination be made by a medical person, and those signs of true pregnancy be discovered which are generally acknowledged. These signs are various, and they may be distinguished into, certain, uncertain, and false. Signs.

The certain and most common, and which may be taken about the time when half the gestation is completed, are: Certain.

1st. A swelling of the abdomen, which arises from no morbid cause, which continues to increase so, that it extends from the lower part even to the summit, which has a shining appearance, and which is peculiarly sharpened about the navel. At the same time a troublesome sensation, pe- Swelling of abdomen.

culiar to such a situation, is perceived, and other signs of pregnancy occur.

Orifice of the
womb alter-
ed.

2d. The orifice of the womb is thicker, more spongy, soft, and widened; is shorter, and exhibits neither a conical nor cylindrical figure.

Motion of
fœtus.

3d. A motion of the fœtus is perceived in the womb.

Suppression
of menses.

4th. There is a suppression of the menstrual flux, when it cannot be accounted for from some evident disease, and when the symptoms which accompany it do not remit, as is the case when it arises from some other cause.

Swelling of
breasts.

5th. A swelling and hardness of the breasts, with an inflation of the nipple, and the veins of the breasts assuming a blue colour. The disk round the nipple is of a dusky brown colour, and the little eminences around the nipples are much enlarged.

Milk in
breasts.

6th. A lymph flows from the breast

upon pressure, which are streaks of true milk.*

The uncertain signs of pregnancy are frequent vomitings, especially in a morning; a constipation of the

Uncertain
signs of
pregnancy.

* The following aphorisms relative to the means of detecting pregnancy, taken from Manningham's *Artis Obstetricariæ Compendium*, seem worthy of particular attention:

1. Women enlarged by a false pregnancy, have the belly equally swelled on every side, whereas in those who are really pregnant the belly bunches out irregularly.

2. When it is doubtful whether a woman be pregnant, or not, and she has remained in this state four or five months, it may be determined that she is *not* pregnant, if there is a considerable depression of the navel, and if the os uteri is close and hard.

3. A suppression of the menses in virgins, often produces sickness and vomiting, in the same manner as during pregnancy; and sometimes, a serous fluid escapes from the nipples, but real milk is never secreted unless the woman is pregnant.

belly; an incontinence or suppression of urine, difficult respiration, irregular appetite, a fondness or aversion to particular kinds of food, head-ach, vertigo, pain of the teeth, yellow spots in the face, the belly growing flat, a descent of the orifice of the womb, enlargement of the veins, swelling of the legs and feet, and pains in the loins, &c.

False signs. The false signs of pregnancy have arisen from some superstitious notions which are now exploded, and therefore we shall omit to mention them in this place.

How to form a judgment.

It appears, however, that no accurate judgment can be formed, but from the certain signs; and a knowledge of these can only be acquired by a minute examination, and immediate inspection of the parts. This, upon account of decency is generally committed to midwives, ignorant persons, who have no knowledge of the ani-

mal œconomy, and may easily be deceived. It would be much better then, that this office should be entrusted to the more regular practitioner, who being a person of education, would add the influence of his judgment to his examination, and would not be content with a single enquiry, which may be uncertain, but would frequently repeat it, till he had perfectly ascertained the truth.

Women sometimes likewise feign themselves to be pregnant when they are not so. The absence of those signs before described, would be sufficient to confute them; but, as much artifice is often used upon such occasions, it may be necessary to examine a little further, and here the following signs present themselves: An improper age, either too tender or too perfect; * a

Feigned pregnancy.

How discovered.

Signs.

* It is very difficult to determine the fact of pregnancy from the age. Instances have been

preternatural defect of the menses, even in those of a fit age; too great a flow of them; a copious and inveterate fluor albus; various diseases of the vagina, as the orifice of it being entirely shut, or a junction of its sides, so as not to admit of an entrance; various diseases likewise of the womb, such as scirrhus, or fleshy excrescences growing up in it, or its mouth being entirely closed.

known in this country of girls under fifteen years being delivered of children, and women have borne children at 50, 51, 53, and even as late as 58 years of age.

CHAP. II.

OF PARTURITION OR CHILD-BIRTH.

PARTURITION may be received in several senses: At one time, it means the action of bringing a child into the world: at another, the child itself, which is received into being.* Parturition
what.

When taken in the first sense, is divided into ordinary and extraordinary. Ordinary. The ordinary is, when the delivery is made in the common and usual manner, or rather by the common passages, notwithstanding any difficulties which may occur in the operation; for this is again divided into natural and preternatural, or arti-

* This is true of the Latin word *partus*; but does not apply to the English word *parturition*.

Extraordi-
nary.

Cæsarean
operation.

ficial. The extraordinary delivery is when it is performed by the Cæsarean operation, which is an extraction of the child, by making an incision through the abdominal muscles into the uterus. This is seldom performed upon the living mother, but may be, and is indeed always advisable, should the mother die before she can be delivered, and life is perceived in the child. In this way some great personages, and particularly our Edward VI. is said to have been born.* Another method lately proposed in France, and absolutely put in practice upon living subjects, is, by dividing the cartilage which binds together the bones that surround the womb, and thus enlarg-

* Our Edward VI. could not have been extracted by the Cæsarean operation after the death of his mother, as she did not die till the third or fourth day after delivery.—See Rapin, and other authors.

ing the opening. This may likewise be called extraordinary, though the delivery be made by the natural passages; yet the strictness of terms confines it to those labours which are made by passages different from the common.

When the word parturition relates to the child itself, it may denote the time when it is born, the conformation of its parts, or the external figure which it presents, the state of its life, and the number which are brought into the world.

When parturition relates to the child.

When it relates to the time in which it is born, it may be considered either as perfect or mature, or immature and imperfect. The former, when gestation has been carried on at least nine months: the latter, when it is completed before that time; and in this last case, another division may be made into abortions, where the delivery is made before the seventh month;

Time of birth.

Perfect.

Imperfect.

Abortions.

Premature. and premature births, where the child is born between the seventh and the end of the ninth. To this head also belong too-late deliveries.

Signs of immature child The signs of an immature child are taken from the following particulars:

Length. 1st. From its length; for if it be not one foot long, we may be nearly certain that it is not completely formed.

Weight. 2d. From its weight, which should exceed five pounds.*

Figure of parts, &c. 3d. From the figure of the head, &c. An incomplete child has a deformed face resembling an old person, with a wide mouth, and slender ears like membranes; its eyes are

* Yet M. Baudelocque, Professor of Midwifery at Paris, says, that he has known many children *at full time* which only weighed four pounds, and others three pounds three quarters, which nevertheless lived and did well.

shut; the hair of its head is of a whitish cast; the division between the bones of the scull, called the lambdoidal suture, gapes wide; the bones themselves are moveable; and the lips of the mouth resemble pieces of bloody flesh.

4th. From its habit of body, which Habit of body. is for the most part thin and tender, and covered with a short down, and is of a reddish hue, particularly on the extremities and the face. If it be a male, the scrotum is of a round figure, and the testicles are not contained in it.*

5th. From its limbs, which are Limbs. thin and weak, and the nails upon its fingers are soft, short, not extending beyond the fingers; nay, if it be very small, as of one or two months, the

* The testicles are very often not to be found in the scrotum of full grown children.

nails are by no means perceptible, either upon the fingers or the toes.

Conforma-
tion of bones.

6th. From the conformation or constitution of its bones; for it is evident from experience, that in every month of gestation, there is some alteration in this respect; ex. gr. in a foetus of five months, the orbits of the eyes are entirely formed into bony sockets; and in one of seven months, the small bones, subservient to the organ of hearing are so perfect, as scarcely to differ from those of a complete child.

Umbilical
cord.

7th. From the umbilical cord, which is very slender.

Other cir-
cumstances.

8th. From other curious circumstances which attend this little embryo, such as a constant indulgence in sleep, an abstaining from crying, an intolerance of cold, an indisposition to suck, or to use its limbs, or the muscles of other parts, such as those which are subservient to the evacu-

ation of urine, or the depositing of the meconium.

The signs by which we distinguish a perfect child are taken, Signs of perfect child.

1st. From its size; its length being at least one foot six inches. Size.

2d. From its weight, which should be at least six pounds. Weight.

3d. From the formation of its bones, which is known only by experience. But in general, a child can hardly be called complete, all whose bones, and every part are not entirely formed, though age may give some addition to their substance. Formation of bones.

4th. From the umbilical cord, which is thick and firm. Umbilical cord.

5th. From other circumstances, opposite to those in that which was imperfect; such as that he cries, moves his limbs, opens his eyes, sucks at the breast, is not always asleep, can bear cold, has a white skin, can evacuate urine and the fæces, has long nails, and his head covered with hair. Other circumstances.

Monsters
what.

That which relates to the conformation of a child, after it is brought into the world, is distinguished into monstrous, and not monstrous: the former including all deviations from the ordinary figure of man. Monsters are again divided into perfect and imperfect. A perfect monster is that which absolutely differs in all its parts, from the human appearance, as when it resembles any brute animals, as a dog, an ape, &c. An imperfect monster is where only a partial alteration is made in its figure; and this may again differ, according as this partial alteration is made in the head, or other parts; and this as it may be born without a head, or with the head of a beast,* &c. Where a monster differs

Perfect:

Imperfect.

* Surely we do not in these days believe that children are ever born with the heads and limbs of beasts! However the monster may be imperfect or complicated, it is still human.

from a complete child, in other parts besides the head, it is distinguished into two sorts, as any parts in general are affected, or as more particularly the change is wrought in the genitals only, and then it is called an herma-

Hermaphro-
dite.

phrodite, which is likewise perfect or imperfect.

In an enquiry into the nature of monsters in general, three objects of consideration present themselves. 1st. What is the cause of monsters? 2d. Whether they are possessed of life? 3d. Whether a perfect monster can be considered as a human being?

1st. The cause of monsters is vari-

Cause of
Monsters.

ous, as depending on such changes in the constitution of the mother, as can hardly be accounted for.

Whatever view we take of the theory of generation, whether a ger-

Theory of
generation.

men be formed in the ovarium of the female, which is only impregnated by the semen of the male, or whether the

homunculus is contained in that semen, and the female affords a nidus for its formation; still we see a strong resemblance to both parents in their offspring: and accidents, or other causes, contribute to make an entire alteration in the form of the foetus, and produce monsters. We will not suppose unnatural connections, or that any impregnation can arise from that source; but imagination has a great power over the body of a female, especially during gestation; and the fluid in which the foetus swims, or the womb itself may be disordered, so as to occasion great changes. Neither need we have recourse to the theory of the ingenious Buffon to explain how these are brought about; or suppose that every part of the human body has a representation in the fecundating quality of both parents, to form its construction. The first rudiments or germen of the human body

is not a human creature, if it be even a living one; it is a foundation only upon which the human superstructure is raised. This is evident to anatomical observation. Were a child to be born of the shape which it presents in the first stages of pregnancy, it would be a monster indeed, as great as any which was ever brought to light. How easy then is it for disorder to prevent the exertion of that plastic force, which is necessary to form a complete animal.

2d. Monsters may live, but it depends on what parts are affected, how long life shall be continued to them. Where the monstrous parts are confined to the extremities, or even to those places which distinguish hermaphrodites, we find from experience, that the vital powers are strong and vigorous; and were it not that such beings often fly from society, lead sedentary lives, and are deprived of

Whether
monsters
can live.

some wholesome exercises to the human constitution, life might be enjoyed by them, and to as great an extent as by any other persons.

Are there perfect monsters?

3d. With regard to perfect monsters, most of the authorities which assert that any thing of that kind can exist, seem to be of no credit. But should any ever appear, we should consider that it is not form or shape, but reason and intelligence, which distinguish human creatures from brute animals.

Hermaphrodites what.

We are next to consider the nature of hermaphrodites; and as these are living beings, and sometimes capable of all the functions of society, such distinctions ought to be made relating to them, as will place their situation in the most proper light, and the most favourable to their happiness. They are great objects of our pity and complacency; for they are not only deprived of the common pleasures of

mankind, but are subject to disorders which are painful, uncomfortable, and inconvenient. A perfect hermaphro-

Perfect.

dite, or a being partaking of the distinguishing marks of both sexes, with a power of enjoyment from each, is not believed by any one ever to have existed. Imperfect hermaphrodites,

Imperfect.

or monsters, whose organs of generation are affected, are frequently presented to us. They may be divided, according to the sexes, into what are called androgynus, and androgyna.

The first is the male, who has in ge-

Androgynus.

neral his own organs tolerably perfect, but has some division in the flesh above, below, on, or in the scrotum, which puts on the appearance of the female pudendum. The penis likewise may be so obliterated, as to give no external appearance of the male; but the beard, and the constitution of his body, confirm him to be of that sex. The androgyna is a woman,

Androgyna

who has the parts of generation nearly like another, but at the same time the clitoris grows to a great size, and gives the form of the male penis. This is a very inconvenient disorder, as she is sometimes deprived of the pleasures peculiar to her sex, and suffers much from disorders of the part. From her breasts, and the deficiency of beard, however, she is distinguished from the male; though it frequently and unfortunately happens, that such women are more subject than others to robust and masculine constitutions. It is evident that the sexes here are as completely marked as in other persons, and to all legal intents and purposes, they are man and woman.

Hermaphro-
dites, how
far impotent.

Some important enquiries may arise upon this subject. As 1st. How far they are to be considered as impotent. This is, I believe, generally the case, but not always, and must depend upon

proof. 2d. Whether they should be permitted to marry? This depends upon the former, but must, I should think, be left to their own choice.

Should they marry?

3d. Whether change of the sexes might be allowed? This is certainly contradicted in the terms, and will admit of no dispute.*

May they change sex?

With regard to the state of life of a child, the following question requires to be decided: At what time may a foetus be supposed to begin to live?

When does a foetus begin to live?

To answer this, we must consider, that conception is made in the ovarium of a female after coition with a male,

What is conception?

* A very curious case was published in the year 1787, by Mr. Brand, surgeon, of Soho Square, of a boy who from a mal-conformation of the organs of generation had been mistaken for a girl, till seven years of age, when Mr. B. being consulted on account of a supposed hernia, discovered the mistake, and by an operation relieved the child.

when the subtile aura of the semen hath so far penetrated into the germen, which may be supposed to contain the outline of the future man, as to produce a turgescence and motion of its circulating humours. At this time, it may be said, that life begins, —*i. e.* immediately after conception. Hence those seem to err: 1st. Who would persuade us, that the fœtus acquires life when it is so particularly active, that the mother becomes sensible of its motions. 2d. Those who think that life does not begin till the seventh or fourteenth day, or even till a month after conception. And 3d. Those who suppose that a fœtus, as long as it continues in the womb, where it does not breathe, cannot be called a living animal. The whole depends on our ideas of life and animation, and the act of generation to create it. If generation be the cause of animating the rudiments of the fu-

ture being, and if that animation be construed to be understood by what is meant by life, then it must certainly begin immediately after conception, and nothing but the arbitrary forms of human institution can make it otherwise.

On this occasion we may enquire, what part of the human body is the seat of animation, or the soul! To which we answer, that evidently it resides most conspicuously in the brain, because that substance being hurt, all the faculties of the soul become disordered; and because all the nerves of the body, which are the great instruments of action, are derived from it as a fountain. But it cannot be supposed that the whole of the brain is the immediate seat of the soul; it is probably confined to what is called the sensorium commune, or a small part from whence the nerves, destined to sense and voluntary mo-

Seat of the
soul.

tions, draw their origin; as they do likewise from an appendix to it, called the medulla oblongata.

What children have the power of life.

The next thing to be considered is, what kind of children, when born into the world, are to be deemed endued with life, or have a prospect of living; for a fœtus cannot live out of the womb of its mother!

No abortion.

1st. Then, no abortion can be said to be endued with life, for if there be some signs of life when it is brought into the world, it cannot continue to live, for it can neither take the aliment which is necessary to its sustenance, nor, if it could take it, can it change such gross food into its tender nature. Some authors have asserted, that children of five and six months have lived; but this is probably a mistake, it being generally agreed, that infants so young cannot sustain the inclemencies to which they must be subject.

2d. Children of seven months, or one hundred and eighty-two days after conception, may live, though generally they are puny, and continue but a short time on earth.*

Children of seven months,

3d. All children above seven months are supposed to be endued with vital principles, and of consequence are allowed the privilege of life.

Children above seven months.

The next subject of consideration, is that of twins, supposititious births, and superfœtation.

The right of primogeniture must be determined in natural births, by that which was first born into the world, and which must be decided by the by-standers. If the delivery, how-

Twins how considered.

* Are any children capable of being reared to maturity, unless they have completed thirty-one weeks, or two hundred and seventeen days of uterine life? This is a very important point to be known, but is at present far from being fully ascertained.

ever, be made by a passage effected by art, the choice depending on the will of the surgeon, no proper determination can possibly be made.

Supposititious births.

Signs to judge by.

In the affair of supposititious births, two questions occur, according as the birth is performed or not. In the former case, a physician may judge, 1st. From those signs in the mother, which distinguish her having been delivered of a child. 2d. From those signs which refer to her incapacity of conception. 3d. From signs of impotency in the father. 4th. From the umbilical cord in the child not appearing as of one just delivered. Some persons look upon the dissimilitude to the parents to be a sign, but this must be very fallacious. Where the supposititious birth depends on the present state of pregnancy, either the proper signs must be examined, or we must wait the event, should those signs deceive us.

The impregnation of a woman already pregnant, is called a superfœtation. Superfœtation. This is either true or false; the former is, when it happens in the womb itself; the latter, when one foetus is deposited in the womb, the other in the ovarium, the fallopian tube, or the cavity of the abdomen.

The following requisites are necessary to a superfœtation. Requisites. 1st. The pregnant woman ought to bear two children, each of a distinct age. 2d. The delivery of these children should be at different times, at a considerable distance from each other. 3d. The woman must be pregnant, and a nurse at the same time.

There have been many doubts about the reality of this superfœtation, but there is no disputing of facts, for which see Gravel on Superfœtation,

Eisenman's Anatomical Tables, and the Leipsic Memoirs, 1725.*

How this superfœtation is accomplished, is a matter of enquiry, and depends in a great measure on the constitution, or rather the formation of the womb of the mother.

Legitimacy.

The last thing to be considered under this head of parturition, is the legitimacy or illegality of births; and this is divided into the time when a child is born after conception, and the conformation of its body. With respect to time, physically considered, (for laws may be as arbitrary as they

Divided
from time.

* Dr. Maton has published, what is called, a case of superfœtation in the 4th vol. of the Transactions of the Royal College of Physicians of London; but this seems rather to have been a case of twins, in which one of the infants was prematurely excluded from the womb between the sixth and seventh months, while the other was retained till the full period.

please in this respect) all abortions, too early births, children of nine months, and those who are late born, even to ten months, may be considered as legitimate in old marriages. Illegitimate with respect to the time of birth, are all perfect and mature children, who are born in the sixth or seventh month after the celebration of marriage; and all late births, when extended to the eleventh, twelfth, or thirteenth month, especially if the husband died of a chronic or lingering disease.

There are many causes alleged to occasion a delay or prolongation of delivery, such as great care and anxiety; some severe diseases, as violent hæmorrhages, a phthisical disposition, &c. but these, one should imagine, would rather hasten than retard such a circumstance. Experience is the only guide we can follow in such cases, and, for the sake of humanity,

Causes of
delay in de-
livery.

the longest time that can be fairly proved, should be the standard to which we should refer.

Legitimacy
from form.

With respect to the conformation of the body, all children may be considered legitimate, who are born at or after seven months; but all abortions are illegitimate. Monsters, likewise are not to be excluded for any trifling alterations; but where all appearances of human nature are obliterated, it would be wrong to take advantage of such a birth.

CHAP. III.

ON DIVORCES.

IT is generally allowed, that various disorders may constitute natural grounds for a divorce between two married persons; and notwithstanding the laws of particular countries are generally founded on local customs, and do not always refer to the natural reasons; yet, as no other concern the medical person, and as they are proper to be known, no further apology is necessary for their insertion in this place.

Grounds of
divorce.

Those disorders, or rather as they may be called defects of the human constitution, which seem to constitute the natural reasons for a divorce, are such as are an absolute impediment to the procreation of children.

Defects in
constitution.

They are of two kinds, according as they have for their subject the organs of generation or not. The former may be divided into impotence in men, and sterility in women, which is either absolute or *continual*, or such as eludes all human art to remove.

Impotence. Absolute impotence in men takes place,

Eunuchs. 1st. When they are eunuchs, or are deprived of both testicles, which being receptacles of the semen, without them no generation can be performed.

Spadones. 2d. When they are spadones, or such as have the nerves or muscles leading to the parts of generation bruised, so as to deprive them of all perception of the venereal appetite.

Short penis. 3d. When the penis is too short, being amputated for disease.

Penis perforated. 4th. When the penis is perforated in such a manner that the semen cannot be thrown out with sufficient

force. This rule is to be admitted, with some limitation, as the theory of generation is not sufficiently established to determine with accuracy this point.

5th. When both testicles are become scirrhus, so as not to be capable of a cure. Scirrhus testicles.

6th. When the semen is too watery, and will not admit of amendment. This too being a disease that admits of a cure, should not determine absolutely. Semen watery.

7th. When the penis is too thick. This is likewise only relative. Penis thick.

8th. When the preputium is so constructed or fastened to the glans penis, as not to admit of relief by a surgical operation. This disease is called capistratio. Phymosis.

9th. When the vesiculæ seminales are become scirrhus. Scirrhus vesiculæ seminales.

Those disorders, which are an impediment to the procreation of chil- Diseases grounds for divorce.

dren, and which are not derived from the organs of generation, are such as are of a highly contagious nature, or create an unconquerable aversion; such as the lues venerea, melancholy, epilepsy, scurvy, scrophula, and a highly foetid and disagreeable breath. But it is to be hoped, for the honour of physic, and the benefit of humanity, that such diseases will meet with their proper cure: and indeed in all the cases here mentioned, as the happiness of individuals is so much concerned, and the public good on the other hand so much to be studied, it is necessary that the observations be made with the greatest care, and that the maturest judgment of the physician be exercised with discretion.

Sterility.

Absolute sterility in a woman, so as to unfit her for matrimonial duties, are:

Parts imperforate.

1st. When the parts destined to generation are so imperforate as not

to admit of any relief without incurring great danger of life.

2d. When she is so grievously afflicted with the fluor albus, vulgarly called the whites, as not to admit of any cure. Much care and attention are here however requisite, and many medicines are to be tried before an absolute judgment be made: nay, I should think much experience must be admitted, and the husband likewise be examined carefully with regard to his own abilities.

3d. When the vagina is too strait and narrow, upon account of scirrhous tumours, or of any other kind which it is impossible to remove.

4th. When the orifice into the uterus is entirely closed. This will be known not only by the touch, but by the retention of the menstrual flux, which in time will force a passage, or from the dreadful symptoms it induces, require the hand of the surgeon

Fluor albus.

Vagina
strait.

Orifice of
womb closed

to procure it. This can hardly be called therefore an absolute impediment.

Ulcer of
womb.

5th. When there is an ulcer in the uterus, or the passages to it, which sometimes is of so corroding a nature, as to penetrate the rectum and bladder of urine. There are many other causes of sterility, which are derived from injuries or obstructions in the internal parts destined to generation. But here all is darkness, and it would be cruel to determine by any other, than what are quite evident upon inspection and accurate examination of the parts.*

Internal
parts dis-
eased.

* Whatever may be the Law of Divorce in other countries, or for whatever causes divorces may be elsewhere allowed, in England the greater part of the causes here mentioned could not be admitted. Scirrhus tumours, ulcers, leucorrhœa, foetid breath, epilepsy, &c. &c. and all maladies to which the human

Before this subject be dismissed, it may be necessary to mention some other circumstances, which, although they may not render either sex absolutely impotent, yet may be considered as defects, and some hindrance to the generative powers, but by no means constitute reasons for a divorce: ignorant persons may consider them as such; this error is therefore to be guarded against.

Defects in generation.

Those which occur in the male sex are, where they are,

1st. Monorchides, or such as have only one testicle. These are by no means incapacitated, as the secretion only is made in that organ from which

Monorchides.

frame is liable, which occur from the infliction of Providence, are guarded from being causes of divorce by that passage in our marriage service which obliges each party to swear, that they will take each other, in *sickness* and in health, till death doth part them.

it is carried to the vesiculæ seminales, and there deposited for use. So that one testicle is as efficacious as two, and the secretion is always proportioned to the evacuation.

Triorchides. 2d. Triorchides, or those who have three testicles.

Spadones. 3d. Spadones, where one testicle only is bruised.

Androgyni. 4th. Androgyni, for which see the account of hermaphrodites in the last chapter.

Circumcision. 5th. Those who are circumcised. This is an advantage rather than a hindrance.

Paraphimosis cured. 6th. Those who have remedied this defect by art.

Chryspor-chides. 7th. Chryspor-chides, or those whose testicles do not lie in the scrotum, but in the abdomen, or in the groin.

Phymosis. 8th. Those who labour under a phymosis, which is a disorder where the præputium is brought over the glans penis, and cannot be retracted but by art.

9th. Those who have the præputium buttoned over the glans. Præputium buttoned.

10th. Those whose penis is longer or shorter than natural, unless in very great extremes. Long and short penis.

Women cannot be said to be incapacitated totally: Defects in women.

1st. When they have a falling down of the womb; for this may be only temporary, and may be remedied by art. Prolapsus.

2d. When they have too large a clitoris, or nymphæ. Large clitoris.

3d. When they are androgynæ, or hermaphrodites from other causes. Androgynæ

4th. When they have the pudendum too large and wide. Parts large.

5th. When they have an irregular flow of the menses. Flow of menses.

6th. When they have suffered in delivery a rupture of the *perinæum*, or the space between the fundament and pudendum. Rupture of perinæum.

CHAP. IV.

ON RAPES.

IN the consideration of rapes, three objects of attention present themselves.

Objects of
attention.

1st. Whether a rape, strictly so called, be possible?

2d. Whether a woman, upon a rape being committed, can become pregnant?

3d. What are the signs of a rape being perpetrated?

Is a rape
possible?

1st. In answer to the first question, whether a rape be possible, meaning upon a grown person, it may be necessary to divide it into two parts, as it is distinguished into the attempt and the consummation of a rape. The attempt, under which is to be understood a great force exercised over a

Attempt.

woman to violate her chastity, but where a compleat coition is prevented, may be possible. But the consummation of a rape, by which is meant a compleat, full, and entire coition, which is made without any consent or permission of the woman, seems to be impossible, unless some very extraordinary circumstances occur: for a woman always possesses sufficient power, by drawing back her limbs, and by the force of her hands, to prevent the insertion of the penis into her body, whilst she can keep her resolution entire. Besides, it is evident that a lesser resistance can prevail against the motion of any body which acts against the weight; and that is the case here: the penis, in attempting an immission into the vagina, moves a body against the weight.*

Consummation.

* Surely the author must be erroneous in these suppositions.

Does pregnancy follow a rape?

2d. With respect to the next question, whether a woman, upon whom a rape hath been committed, can become pregnant? It may be necessary to enquire how far her lust was excited, or if she experienced any enjoyment. For without an excitation of lust, or the enjoyment of pleasure in the venereal act, no conception can probably take place. So that if an absolute rape were to be perpetrated, it is not likely she would become pregnant.

Signs of rape.

3d. The signs of a rape having been perpetrated, or rather attempted, are taken from the evacuation of blood from the injured parts, and great swelling and inflammation. But as these may be induced by other means, or are not inconsistent with consent having been obtained, they can only be considered as corroborating, but not as certain proofs.

As rapes however are sometimes

committed upon young children, who may have the signs of their virginity obliterated by them, it may be necessary to consider what are those signs, and what are the marks of their being destroyed. The signs of virginity then may be allowed to be the following.

Signs of virginity.

1st. The lips of the pudendum are more prominent, and close together.

2d. The nymphæ are small, endued with a light rose colour, and do not extend out of their place.

3d. The prepuce of the clitoris is small, and does not cover the glans.

4th. The orifice of the urethra, or urinary passage, is entirely covered.

5th. The wrinkles of the vagina are considerable, and raised above the surface.

6th. A bridle, or frœnulum, appears before the lips of the pudendum.

7th. The hymen is likewise present, by which is meant a thin tense

membrane, situated at the entrance into the vagina, being sometimes of an oval figure, sometimes circular, and sometimes semilunar, and shutting up the greatest part of the passage. This hymen hath been esteemed a certain mark of virginity, when other circumstances concur to give it authority. It is not, however, by any means absolute, even in the youngest subjects; for it may be so concealed in the back of the vagina, as not to be perceptible at first sight, or it may be destroyed or obliterated by a variety of causes, besides a connection with a male. A fresh rupture of it, however, may be perceived, and some remains of it will continue evident for some time.

Marks of
having used
venery.

The marks by which it is most probable that a female accustomed herself to venereal habits, and of consequence is less to be believed upon a deposition for a rape, are the following:

1st. The lips of the pudendum are flaccid and distended more than in a maiden.

2d. The clitoris is enlarged, and hath a prepuce which covers the glans arising from constant friction, and is produced to defend it from injuries, in proportion as it is exposed to them.

3d. The nymphæ are likewise enlarged, and are of a lighter and more obscure colour.

4th. The orifice into the urinary passage is more open and exposed. This is owing to the flaccidity of the labia.

5th. The hymen is wanting, as may naturally be supposed; but it is not to stand as a test by itself, where the other circumstances do not occur.

6th. Some small excrescences arise in the shape of the berries of the myrtle, (called from thence *carunculæ myrtiformes*) at the entrance into the vagina.

7th. The vagina is enlarged and spacious, and this even where there has been no parturition.

8th. The wrinkles are less prominent, and in length of time are quite obliterated.

9th. The orifice of the uterus approaches nearer than before to the orifice of the vagina. This, however, must be entirely relative, as the extent of the vagina must differ in every subject; and besides, it presumes upon an acquaintance with the person previous to the habit she is engaged in, which is not easily to be acquired.*

* “ In order that a medical man should be able to decide whether a rape has been committed or not, it seems absolutely necessary that he should examine the woman very soon after the act has been committed; for the parts will in no long time recover their usual appearance, or at least will only appear as they do after a willing compliance on the part of the woman. Where a rape has been committed,

not only will the parts of the woman have suffered violence, but there should be marks of bruises on different parts of her body, in consequence of her struggles and endeavours to preserve her chastity."

Belloc Cours de Medicine Legale.

CHAP. V.

OF THE MURDER OF INFANTS.

Confined to
what ages.

THIS kind of homicide relates to the youngest and most helpless part of the human species, and is confined to them in three states of their existence: just before they are born, at the time of delivery, and immediately, or soon after they are brought into the world. The two last may be included together, and constitute child murder, strictly so called, and the other the murder of a child in its abortive state, or the premature delivery of it, so as to procure its death.

State of the
mother.

We shall first consider the state of the mother, after she has been delivered of a child, as a leading fact upon which much depends with regard either to the destruction of infants or

abortions, and then the particular nature of these homicides.

The signs that a woman hath been delivered of a child, are of two kinds, as this circumstance is recent, or has happened for some time back. The signs of the former are,

Signs of
delivery.

Recent.

1st. An extraordinary swelling of the external parts of generation.

2d. A preternatural distention of the vagina.

3d. A flow of the lochia, which is a discharge that differs from the common menstrual flux, in being of a paler colour, and having a sourish disagreeable smell.

4th. The orifice into the uterus is soft and open, as if a late discharge had been made from it; the womb itself too not having properly collapsed and taken its natural shape.

5th. There is a roughness and flaccidity of the abdomen, which is sometimes covered likewise with wrinkles.

6th. The breasts are swelled to a larger size than common, and are hard and troublesome to the touch, sometimes loaded with excrescences that feel like scirrhi.

7th. Milk is found in the breasts, which, when curdled, forms the knots above-mentioned, and may be extracted from them by pressure, or by suction.

8th. The nipples become thick and strong, and the disk round them is much widened.

Former.

The signs that a woman hath formerly been delivered of a child, are the following.

1st. All the signs of her having lost her virginity in the last chapter.

2d. The orifice of the womb has not its usual conic figure, and is more open than in a maiden.

3d. The lips of the orifice of the womb are unequal.

4th. There is a roughness of the abdomen, which is likewise more expanded, and pensile or hanging down.

5th. There are small white and shining lines running on the abdomen.

6th. The frænum of the labia pudendi is obliterated.

7th. The breasts are more flaccid and pendulous.

8th. The lines on the breasts are white and splendid.

9th. The colour of the disk is brown.

10th. The nipples are prominent.

11th. There is a prominence of the inner coat of the womb.

12th. There is sometimes an inversion of this body.

The marks of abortion depend on Marks of abortion. the length of the pregnancy, and must be referred to the judgment of the physician, &c. In general, they are only those of lost virginity.—Vide last chapter.

In order to explain those distinctions by which we are to know whether an infant, who has been found dead and exposed, was murdered by any inhuman hands or not, we should divide them,

Division of
the signs of
murder.

I. Into those signs by which we know that the child might be born alive, and afterwards be destroyed.

II. Those more evident marks, by which we ascertain that it was brought into the world dead.

III. Those which accurately point out, that force and violence were exercised to deprive it of existence.

IV. Those more particular distinctions which are to be made on a thorough inspection and dissection of the dead body.

Signs that a
child was
born alive.

I. We know that a child has been born alive, when we find that it has exercised any of the vital actions, by which is meant, not those similar actions by which life is supported when

the foetus remains in the womb, but those real actions, which are in force after the child is brought into the world. These are the circulation of the blood, and respiration, such as is enjoyed by animals after their birth.

The following may be esteemed proofs that a child hath enjoyed the circulation of its blood after it is born, and thus may be said to be born alive.

Signs of circulation of blood.

1st. The mother, during the whole state of her pregnancy, must have enjoyed a good state of health, and have perceived the motions of the infant to the time of her delivery.

2d. The child, when born, must be of a proper length and weight.—
Vide chap. ii. p. 17.

3d. The blood-vessels of the child must not be replete with blood.

4th. There must be a settlement of blood in divers parts of the external surface of the skin.

5th. The body of the child must not be rough nor flaccid.

6th. The umbilical cord should be full of juice, and of a white colour.

7th. The placenta, if it be to be found, should be turgid, and its vessels full of blood.

8th. In places that may be pressed in different parts of the body, the blood ought to stagnate, and become coagulated.

9th. A froth should appear upon the mouth of the infant, and stick about its lips.

10th. There should be every appearance of a natural delivery.

It should be remarked here, that these signs should be taken collectively; scarcely any of them will avail when taken separate from each other.

Signs of res-
piration.

The signs that an infant has breathed after it is brought into the world are,

1st. The act of vociferation after

delivery, if positive proof of such a circumstance can be obtained.

2d. The lungs being endued with a colour approaching to white, being of less specific weight than others, when the child never breathed through them, and being put into water, having a disposition to swim in it. This will be considered more fully.

3d. The lungs are more expanded than in dead subjects; and, previous to delivery, adhere to or rather fill up the cavity of the thorax.

II. The signs by which we can in some measure determine that an infant was brought into the world dead, are to be derived from the following circumstances, and which appear to be of the utmost note.

Signs of an
infant being
dead.

1st. When the mother has been for some time afflicted during the time of her pregnancy, with various severe disorders.

2d. When she has not perceived

for some time the motions of the infant in her womb.

3d. When upon dissection of the head of the infant, the brain appears fluid like water, and has not its usual substance.

4th. When the heart and other blood-vessels are filled with thick and coagulated blood.

5th. When the body of the infant has its flesh collapsed and contracted, its skin soft and flabby, and its whole appearance of a red or scarlet colour.

6th. When compressions on the surface are attended with no *ecchymoses*, or stagnations of blood.

7th. When the blood is of a putrid nature, whilst it continues in the vessels.

8th. When there are evident signs of a putrefaction having taken place, whilst the child was in the womb, such as a separation of the cuticle from the next surface of the skin; the umbili-

cal cord being rotten, wrinkled, of a yellow colour, and as if melting away; a swelling of the abdomen, and a soft tumefaction of the whole body.

9th. When the umbilical cord is not only rotten, but devoid of humours.

10th. When the bones of the skull of the infant are softer and more disjointed than in one born alive.

11th. When other internal parts besides the brain are found corrupted and decayed.

12th. When the *placenta*, or after-birth, at the time of delivery, or soon after, is in a state of corruption.

13th. When there is a defect of the excrement in the large intestines, and of urine in the bladder destined to its use.

14th. When parturition was exceedingly laborious.

15th. When the lungs are more dense than in a live subject, have a red

colour, subside in water when they are thrown into it, and are so collapsed as not to fill up the cavity of the thorax.

16th. When there is an unequal conformation of all the organs destined to their several functions, with respect to length and thickness.

17th. When the little body of the child, if perceived soon after delivery, is not found warm to the feeling.

18th. When the blood flows from the mother in a superabundant quantity, both before and after delivery.

19th. When the mother, during her pregnant state, has been excited to a high degree of anger, or impressed with extraordinary fears.

20th. When she has suffered a great injury during that state, especially in the abdomen.

21st. When at the time of delivery a strong mephitic smell may be perceived to issue from the external parts of generation.

22d. When there is a subsidence of the sutures upon the top of the head in the child, without any marks of violent depression.

23d. When the meconium, a kind of fæces, flows from the child at the time of delivery.

A great handle hath been made of the swimming or subsidence of the lungs. When other circumstances are taken into consideration, it may be a corroborating proof, but can by no means be absolute of itself; for the lungs may swim from putrefaction, where a child is born dead, or from inflation by a blow-pipe, or other means.* On the other hand, the lungs

Swimming
of lungs
examined.

* It is not at all uncommon for a child born in a very weak and exhausted state, to sob and catch in its breath, or even to breathe distinctly two or three times, and then to die; and this is particularly observable in children born in a preternatural posture. I have many times observed in a footling delivery, the chest

may subside in a child that is born alive: for a child may live, or have its circulation perfect, some time before it begins to breathe.

Signs of violence to procure death.

III. We are to consider how to form a judgment, concerning any violence that may have been used to procure the death of a child, and this we derive from the following circumstances.

From wounds.

1st. When at the time of inspection, marks of certain injuries, such as might have been inflicted upon an adult, as fractures, or wounds, are evident to the senses.

From suffocation.

2d. When there are evident marks of suffocation, or strangulation, such as a remarkable compression of the *thorax* or chest; the *aspera arteria*, or wind-pipe, being filled with serum or mucus; a redness, or lividity of the

of the child to be fully expanded before the head of the child has been freed from the vagina, and yet the infant has been dead born.

countenance; the tongue swelling and prominent; a red, or livid circular line about the neck; the cavities of the mouth and nose full of extraneous matter; a falling in of the flesh about the *scrobiculus cordis*, or pit of the stomach; the lungs livid, filled with blood, and heavier than usual; the vapours of sulphur burnt extending to the lungs; the cavities of the heart, as the right auricle and ventricle, being filled and expanded with blood; the jugular veins, and those about the head, being also distended with blood; a froth about the mouth; the bladder empty of urine; the child being found in places where it is liable to be destroyed by dirt or water, as in ditches or lakes; and lastly, its being oppressed soon after delivery by bed-clothes, or other coverings, which might deprive it of life.

3d. When there are evident marks of the luxation of the neck, taken not

Luxation of
neck.

only from the flaccidity of the head and neck, but from depressions about the parts, which are wide and deep.

Injuries of
the skull.

4th. When there are evident marks of injuries to the skull, as great depressions and blots near to the sutures, which arise from extravasations of blood and serum, and appear either under the skin, or in the hemisphere of the brain, or in its ventricles, or in the base of the skull.

Umbilical
cord not
tied.

5th. When the umbilical cord does not appear to have been tied, or is entirely torn off from the body. It should be observed, that the neglect of tying the umbilical cord * is not always

* A woman was delivered of a bastard child by herself, which was soon afterwards found dead by the people of the house, and a coroner's inquest was summoned to sit upon the body. An accoucheur was examined, who thought that the child had been born alive, and that it was destroyed in consequence of loss of blood,

the immediate cause of death to an infant, but only when, from such defect, a mortal hæmorrhage arises, and which may be known,

1st. When the whole habit of the body is quite pallid. When the cause of death.

2d. When the great blood-vessels, and the cavities of the brain, are empty of blood.

3d. When there is a rupture of the cord in delivery, and the mother has suffered much hæmorrhage both before and after that event.

IV. It is necessary, perhaps, in Circumstances on inspection.

the navel string being cut very near to the abdomen, without having been first tied: he stated, however, that he had known many mothers of children and nurses, in the habit of attending women in child-bed, who did not know that it was necessary for the navel string to be tied before it was cut; and therefore it was possible, that the young woman in question was equally ignorant of this necessity. The jury, on this, acquitted the prisoner.

many cases where a suspicion of murder is great, but the facts are not very evident, to exercise the judgment as well as the observation of the person employed to give a deposition. And here are some rules necessary to be observed to execute his intention in a masterly, judicious, and accurate manner. In the first place, he should consider, whether the body be in a state of putrefaction, or not, and whether that putrefaction is in such degree as to preclude all observation. If that be not the case, perhaps an examination may be made upon the bones of the head, or other parts, so far as to ascertain,

Putrefaction.

1st. Whether the fœtus be of mature growth; and this may be known from the size as well as the conformation of them.

2d. Whether such violences have been used as to injure these parts, as by fractures, &c.

If a degree of putrefaction has not taken place, so far as to preclude our observation, the rules may be divided into those that relate to the inspection, and those that relate to the dissection of the body.

When a proper inspection is made, we should examine,

1st. Whether the clothes in which the child is wrapped up be tinged with blood, or whether there be any blood upon the external surface of the skin. Clothes.

2d. Of what sex the child is, and whether it be come to mature growth. Sex and growth.

3d. The whole superficies of the body is to be examined from head to foot, to see whether there be any *ecchymoses*, or stagnations of blood; livid spots, or spots of various colours; whether the skin itself be grown livid, with or without any signs of violence, or other injuries, such as punctures in the head or neck, luxations, and sub- Superficies of the body.

sidence of the sutures, with or without any violent depression.

Heat of the
child.

4th. The heat of the face, in particular, and of the whole body, are to be attended to. And here we must guard against deception, for a dead fœtus may partake in some measure of the heat of the mother; so that if a dead fœtus were to be examined immediately after delivery, and a child born alive, some little time after death, they might both enjoy the same degree of heat. Other circumstances then here must be taken into the account.

Cavities.

5th. The cavities of the mouth and nose are to be examined, to see whether any foreign matter is deposited in them. This cannot be, unless the child had enjoyed life so far as to open these passages. We should observe, likewise, whether it has grasped any thing in its hands, as this is a certain proof of life.

6th. We should examine the umbilical cord, whether it adhere to the placenta; if it be tied, or is broken, or cut off, and what is its colour, and what its length.

Umbilical
cord.

7th. The *placenta*, or after-birth, likewise should be examined, to see whether it adhere to the umbilical cord; whether it be dry or moist, and how far it may have become scirrhus.

Placenta.

We are next to consider, what is to be done upon a dissection of the body, and this ought never to be omitted: and here the following rules should be observed.

Appear-
ances on
dissection.

1st. All the three principal cavities of the body, the head, the *thorax* or chest, and the *abdomen* or belly, should be opened, to discover any injuries that may have happened to the substances contained in them, and the great vessels which run through them.

Principal
cavities to
be opened.

2d. The lungs should be properly

Lungs ex-
amined.

examined, and every enquiry made into their colour, connection, density, substance, and specific gravity; and whether they may not be indurated in some places, and how far they exhibit signs of putrefaction.

Wind-pipe.

3d. The *aspera arteria*, or wind-pipe, should be cut through, to discover how far it is filled with mucus or serum. The great vessels, and the cavities of the heart likewise, should be opened, not only to observe how far they are full or empty of blood, but that the colour and consistence of that fluid may be ascertained. Having made these observations, the lungs, with the heart are to be cut out of the body. After this the heart is to be separated from them, and the vessels tied; they are then to be thrown into a large bason of moderately warm water, and it is to be observed how far they sink or swim in it: After this, each tube of the lungs is to be examined

separately, and the same observations to be made upon it.

4th. All the other viscera, but particularly those of the abdomen, are to be examined, but the great intestines especially, to see whether they are full of meconium, and the bladder if it be exhausted of urine.

Viscera of
abdomen.

We cannot help lamenting here, that although so much is required, so little is generally done in these cases; and that an innocent life is often sacrificed to hurry, to negligence, or ignorance; whilst a wretch, who is devoid of shame, escapes from punishment, for want of judgment, accuracy and attention. And it is to be hoped, that this little treatise will meet the attention of judges and lawyers in this particular circumstance, which so often comes before them, to the shame and scandal of humanity; and that they will be enabled to correct the errors of coroners, or ignorant sur-

geons, who may have been misled in the depositions they give in. It is a misfortune, that men of eminence in the physical line fly from bars of judicature, as places of trouble and examination. It may be necessary, therefore, to give the court such checks upon ignorance, as will serve to discover the truth.

Abortions.

The next thing to be considered before we finish this chapter, is with respect to abortions, or the destruction of those unborn embryos which were never brought into the world: and indeed as such beings might live, and become of use to mankind, and as they may be supposed from the time indeed of conception, to be living animated beings, there is no doubt but the destruction of them ought to be considered as a capital crime. It is necessary then, that we enquire whether any medicines can be given, or other means used, absolutely to procure this

No medicine can procure it.

effect; and indeed it is evident, I believe, from experience, that such things cannot act as efficient causes, without the aid of those predisposing causes, or natural habits of the body, which are necessary to concur with them. As attempts of this kind, however, should not be passed off with impunity, and as the life of the mother, as well as the child, is endangered by such exhibitions, if advised by any other, they should be considered as highly culpable, and for this reason should be made known.

The common methods made use of are the stronger vomits and purges, venæsection to a great degree, all that class of medicines called emmenagogues, and those which have a tendency to promote salivation. External methods are, irritations of the mouth of the womb, strong passions of the mind, painful disorders, fevers, &c. The predisposing causes must be,

Methods
generally
used.

great fulness of the blood, irritability of the womb, a defect in the nutriment of the foetus, a womb that will not suffer itself to be distended beyond a certain degree, and a morbid disposition of the placenta.

It is to be lamented here too, that whilst this crime, which is practised generally by the most abandoned, escapes unpunished, a poor deluded creature, in the case of infant murder, whose shame highly extenuates her guilt, should suffer death, where nature had acted so forcibly as almost to overcome her fatal resolutions, and had taken away all power to put in practice the subtle contrivances of art.

CHAP. VI.

ON HOMICIDE.

THAT wonderful machine of which human nature is composed, which is directed and ordered by a contrivance unknown to the wisest of men, and which gives birth to all our pleasures and enjoyments, contains nothing in itself to perpetuate its own existence. A very little derangement of its functions, or of its acting principles, will deprive it of life, and destroy all its powers of action. The most common methods by which men lose their lives, are by diseases which are generally, though impiously, attributed to the hand of God: for what we incur by our own vices and imprudence, what by the passions and evil dispositions of others preying upon our spi-

Nature of
man.

How de-
prived of
life.

By disease.

rits, and what by bad customs and habits, we must attribute more of death to any other cause, than what is assigned. Where death is occasioned in any other manner than by disease, it is called natural; where it arises from some accident, which shall immediately cause a dissolution of our powers, it is unnatural; and homicide where it is effected by the violent hand of another. In such a case, the law justly retaliates upon the offender where it is committed from anger and malice, and is not, as in the case of war, protected by the sovereign influence of princes.

Natural
cause.

Homicide.

Officers to
enquire.

Where it comes under the cognizance of a court of judicature, the greatest circumspection and attention are required, and the laws of all countries have appointed proper officers previous to any trial; and as soon as possible after the murder, to enquire into the causes and nature of it, how it was committed, and what appear-

ances present themselves upon inspection.

In the examination which is made, (before a decision be pronounced), the following directions are necessary to be observed.

Directions
how to ex-
amine.

I. The examination of the dead body should be as soon as possible after death, in the day time, at a proper place, where a dissection, if necessary, (and it is almost always necessary) may be performed; and not according to vulgar custom, where it is found, let it be ever so improper; and likewise by proper instruments, such as are generally used by surgeons in their dissections, and not by coarse and rude knives and scissars, which may mangle and tear the body, but cannot ascertain the cause of its death.

When to be
made and
where.

II. Before a dissection is proposed, a very accurate inspection should be made upon the sound body, in order to discover how far the death was

Accurate
inspection of
sound body.

occasioned by suffocation from mineral vapours, the fermentation of new liquor, the burning of charcoal, or the electric shock of lightning. In such cases, except the last, and then they do not seem to be the cause of the death, no marks are to be found.

Spots on the
body.

III. Upon a further inspection, it is to be examined, 1st. into any deviations from the natural state of the external superficies of the body, as whether there are any spots which are derived from the blood's escaping into vessels not fitted to convey it; ecchymoses, which are stagnations arising under the skin, or pericranium of the head; or any other spots in the external surface; and of these we are to examine the situation, magnitude, figure and number. We must examine, likewise, under this head, the nature of any tumours which may appear, and whether they are owing to violence, or any other cause: their size and figure

Tumours.

should also be described. And, lastly, Putrefac-
tion. we should enquire into the state of putrefaction of the body, which is known by the following particulars. 1st. Bladders filled with a yellow or brownish liquor. 2d. The external cuticle separated from the true skin. 3d. A lividity or blackness of the skin. 4th. A fœtor, or disagreeable smell of the whole body. 5th. A considerable swelling of the carcase. 6th. A particular lividity and blackness in the scrotum of male subjects. 7th. A blackness of the nails.

2d. Into any wounds which are Wounds,
&c. conspicuous, and remark whether they be over the whole body, or confined to a particular part; and here no probe or other instrument should be inserted which may enlarge them, and alter their nature.

3d. Whether from the carcase in Blood or
other hu-
mour flowing
from car-
case. general, or from any wound or aperture, as the mouth, anus, &c. there be

a flowing of blood, urine, or meconium.

Habit of
body.

4th. Into the habit of the body, whether it be fat or lean, or swelled from any cause.

Dissection.

IV. The directions to be attended to under a dissection are the following.

Integuments.

1st. The integuments of the body, and especially of those places which require examination, where any wounds present, are to be dissected away, and the muscles are to be cut through, in order to open a way to the parts where injury is supposed to be done.

Cavities.

2d. All the chief cavities of the body, as the head, the chest, and the belly, are to be opened.

Where injury received.

2d. That cavity is to be penetrated first where the injury is supposed to reside.

Parts circumjacent.

4th. The parts circumjacent to a wound are not to be dissected before the progress of the injury is traced to its utmost extent.

5th. Any bowel contained in the cavity, is to be examined according to its situation, connections, constitution, and any wounds which it may have received, in their length, breadth, and depth.

Bowels.

6th. We should enquire if the bowel opened contain any foreign bodies, either fluid or solid: if the former, their nature and quantity is to be determined; if the latter, their quality, number, quantity, figure, and situation.

Foreign bodies.

7th. All the great blood vessels passing through a cavity, are to be examined whether they be entire or no, and whether they contain blood or not.

Blood vessels.

8th. The great nerve likewise, as the *medulla spinalis*, or spinal marrow, &c. should undergo an examination, and the thoracic duct and receptacle of the chyle, vessels which carry the nutriment from the stomach, and from

Nerves, &c.

the external surface into the mass of blood.

Head
opened.

9th. Before the head is opened, it should be discovered whether there are any wounds in the skull by fracture, fissure, intropression, &c. and of such the situation, size, depth, number, and figure should be marked.

Skull.

10th. When the head is opened, the skull should be carefully taken off with a saw.

Brain.

11th. When the brain is examined, regard must be had to its substance, to its vessels, whether they be full or empty of blood; to the sinusses of the dura mater, those large receptacles of blood which lie under the skull; to the ventricles or cavities, to see whether any fluid be contained in them, and of what nature, and in what quantity; to the base of the skull, to discover if any foreign body lies upon it; and lastly, to the thickness of the

bones, whether it be ordinary or extraordinary.

12th. When the chest is opened, Chest.
the sternum is to be separated from the ribs with great care, lest the arteries or veins lying near it, or in the cavity, be injured.

13th. If a wound should be made Ribs.
in the chest, and which penetrates either side, then we should not only determine the ribs between which the wound is made, but from whence we reckon.

14th. When the heart is examined Heart.
we should take notice, whether poly-pous concretions occur in its cavities, or in the greater vessels.

15th. When a rupture of any of Rupture of
bowels.
the bowels is discovered upon dissection, we should carefully examine whether it be recent, or whether it be gangrenous, or have the signs of putrefaction.

Contents of
bowels of
abdomen.

16th. When the bowels of the lower belly, which are large cavities, are submitted to examination, we should enquire with the utmost care into their contents; and this not only by simple inspection, but by the fire, and chemical mixtures.

Other cir-
cumstances.

There are, besides these, some other circumstances to be attended to, as the constitution of the dead person, the instrument by which his death was occasioned, the symptoms under which he laboured, the means used to restore him, the time when assistance was called to him, his situation when wounded, his diet before and after, and lastly, whether he was affected with drunkenness.

Different
kinds of
murder.

The different kinds of murder, or the different means by which it is committed, may be reduced to poisons, wounds, bruises, drowning, and strangulation. The two first seem to be the most common; the third is often

rather a remote than a proximate cause; and the two others are chiefly discovered by the facts, rather than by any peculiar marks they leave on the body. But first of poisons.

A poison may be defined any substance, which, applied to the human body internally, is injurious to its preservation, or procures its dissolution by its own proper qualities. The ways by which poisons get into the body, are by the mouth, nose, lungs, and sometimes the external surface of the skin; and these modes of action may be explained in the following manner.

Health supposes a natural state or constitution of the fluids and solids of the animal body. All poisons then, must act in destroying this natural constitution of parts, and changing it into a preternatural one. There are various ways by which this is done; the principal are the following.

Of poisons defined.

Ways by which they act.

Mode of action.

By acrids.

1st. By acrid things, which constringe and erode the solids, or sometimes coagulate, sometimes resolve the fluids.

Stupifiers.

2d. When they possess a power of stupifying or destroying the powers of sensation and motion in the nerves, which are the great agents of the animal machine.

Figure sharp.

3d. When they possess a sharp and acute figure, which tears and lacerates the tender parts of the stomach and bowels.

Suffocation.

4th. When they induce a powerful suffocation.

Tenacity.

5th. When they act not only from acrimony, but from a power of thickening the blood at the same time.

Drying.

6th. When they have the power of thickening and of drying also the humours.

Unknown power.

7th. When they act by some unknown power, which is not yet discovered.

It would be useless, nay perhaps injurious to society, to enumerate all the poisons which belong to the different heads. It is dangerous to entrust such materials in the hands of mankind in general: we hope, therefore, we shall be excused if we mention only the principal ones, according to the foregoing arrangement. They are all taken from the animal, vegetable, and mineral kingdoms.

The 1st class, or acrids, include acids and alcalies; among the last of which may be included the effects of the putrefactive process, as being exposed to its influence.

Acrids
what.

Those poisons of an acrid nature which have a mixed quality, are the metallic salts, or some of the semi-metals themselves, as arsenic, &c. and some vegetables which are of a highly drastic nature, and which, used in small quantities, may produce useful evacuations in cases of disease.

- Stupifiers.** 2d. The poisons which have a stupifying quality are of the vegetable kind, as the cicuta, lauro cerasus, &c.
- Mechanic powers.** 3d. Those which act mechanically by the sharp points and edges with which they are endued, are the powder of glass, diamonds, &c.
- Suffocations.** 4th. Those which have a suffocating power, are the vapours of new and fermenting liquors, the smoke of charcoal and of sulphur, the air of close and damp places, &c.
- Viscid.** 5th. Those which have a viscosity joined with acrimony, are generally vegetables, such as cicuta major, solanum, &c.
- Driers.** 6th. Those which are of a thickening quality, and a drying one at the same time, are quick-lime, cerusse; and among the vegetables, several of the class of fungi, &c.
- Unknown qualities.** 7th. Those which have a secret quality, not easily discovered, are the various tribes of animals which live

around us, such as spiders, toads, vipers, &c.

The effects which poisons produce upon the body vary, according to the nature of their qualities, the place which they affect, and the subjects to whom they are applied, according to age, temperament, habit of body, &c.

How poisons
affect the
body.

Thus the aconite affects the lips, mouth, forehead, tongue, and stomach, by making them to swell, and causes anxieties, vertigoes, faintings, and convulsions.

Aconite.

The cicuta occasions enormous vomitings, hiccups, heat of the stomach, swelling of the belly, delirium, and convulsions.

Cicuta.

The acid spirits, wherever they touch, cause erosions, most grievous pains, vomiting and hiccup. Arsenic and cobalt excite inflammations of the stomach, &c. the most acute pains, heat in the mouth and jaws, nausea, or sickness, vomiting, spasm-

Acids.

Arsenic, &c.

dic contractions of the chest, swelling of the belly, coldness of the extremities, cold sweats, convulsions, &c.

How to judge in a living subject.

When a medical practitioner, therefore, is called to a person who is suspected to be poisoned, if he be alive, he may judge from the following observations.

From symptoms above.

1st. From comparing the symptoms which present themselves with those which generally attend the taking of poisons mentioned above.

From suddenness of some symptoms.

2d. From the sudden appearance of some symptoms, such as spasms and violent pains, great thirst, sickness, vomiting, fainting, cholick, the throwing up some foreign matter from the general contents of the stomach, and universal convulsion of all the muscles.

Previous health.

3d. From the health of the patient foregoing this attack, and his not having any connection with a person labouring under any contagious or epidemic disease.

4th. From the patient having committed no errors in diet, &c. No errors in diet.

5th. From an ungrateful odour and taste of what has been taken. From odour and taste. There are few poisons but what are attended with a very disagreeable smell and taste; hence a suspicion soon arises from this source, which if immediately taken notice of, the patient may soon receive the proper relief.

But if the person be dead, a very minute examination must be made, and the following particulars attended to. How to judge in a dead person.

1st. The external habit of the body is to be inspected with the greatest accuracy and attention, to discover whether there be any livid spots upon the surface of the skin; whether there are any premature signs of putrefaction, and whether there be any swelling of the belly, or of the face; for experience evinces that these changes From external habit.

are soon induced by poisonous substances.

The passages.

2d. The passages by which the poison has been conveyed into the body, are to be examined; these are the mouth, the throat or gullet, the stomach, and the intestines; but chiefly the stomach, as the same effects will be produced in it as in the other parts. We must examine then first into its constitution, and then into its contents.

Principally the stomach.

In its constitution.

When we examine the constitution or form of the stomach, we must consider,

1st. Whether it be inflated or corrugated in an extraordinary manner.

2d. Whether it be inflamed, or in a state of gangrene or mortification.

3d. Whether it exhibits upon its external surface supernatural spots, either of a red colour, or black or livid.

4th. Whether it be perforated into holes, either one or many.

5th. Whether its veins be tinged with blood more than usual.

6th. Whether it be eroded, and its inner coat be stripped off and bloody, and swim amongst the other contents.

7th. Whether there be any eschar in its substance, of a black or yellowish colour.

All these marks afford very strong suspicions of poisons, especially of those which are acute and acrid.

The next observations are to be made upon the contents of the stomach, previous to which two circumstances must be attended to.

Contents of
the stomach.

1st. All the contents of the stomach are to be thrown into a vessel prepared for that purpose.

2d. The surface of the stomach is to be inspected more carefully, to discover, if possible, whether particles of the poison may not stick to it, which are to be collected.

The contents of the stomach are to be considered as more or less fluid; if they are not entirely so, but consist of many solid substances, then a portion of them is to be dried and put into an iron vessel lined with tin, and being previously weighed, the following experiments are to be made upon it.

Solid.

To be tried
by burning.

1st. It is to be thrown upon burning coals; which, if it produces a vapour of a blue colour, and an odour like that of garlic is perceived, it may be nearly ascertained that an arsenical matter was mixed with it. But in order to clear up this point to greater satisfaction,

By other ani-
mals.

2d. Another portion of the dried mass is to be given to other animals, such as fowls, dogs, &c. which, if it causes their death, it is a proof that poison made a part of its contents.

Mixed with
suet and sal.
tart. and
melted.

3d. Another portion of this dried mass is to be mixed with a quantity of suet and salt of tartar, which being

put into a crucible, and melted over the fire, if a reguline metallic substance is produced at the bottom, it is clear that an arsenic is contained in it.

4th. It may be enquired, whether this metallic substance being melted again with metals of a red colour, turn them to a white, for this is likewise proof of arsenic.

Melted with
other metals.

The remainder of the dried contents, if poison be found upon experiment, must be nicely and accurately weighed. This is to discover, whether the proportionate quantity would be sufficient to produce the effect. But in general, where arsenic has been administered, so small a quantity is sufficient to produce the most dreadful influence, that it will be nearly satisfactory, if any of it be found upon a chemical examination.

Remainder
weighed.

When the fluid parts of the stomach

Fluid parts
examined.

are examined, the following experiments are to be made.

By alkalines.

1st. An alkaline liquor, as oil of tartar per deliquium,* for instance, is to be thrown in, and if it take a brownish colour, it is a proof that mercury, in the shape of corrosive sublimate, or precipitate, has been mixed with it; if it ferments, that an acid has been exhibited. This, however, is no certain sign, as an acid may subsist very innocently in the stomach.

By acids.

2d. An acid may be applied, and here, if an effervescence be produced, it is a proof of an alkaline substance, and then, as in the last case, it must be by the quantity and acrimony of the substances that we determine concern-

* Liquor Potassæ Subcarbonatis of the present Pharmacopœa.

ing their poisonous nature, as in themselves, and when well diluted, they are innocent and sometimes salutary.

3d. The colour is likewise to be attended to, as it may determine the exact nature of the poison which is given. By colour.

4th. Some portion of the poison found may be sent to a chemical laboratory, to examine more particularly its nature. By chemical analysis.

These observations, it should be remarked, however, relate more particularly to poisons, which produce their effect more immediately, than to those which lie a long time first, in the stomach. But we may, from the injuries done to the stomach itself, determine likewise in some measure concerning even those more slowly acting poisons. The remains of inflammation, gangrene, perforations, &c. will

continue for a long time, and if the patient should die of poison at ever so great a distance, whilst the cause subsists some effect will evidently be perceived, or some change from a natural state.

Wounds defined.

Division.

Mortal what.

Mortal by accident.

2d. Of wounds. Under wounds may be comprehended every disorder which arises from some external violence offered to the human body. To this head, therefore, may belong contusions, luxations, fractures, and wounds, more properly so called, being a division of the muscular parts of the body. The first division of wounds is into mortal, and the contrary. Every wound is of such a nature, that death is absolutely the consequence of it or not. In the latter case it may be called mortal by accident. This also we may divide into two kinds or orders. That wound which is so inflicted that it

may be relieved by the means cognizable by art, is of the first order. That where it happens that the death which is incurred, is owing not to the wound, but to other causes, then the wound is said to be of the second order of such as are called mortal by accident.

From what hath been advanced, the following positions may be deduced.

1st. Every wound, absolutely mortal, will admit of no relief, but will certainly destroy, either by a sudden or lingering death. Positions.

2d. Death is always the inseparable effect of a wound absolutely mortal.

3d. A wound absolutely mortal is always the *sole* cause of death to the injured person.

4th. The consequences here avail nothing: the wounded person, after the wound is inflicted, is to all intents

and purposes a dead man; the injury then is absolutely mortal.

Reasons for such distinctions.

5th. Wounds are by accident mortal, when the cause of death arises partly from the wound, and partly from other concurring causes.

These distinctions are necessary, though not always attended to; for it may so happen, where men judge alone from consequences, that a person may be punished for a death occasioned by a wound which was not absolutely mortal. It is highly important that in a deposition for murder, such distinctions should be made of these kinds of wounds, as to place them in their proper light. In order to do this more effectually, it is necessary to make the following divisions. 1st. To consider those kinds of wounds which are absolutely mortal, or mortal by accident. 2d. In what parts of the body such wounds are most likely to be inflicted. 3d. Some circumstances which may

Division of rules.

occur to distinguish such wounds more accurately.

I. It appears then, that because a mortal wound cannot be cured by any art, that every wound which entirely takes off the influx of the blood into the heart, from the vein, and its egress from the heart into the arteries, or which entirely destroys the powers of circulation, and the action of the heart, must be absolutely mortal. From the elements of physiology it appears, that the following circumstances are necessary to promote the action of the heart.

What kind
of wounds
mortal.

Actions of
the heart
promoted by

1st. The soundness of the sides of the cavities of the heart, so as to be able not only to contain the blood, but to push it forward into the system. The strength required here is amazingly great.

Soundness of
walls.

2d. A free action of the brain and nerves going to the heart, called the cardiac nerves.

Action of the
brain.

Coronary ar-
teries.

3d. The motion of the blood through the coronary arteries which surround the heart.

Lungs.

4th. A free motion of the blood through the lungs.

Proper re-
turn.

5th. A proper return of blood through the veins.

Aliment.

6th. A renewal by the aliment of nutriment to restore the expence which is incurred by the several secretions, &c. It appears then that all wounds are absolutely mortal,

Mortal
in that or-
der.

1st. Which injure the cavities of the heart, so that they cannot contain the blood :

2d. Which take away the free action of the brain and nerves going to the heart, so that neither sense nor motion can be promoted in that organ so essential to life :

3d. Which destroy respiration ; for then the blood cannot be carried through the lungs :

4th. Which stop the motion of

the blood through the coronary arteries:

5th. Which prevent its return through the veins:

6th. Which prevent the use of nutriment, and consequently the accession of chyle.

It appears then, that the subject of wounds absolutely mortal are those parts whose soundness cannot be taken away, and life continue; and that many of those wounds which happen in internal parts, to which the medical aid cannot reach, are to be considered as absolutely mortal.

When a wound is mortal by accident, death is either to be attributed to it in part as a concurring circumstance, or not at all: as in such cases as the following.

1st. Where death is occasioned by wounds being left to themselves, as for instance, wounds of the head which may be cured by the use of the tre-

Wounds
mortal by
accident.

When left to
themselves.

pan; those of the greater blood vessels, where access may be acquired; those of the viscera, where the hand may be applied, and medicines may be administered; those which induce death by evacuations into cavities, which might be prevented, or from which they may easily be discharged.

Where there
are other
causes.

2d. Where other causes may be the occasion of death, as the particular constitution, or habit of the wounded person, as well as his neglect and want of prudence, the fault of the medical practitioner, the blunders and carelessness of by-standers, or some previous disorders which may have prevailed.

Parts where
wounds are
mortal or
not.

II. We are now to consider the second general division, or those wounds of the different parts of the body which are to be accounted mortal absolutely or not; and here we shall treat of them in the follow-

ing order: 1st. Wounds of the head and neck. 2d. Wounds of the chest. 3d. Wounds of the abdomen or belly. 4th. Wounds of the extremities.

I. Of wounds of the head. — Of the head.
 These are external or internal, which may be again distinguished according to any injury done to the brain, &c. or not.

1st. External wounds of the head, External.
 whether they are wounds of the integuments, or of the pericranium, or of the bones composing the skull, or of the face, are not absolutely mortal.

2d. Internal wounds of the head, Internal.
 unaccompanied with injuries of the brain, &c. are not to be accounted absolutely mortal.

3d. Those wounds of the inner part of the head, where the brain, Where brain, &c. is affected.
 &c. likewise is injured, are to be accounted absolutely mortal, or not,

according to the following distinctions.

1st. Wounds of the dura mater, where there is no sinus or branch of the greater artery running across it that is injured, are not absolutely mortal.

2d. Wounds of the dura mater in its sinus, and the greater artery, are to be accounted absolutely mortal.

3d. All wounds of the contents of the skull, which are attended with great extravasations of humours which cannot be evacuated: as in the ventricles of the brain, and the base of the skull, are to be accounted absolutely mortal; such are, what are made at the bottom of the skull, in the bones of the temples, the ethmoid bones, and the inferior orbits of the eyes.

4th. Slight wounds of the brain itself, or of the superficial part of

the cerebellum, are not absolutely mortal.

5th. All wounds of the cerebellum, which are deep, and of the medulla oblongata, are accounted absolutely mortal.

6th. All injuries of the origin of the spinal marrow, and all deep wounds through its whole length, may be pronounced absolutely mortal.

With regard to wounds of the neck, we may make the following observations.

Wounds of the neck.

1st. Wounds of the internal jugular veins are absolutely mortal; those of the external, only so by accident.

Internal jugular veins.

2d. Wounds of the carotid and vertebral arteries, may be pronounced absolutely mortal.

Carotid arteries.

3d. Wounds of the internal maxillary artery, and the sublingual artery, belong to those esteemed ab-

Internal maxillary.

solutely mortal, if they cannot be healed.

Branches of
carotid.

4th. Wounds of the branches of the carotid artery, which can be tied or compressed so as to stop the blood, may be accounted mortal by accident.

Intercostal
nerves, &c.

5th. Wounds of the intercostal nerves, and of the par vagum, and of the phrenic nerves, which run through the neck, induce absolute death.

From spinal
marrow to
arm.

6th. Wounds of that plexus of nerves which reaches from the spinal marrow to the arm, are the causes of death.

Luxations.

7th. All luxations of the first and second vertebræ bring absolute death.

Œsophagus.

8th. Small wounds of the œsophagus, or gullet, are only mortal by accident; but if the gullet be cut through, they are amongst those which are accounted absolutely mortal.

9th. In the same manner slight Wind-pipe.
wounds of the *aspera arteria*, or
wind-pipe, belong to those which
are mortal by accident; but if it
be cut through, they are always
mortal.

10th. All violent strokes upon the Larynx.
larynx, or cartilaginous muscles, on
the top of the wind-pipe, so as to de-
stroy their tone and power of action,
will speedily induce the death of the
sufferer.

II. Wounds of the chest are of two Wounds of chest.
kinds, as they are made in the cavity,
or in the parts surrounding it. Of the
former,

1st. All wounds of the heart, Heart.
which penetrate into its cavities, *i. e.*
into its ventricles, or auricles, are
absolutely mortal. The same may be
said,

2d. Of all wounds of the coronary Coronary arteries.
arteries, which surround the heart,
and all the great arteries and veins

which carry blood from the heart, and bring it back again.

Intercostal
arteries.

3d. Wounds of the intercostal arteries, or small vessels which pass between the ribs, are only mortal by accident.

Gullet.

4th. Wounds of that part of the gullet which lies in the chest, are absolutely mortal. The same may be said,

Wind-pipe.

5th. Of wounds of the wind-pipe in the same situation.

Pericardium.

6th. All wounds of the pericardium, or bag containing the heart, are not absolutely mortal.

Lungs.

7th. Wounds of the lungs, which pierce the great blood-vessels, are absolutely mortal; but those which penetrate the smaller vessels, are only accidentally so.

Bronchia.

8th. Wounds of the air vessels of any magnitude, are absolutely mortal.

Diaphragm.

9th. Superficial wounds of the

muscular part of the diaphragm, or midriff, are mortal only by accident ; but those which pierce the tendinous part are absolutely so.

10th. Injuries to the thoracic duct, Thoracic duct. which convey the chyle, are mortal absolutely, as are,

11th. Those of the cardiac nerves, Cardiac nerves. &c.

II. Wounds made upon the parts Surrounding the chest. surrounding the chest are to be judged by the following decisions :

1st. All external wounds of the chest, are not absolutely mortal.

2d. A simple luxation or fracture of the ribs, is not absolutely mortal.

3d. Considerable bruises, and injuries of the walls of the chest, with dilacerations of the intercostal arteries, are absolutely mortal.

4th. A wound of the chest, where one side only is penetrated in a certain place, is mortal by accident.

5th. Every wound which is of any

size, that pierces both sides of the cavity of the chest, is absolutely mortal.

As the chest is the seat of the great fountain of blood, it is no wonder that any injuries committed there should be mortal, and even in those cases where the exceptions are made, the hæmorrhage of itself may cause death.

Wounds of
the abdo-
men.

III. Wounds of the abdomen, or lower belly, are judged by the following rules.

1st. Every wound of the abdomen which does not penetrate into its cavity, whether it be a wound of the integuments, or of the muscles, or of the *linea alba*, as it is called, or of the navel, or of the abdominal ring, are not absolutely mortal, nor are they such when they do penetrate the cavity, when none of the contents are injured.

Omentum.

2d. Wounds of the *omentum*, or

caul, where its blood-vessels are hurt, so that the hæmorrhage cannot be restrained by any art, are absolutely mortal, otherwise they are mortal only by accident.

3d. Wounds of the stomach are Stomach. absolutely mortal, when many of the nerves are at the same time injured, when some of the principal blood-vessels are cut through, or they are made in such a place, that the food cannot arrive at the hollow part of it, but is thrown into the cavity of the abdomen. The same may be observed where the bottom or curvature of it is wounded, or it is pushed to one side.

4th. A wound in the small intes- Small intes-
tines. tines, so as to separate them from the stomach, is absolutely mortal.

5th. Wounds of the great, as Great intes-
tines. well as small intestines, at some distance from the stomach, which do

not divide the tube, are not absolutely mortal.

Liver if
great.

6th. Wounds of the liver, which are deep and broad, and are supposed to be connected with injuries done to the large vessels passing through it, are absolutely mortal; in like manner are any wounds of the duct of the liver, of the cystic duct, of the gall-bladder, of the *ductus choledochus*, of the vena portarum, or of the artery of the liver.

Small
wounds of
liver.

7th. Slight wounds of the liver, which do not occasion an extravasation of the humours, are mortal only by accident.

Rupture of
liver.

8th. A rupture of the liver is always absolutely mortal.

Spleen.

9th. Deep and broad wounds of the spleen are absolutely mortal, as well as a rupture of the spleen; but slight wounds are only mortal by accident.

10th. All wounds of the receptacle of the chyle are absolutely mortal; the same may be pronounced of

Receptacle
of chyle.

11th. All the great vessels, arteries and veins, and the nerves which run through the abdomen.

Great vessels.

12th. Wounds of the *pancreas*, or milt, as the trunks of many large vessels, pass through it, are absolutely mortal. The same may be said,

Pancreas.

13th. Of wounds of the mesentery, or external covering of the bowels, for the same reasons, upon account of the vessels.

Mesentery.

14th. Wounds of the kidney which reach to the bosom of it, and cut off the ureters, are absolutely mortal; slighter ones are only so by accident.

Kidneys.

15th. Wounds of the urinary bladder, where the blood cannot be stopped, are absolutely mortal, and

Bladder.

no excuse can be made here from wounds being inflicted by surgical operations. Such being immediately under the eye of the operator, can be easily restrained, so as to have no ill effect.

Genitals in
men.

16th. Wounds of the external parts of generation in men, in which may be included contusions of the testicles, are not absolutely mortal.

Womb.

17th. Wounds of the womb are absolutely mortal.

Extremities.

IV. Wounds of the extremities in general, are not absolutely mortal; but, sometimes they are, as when they are made upon the trunks of the largest vessels, in which case such an hæmorrhage may arise, as no art can restrain; or, from the vital powers being weakened, a most powerful and fatal gangrene or mortification may be occasioned, and so as to elude the force of medicines.

III. We come now to the last division of rules, concerning wounds, to examine some circumstances by which the mortality of their nature may be more exactly ascertained. These relate,

Further
rules on
wounds.

1st. To the wounded person himself, in whom we should attend to his age, his constitution of body, his exemption from former injuries, or his subjection to disease, the sex, and if a woman, whether she be pregnant or not; the state of his mind, and how far his imagination might increase the effect of the wound; and lastly, whether he was at the time inebriated with liquor. All these circumstances aggravate the mortality of wounds.

From the
wounded
person.

2d. To the symptoms which occur, either immediately upon a person's being wounded, or which appear some time after; the symptoms besides these may be of three kinds.

Symptoms.

1. Those which acknowledge the wound to be their sole cause.

2. Which depend upon the wound partly as their cause.

3. Which do not acknowledge the wound to be their cause at all. Now in reviewing the symptoms, it will appear that the first alone are objects of attention.

Instrument. 3d. To the instrument with which the injury was effected; in which its figure, its size, its power of acting, are to be taken into consideration.

Time. 4th. To the time when death may occur after the wound is given.

Cure. 5th. To the methods made use of to effect a cure.

Exposure. 6th. To many occurrences which may arise from the circumstances of time, and any other accidents which might render a wound more dangerous, such as cold air, or a desert place, where no one might be ready to assist.

CHAP. VII.

OF IDIOTISM AND INSANITY.

WHEN the ideas of the mind are distracted, and thought and reason are confused and destroyed; it is common for the civil power, not only to take cognizance of the unhappy persons subject to such misfortunes, but to deprive them of their estates for a time, and put them under proper confinement. As the consequences are so dreadful, it is necessary then that the decision be established upon the firmest and most satisfactory proof.

Objects of
civil power.

Idiotism and insanity, though punished in the same manner, seem to vary from each other. It may be ne-

How distin-
guished.

cessary then to specify the proper distinctions of each.

Idiotism natural.

I. Idiotism is—1st. Either born with the subject of it, or appears as soon as the reasoning faculties should begin to expand.

Depends on defects in memory and judgment.

2d. It is established upon great defects of the memory, and much greater of the judgment, though this is not much attended to.

Prone to mischief.

3d. Idiots are in general prone to mischief, or to actions over which reason seems to have very little command.

Insensible to evacuations.

4th. They have not a proper command over the evacuation of fæces and urine, and drivel at the mouth.

Health.

5th. They have generally strong and hearty constitutions.

Aspect peculiar.

6th. They have a peculiar aspect, which describes a vacancy of thought and inattention to any engagement.

Inarticulation.

7th. They have little use of speech, and articulate very incoherently.

II. Insane persons are either furious or melancholic, both of which acknowledge a great imbecility of the mental faculties, and which are derived from hereditary constitutions, attention of mind, violent passions, the terrors of a false religion, immoderate use of venery, poisons of the narcotic kind, some preceding disorders, the suppression of evacuations, indigestible aliments, a sedentary life, &c. But they differ in the following particulars.

Insanity,
cause of.

1st. The furiously insane are naturally of angry and violent dispositions, in the prime of youth, and of a plethoric constitution, and tense fibre.

Furious
signs of violent
disposition.

2d. They lose all their natural delicacy of manners, and become furious, ungovernable, and are particularly affected by pride, anger, hatred, and revenge, and very often intemperate lust.

Subject to
passions.

Refusal of
food.

3d. They refuse their food, and yet preserve their strength; they scarcely ever sleep, are continually shifting their ideas from one thing to another, bear the cold with incredible patience, and are not easily affected by medicines.

Peculiar
look.

4th. They have a peculiar look with their eyes, descriptive of violent anger, mixed with a glariness, like that of drunken persons, their eye-lids are constantly vibrating, and their hands, and sometimes the whole body, they keep in motion.

Melancholic.

Melancholy persons are,

Phlegmatic.

1st. Naturally dull, slowly learning, and easily forgetting, and are sad and melancholy, of a phlegmatic temperament and relaxed fibre.

Fearful, &c.

2d. When the disorder seizes them they become abject, fearful, fond of solitude, prone to anger, changeable in their opinions and desires, but fixing their attention upon a single object.

3d. The belly is constipated; the urine is made in small quantities; the abdomen is distended with wind; a sharp acrid matter is discharged by vomiting; the pulse moves very slowly; the aliment is devoured with greediness; the imagination is perverted so, as that they are persuaded that they are made of glass, china, &c. and lastly, and worst of all, they are induced to put a period to their existence.

Constricted
in bowels,
&c.

4th. Their eyes have a dull, heavy, and stupid look; they seldom move, but continue in one posture a very long time.

Aspect dull.

CHAP. VIII.

OF IMPOSTORS.

Various
causes of im-
position.

THERE are various causes which induce men to feign disorders to which the human body is subject, and with such fictions to impose often upon a court of judicature, or at least a civil magistrate. To this they are induced from fear, from bashfulness, or from lucre. Should they be submitted to a physician upon such an occasion, he can only judge from the symptoms of the disease, and determine by their presence and absence. But there are many cases where artful people, by a specious tale, and by feigning disorders, where much is to be known from their own confession, may cause a good deal of difficulty to discover the

truth. Let him then attend to the following circumstances.

1st. All the phœnomena which evidently appear in the subject at the time of examination, together with such as may be related by the sick person, or the standers by, are to be carefully and maturely weighed.

Physician should consider the phœnomena.

2d. An account is to be taken of the urine, age, pulse, hereditary disposition, way of living, condition of the person, and the disorders to which he has been subject.

Take account of natural appearances.

3d. The questions which are to be put to the sick person, or the bystanders, are to be so framed as to confound them.

Confound the subject.

4th. The pretended sick person is to be visited frequently and when he least expects it.

Frequently visited.

5th. Enquiry is to be made whether such causes as generally produce the feigned disease have previously presented themselves.

Enquire into causes.

Diseases
feigned.

There are many diseases which may be feigned, particularly by a person who has before suffered from them, and especially if they be devoid of fever, and depend upon his own relation; yet there are but a few which are generally objects of imposition. These are epilepsy, melancholy, foolishness, possession by evil spirits, and fascinations.

Epilepsy.

I. A feigned epilepsy may be known from a real one,

1st. When the sick person does not fall to the ground very suddenly.

2d. When the face is not livid, nor the lips pale, nor is there any change made in the colour and real form of the face.

3d. When the patient is soon roused by sternutatories, or burning coals applied to the hands.

4th. When the nails do not appear livid.

5th. When the pulse is not altered.

6th. When at the end of the paroxysm the patient does not fall into a profound sleep.

7th. When he does not complain of a dulness of sensation, forgetfulness, a swimming of the head, great weakness, and thirst.

II. A melancholy that is feigned Melancholy.
may be known by the absence of those symptoms mentioned in the last chapter.

III. We may conclude that foolishness is fictitious, when the person at Foolishness.
any time appears rational: for persons afflicted in this manner are not furious as madmen, nor thoughtful as the melancholy, but speak confusedly, neglect themselves, and sing and talk like children.

IV. Possessions by evil spirits, as Possession.
they constitute no real disorder, can

never be feigned; the pretences therefore of such persons will not be detected by physicians.

Fascinations.
ons.

V. The same may be said of incantations, fascinations, &c.

CHAP. IX.

ON THE MEANS OF PRESERVING THE
PUBLIC HEALTH.

THE general health of the public, which is of so much consequence, especially in large towns, calls loudly for the attention of the magistrate, who should exert every nerve to preserve and support it. This is best done by frequently consulting physicians of the first eminence, concerning the proper means to be embraced; and it would be highly useful if they were to be vested with proper authorities, and put in practice any scheme of this sort which they might think advantageous to the general service.

An object of
consideration.

How best
executed.

The health of the community seems

in the best way of being preserved, when the following particulars are observed; and it is no small matter to see them regularly put in execution.

1st. When every thing which may tend to injure the public health is properly prevented or averted.

2d. When care is taken that the sick have every assistance to remove the disease with which they are afflicted, or at least to mitigate its rage.

By averting
the causes of
disease.

3d. When contagious and epidemical disorders are guarded against, and the spread of them, when they do prevail, prevented.

By purifying
the air.

I. The causes which are injurious to the health of the community may be averted,

1st. By preserving the air as much as possible, from the effects of putrefaction, which must be done by removing all kinds of putrid bo-

dies, both animal and vegetable; for vegetables in this corrupt state are more offensive, or at least as much so, and consequently equally pernicious with animals. The lay-stalls of butchers should always be situated at the extremities of towns, and large cess-pools should be made, covered with earth, to receive the blood and offal meat. Butchers likewise should be punished for keeping their meat till it be too stale for use. It is not only improper upon account of the smell, but poor people, by reason of the reduced price, are induced to purchase it, and thus contribute to produce unwholesome diseases.

The water also of towns should be carried off, and not suffered to stagnate in the streets. It is generally putrid in itself, but much more so when it becomes a recep-

tacle for all kinds of filth. Hence we see that most towns which are not accommodated with common sewers, are very unhealthy. The last thing to be considered under this head are the burying grounds, which should always be removed to some distance from a town.

By whole-
some provi-
sions.

2d. The next means for removing the causes of injuries to towns, &c. is, by taking care that the corn be not of an unwholesome and putrid nature; that the flesh of animals be not diseased; that the fruits be properly ripened; that the wine be not poisoned, nor the beer foul and vapid; and that all vegetables of a deleterious quality, be not admitted to be sold.

By good wa-
ter.

3d. By taking care that the water which is drank be tolerably pure, or free from any mineral substances, which may be prejudicial to health.

This is not always easily ascertained, and will require a chemical analysis.

4th. By regulating the use of the still, and taking care that too much fermented liquors be not prepared.

By regulating the use of spirits.

5th. By providing a sufficient quantity of wholesome food for the use of the poor.

By quantity of food.

6th. By suppressing the common stews, or at least regulating them in such a manner, as that the disorders now peculiar to such places, and the common effects of riot and drunkenness be as much as possible prevented. In a moral light, no vice can be tolerated by the civil power; but in a physical view, we should certainly prevent many of the deleterious effects of the venereal disease, if not in time eradicate it, by having the brothels under the eye of the magistrate, who could appoint in-

Suppressing stews.

spectors under a licence, who should regularly make their report, and confine the subjects of it in some well regulated hospital. If any way then could be thought of, which should avoid the encouragement of vice, and yet admit of such an inspection, it would no doubt be of very great benefit to society.

Confining
the insane.

7th. By insane persons being properly confined and provided for.

Destroying
mad ani-
mals.

8th. By destroying mad animals; and when such are roving about, taking care that others are not suffered to go loose; but confining them in yards, or other places within walls, &c. I do not think it proper to tie them up, as by their uneasiness and watchfulness, they may bring on them the disorders we would wish to prevent.

Suppressing
quacks.

9th. By suppressing as much as

possible all mountebanks and quacks,* and other pretenders to the practice of physic. No one can tell how much they injure society by violent medicines, the effects of which they do not see, they may introduce some fatal

* Many years ago a tax was laid upon quack medicines in England, which, it was presumed, would rather tend to suppress the sale of such articles; the contrary, however, has been found to be the effect: for every quack now professes that his medicine has the sanction of government; and thus is the public more easily deluded. The regular practitioners of medicine can alone judge of the mischief which is occasioned by the indiscriminate and improper use of quack medicines, sometimes by their powerful properties actually injuring the constitution, sometimes by preventing the timely use of better remedies. But the complaints of the regulars on these points are generally slighted, because they are considered as interested in procuring the suppression of quackery.

disease; and, by inefficacious ones, they prevent the effects of those which are proper.

Preventing
irregular
practition-
ers.

10th. By preventing apothecaries, midwives, &c. from practice, unless properly qualified.

Preserving
foundlings.

11th. By taking care that foundling infants, or others who may be deserted by their parents, be taken care of, and educated at the public expence.

Regulating
the sale of
drugs,

12th. By preventing any persons from selling drugs who are not bred to the business of an apothecary or druggist, or do not understand the nature of medicines.

And shops.

13th. By regulating the shops of those who sell drugs, so that the more active medicines, such as vomits and purges, emmenagogues, and the mineral acid spirits, be not promiscuously arranged with the rest, but be kept in some private drawers, or in an inner room, to which no one should

have access but the master. At the same time, particular care should be taken of the labels, so that they make distinct marks, &c.

14th. That it be enjoined midwives and surgeons to call to their assistance the most able physicians, in cases of danger; and that for this purpose, physicians accommodate their fees to the abilities of the patient, so that all may receive the benefit of their advice.

Promoting
consulta-
tions.

15th. By midwives preserving the live child by a dissection, should the mother unfortunately die during the pains of labour.

Cæsarean
operation.

16th. By guarding against the contagious disorders which often arise among the horned and other cattle.

Preventing
diseases of
cattle.

II. The best care is taken that the diseases of the sick be as speedily as possible removed,

Diseases are
removed.

1st. When physicians of great knowledge and the most liberal educa-

By providing
proper phy-
sicians.

tion are provided to order medicines, and illiterate and immoral men are not suffered to obtrude themselves on the public.

Public hos-
pitals.

2d. When public hospitals are established, and so conducted as to accommodate all the sick poor who may offer.

Surgeons
and apotheca-
ries.

3d. When surgeons and apothecaries, and midwives who are skilful in this business, are constituted by the public to execute their part of the business, which they undertake with carefulness and assiduity.

Visiting
shops.

4th. When the apothecaries' shops are occasionally visited by the physicians, to see that their drugs are of the best quality, and provided in sufficient quantity for the exigencies of the sick; that their bottles and other vessels be preserved clean, and fit to contain the ingredients deposited in them: that the medicines be preserved in a proper place to pre-

serve them from injury; and that the shopmen or apprentices be industrious, sober, and fitted for their business.

III. The next thing to be attended to is, by what means contagious and epidemic diseases are to be prevented and removed. These are of two kinds, what is called the plague, or any other disease of the same nature, though less deleterious.

Contagious disorders remedied

I. The plague is a disease of so alarming a nature, that every precaution should be taken by magistrates to prevent its access.

Of the plague; rules for regulating it.

The following seem to comprehend the principal regulations necessary to be observed.

1st. The purification of the air is to be studied, and ever thing put in execution that can promote this end. Some have proposed, for this purpose, the explosion of great guns, the lighting up of fires, &c. These can only

By purification of air.

have effect in rarifying the air, as heat is found to contribute to promote this disease, as described by Doctor Mead. The church bells, for the same purpose, are frequently to be rung, and the greatest cleanliness in the streets, and all public places, is to be observed. Besides this, sulphur and pitch, &c. may be burnt in the open places, and vinegar may be evaporated in the chambers and insides of houses, as well as the fumigation of juniper and other woods be kept up.

Forming
lines.

2d. Lines are to be formed, which are not to be transgressed by the infected, nor by the healthy; at the same time, proper houses are to be allotted for those who are attacked with the disease, and others for the healthy part of the family, where the disorder prevails.

Commerce
forbidden.

3d. All commerce with countries, where the disease is prevalent, is to

be avoided; nay, some punishment should be inflicted on those who transgress this rule. It is an object of too much consequence to be neglected, the lives of so many thousands depending on it.

4th. Vessels which come from such countries are to be driven from the harbour where they attempt to enter, and should be obliged to unlade their goods, and properly ventilate them in some uninhabited island. I do not think the usual manner in which quarantines are performed by ships in harbour, are by any means adequate to the purpose. Were the plague really on board any such ships, forty or sixty days, no nor any time would be sufficient to prevent the disease, unless the goods were properly ventilated; bale goods being known to preserve the infection for many years: but, besides this, it is impossible to

Vessels not
to enter har-
bour.

keep the superior officers of a ship from leaving it, and flying to their domestic mansions to repose themselves after a long and tedious voyage. The only remedy is, to appoint a place for unlading and ventilating.

Appropriating physicians, &c.

5th. Physicians and surgeons, and ministers, are to be appropriated to visit the sick in the plague, and no others, lest the infection may be conveyed by them to sound persons. The same rule is to be observed with regard to midwives.

Providing hospitals.

6th. Hospitals are to be provided for the poor who may be sick of this disease; but every connection between them and their friends should be prevented.

Burying the bodies.

7th. The dead bodies are to be buried as soon as possible; and here a suspension should be made of the law against burying in any thing

but woollen: nay that should be forbidden, as it is a powerful retainer of infection. Linen here should be preferred.

8th. Every thing which is capable of retaining infection, as the cloaths of the deceased, and the furniture of the room, should be buried. This is preferable to burning.* Those things which retain infection the most, are, all sorts of woollen cloths, silks, cottons, linens, the skin of animals, hemp, and flax, &c.

Cloaths, &c.
burying.

9th. The food of those who are not infected at such a time, should be principally of vegetables, and of

Regulating
food of
healthy.

* This may be doubted, as there is reason to believe that the infection may be retained in the buried cloaths for many years. Variolous matter, received upon cotton, and kept in a phial, has been known to preserve its power of communicating infection after a period of *nineteen years*.

those which contain the acid salt pretty strongly, together with all sorts of fruits. The chewing and smoaking of tobacco may also be recommended. But the best preservative is a mind free from care and anxiety, together with a very strict attention to cleanliness and free ventilation.

Similar diseases.

II. In diseases which are less extensive than the plague, but still highly infectious, and sometimes dangerous; the following should be regarded.

1st. Physicians should study the nature of these remedies appropriated to them, and consider with care what are most likely to remove them.

2d. The poor are to be moved into hospitals, and placed in wards by themselves.

3d. The sick, even in private families, should be separated from those who are healthy.

4th. The healthy should live upon a spare diet, nor indulge to excess either in wine or venereal pleasures: the air they breathe should, if possible, be purified.

5th. Chewing tobacco and other herbs, and other preservatory medicines, should be used.

6th. Flowers growing in pots should be introduced into sick rooms, as well as aromatic herbs. This should be done likewise in courts of judicature, where it is feared that the gaol distemper prevails.

the health should live upon a
 more diet not indulging in
 what is called the venereal phantoms
 the air they breathe should be pure
 they should not be
 in the morning tobacco and other
 herbs and other pernicious
 things should be avoided
 in the evening
 should be abstained from
 as well as unclean habits
 should be done likewise in case of
 whatever other it is desired that
 the patient should prevail

ON THE
UNCERTAINTY
OF
THE SIGNS OF MURDER
IN THE CASE OF
Bastard Children:

BY THE LATE
WILLIAM HUNTER, M. D. F. R. S.
&c. &c.

TO THE
Members of the Medical Society.

GENTLEMEN,

IN the course of the present year, one of our friends, distinguished by rank, fortune, and science, came to me upon the following occasion: In the country, he said, a young woman

was taken up, and committed to jail to take her trial, for the supposed murder of her bastard child. According to the information which he had received, he was inclined to believe, from the circumstances, that she was innocent; and yet, understanding that the minds of the people in that part of the country were much exasperated against her, by the popular cry of *a cruel and unnatural* murder, he feared, though innocent, she might fall a victim to prejudice and blind zeal. What he wished, he said, was to procure an unprejudiced inquiry. He had been informed that it was a subject which I had considered in my lectures, and made some remarks upon it which were not perhaps sufficiently known, or enough attended to; and his visit to me was, to know what these remarks were. I told him what I had commonly said upon that question. He thought some of the observations so material, that

he imagined they might sometimes be the means of saving an innocent life: and if they could upon the present occasion do so, which he thought very possible, he was sure I would willingly take the trouble of putting them upon paper. Next day I sent them to him in a letter, which I said he was at liberty to use as he might think proper. Some time afterwards he told me, that he had great pleasure in thanking me for the letter, and telling me that the trial was over; that the unfortunate young woman was acquitted, and that he had reason to believe that my letter had been instrumental. This having been the subject of some conversation one evening at our medical meeting, you remember, Gentlemen, that you thought the subject interesting, and desired me to give you a paper upon it. I now obey your command.

In those unhappy cases of the death of bastard children, as in every action

indeed that is either criminal or suspicious, reason and justice demand an enquiry into all the circumstances; and particularly to find out from what views and motives the act proceeded. For, as nothing can be so criminal but that circumstances might be added by the imagination to make it worse; so nothing can be conceived so wicked and offensive to the feelings of a good mind, as not to be somewhat softened or extenuated by circumstances and motives. In making up a just estimate of any human action, much will depend on the state of the agent's mind at the time; and therefore the laws of all countries make ample allowance for insanity. The insane are not held to be responsible for their actions.

The world will give me credit, surely, for having had sufficient opportunities of knowing a good deal of female characters. I have seen the

private as well as the public virtues, the private as well as the more public frailties of women in all ranks of life. I have been in their secrets, their counsellor and adviser in the moments of their greatest distress in body and mind. I have been a witness to their private conduct, when they were preparing themselves to meet danger, and have heard their last and most serious reflections, when they were certain they had but a few hours to live.

That knowledge of women has enabled me to say, though no doubt there will be many exceptions to the general rule, that women who are pregnant without daring to avow their situation, are commonly objects of the greatest *compassion*; and generally are less criminal than the world imagine. In most of these cases the father of the child is really criminal, often cruelly so; the mother is weak, credulous, and deluded. Having obtained gratifica-

tion, he thinks no more of his promises; she finds herself abused, disappointed of his affection, attention, and support, and left to struggle as she can, with sickness, pains, poverty, infamy; in short, with compleat *ruin for life!*

A worthless woman can never be reduced to that wretched situation, because she is insensible to infamy; but a woman who has that respectable virtue, a high sense of shame, and a strong desire of being respectable in her character, finding herself surrounded with such horrors, often has not strength of mind to meet them, and in despair puts an end to a life which is become insupportable. In that case, can any man, whose heart ever felt what pity is, be *angry* with the memory of such an unfortunate woman for what she did? She felt life to be so dreadful and oppressive, that she *could not* longer support it. With that view of her situation, every

humane heart will forget the indiscretion or crime, and bleed for the sufferings which a woman must have gone through; who, but for having listened to the perfidious protestations and vows of our sex, might have been an affectionate and faithful wife, a virtuous and honoured mother, through a long and happy life; and probably that very reflection raised the last pang of despair, which hurried her into eternity. To think seriously of what a fellow creature must feel, at such an awful moment, must melt to pity every man whose heart is not steeled with habits of cruelty; and every woman who does not affect to be more severely virtuous and chaste than perhaps any good woman ever was.

It may be said that such a woman's guilt is heightened, when we consider that at the same time that she puts an end to her own life, she murders her child. God forbid that killing should

always be murder! It is only murder when it is executed with some degree of cool judgment, and wicked intention. When committed under a phrenzy from despair, can it be more offensive in the sight of God, than under a phrenzy from a fever, or in lunacy? It should therefore, as it must raise our horror, raise our pity too.

What is commonly understood to be the murder of a bastard child by the mother, if the real circumstances were fully known, would be allowed to be a very different crime in different circumstances.

In some (it is to be hoped *rare*) instances, it is a crime of the very deepest dye: it is a premeditated contrivance for taking away the life of the most inoffensive and most helpless of all human creatures, in opposition not only to the most universal dictates of humanity, but of that powerful instinctive passion which, for a wise and im-

portant purpose, the Author of our nature has planted in the breast of every female creature, a wonderful eagerness about the preservation of its young. The most charitable construction that could be put upon so savage an action, and it is to be hoped the fairest often, would be to reckon it the work of phrenzy, or temporary insanity.

But, as well as I can judge, the greatest number of what are called murders of bastard children, are of a very different kind. The mother has an unconquerable sense of shame, and pants after the preservation of character: so far she is virtuous and amiable. She has not the resolution to meet and avow infamy. In proportion as she loses the hope either of having been mistaken with regard to pregnancy, of being relieved from her terrors by a fortunate miscarriage, she every day sees her danger greater and nearer, and her mind more overwhelmed with terror and de-

spair. In this situation many of these women, who are afterwards accused of murder, would destroy themselves, if they did not know that such an action would infallibly lead to an inquiry, which would proclaim what they are so anxious to conceal. In this perplexity, and meaning nothing less than the murder of the infant, they are meditating different schemes for concealing the birth of the child; but are wavering between difficulties on all sides, putting the evil hour off, and trusting too much to chance and fortune. In that state often they are overtaken sooner than they expected; their schemes are frustrated; their distress of body and mind deprives them of all judgment, and rational conduct; they are delivered by themselves, wherever they happened to retire in their fright and confusion: sometimes dying in the agonies of childbirth, and sometimes, being quite exhausted, they faint away, and become

insensible of what is passing ; and when they recover a little strength, find that the child, whether still-born or not, is completely lifeless. In such a case, is it to be expected, when it could answer no purpose, that a woman should divulge the secret? Will not the best dispositions of mind urge her to preserve her character? She will therefore hide every appearance of what has happened as well as she can ; though if the discovery be made, that conduct will be set down as a proof of her guilt.

To be convinced, as I am, that such a case often happens, the reader would wish perhaps to have some examples and illustrations. I have generally observed, that in proportion as women more sincerely repent of such ruinous indiscretions, it is more difficult to prevail upon them to confess ; and it is natural. Among other instances which might be mentioned, I opened

the bodies of two unmarried women, both of them of irreproachable and unsuspected characters with all who knew them. Being consulted about their healths, both of them deceived me. One of them I suspected, and took pains to prevail with her to let me into the secret, if it was so; promising that I would do her the best offices in my power to help her out of the difficulties that might be hanging over her: but it was to no purpose. They both died of racking pains in their bowels, and of convulsions. Upon laying out of the dead bodies, in one of the cases, a dead child, not come to its full time, was found lying between the unhappy mother's limbs; and in the other, a very large dead child was discovered, only half born. Such instances will sufficiently shew what a patient and fixed resolution the fear of shame will produce. A young unmarried woman, having con-

cealed her pregnancy, was delivered during the night by herself. She was suspected; the room was searched, and the child was found in her box, wrapped up in wet clothes. She confessed that the child was her's, but denied the having murdered it, or having had an intention to do so. I opened the child with Mr. Pinkstan, of St. Alban's-street, and the lungs would not sink in water. Her account of herself was this: she was a faithful and favourite servant in a family, which she could not leave without a certainty of her situation being discovered; and such a discovery she imagined would be certain *ruin* to her for life. Under this anguish of mind she was irresolute, and wavering from day to day as to her plan of conduct. She made some clothes for the preservation of her child (a circumstance which was in her favour), and she hired a bed-room in an adjacent street, to be ready to

receive a woman in labour at a moment's notice. Her scheme was, when taken in labour, to have run out to that house, to be delivered by a midwife, who was to have been brought to her. She was to have gone home presently after, and to have made the best excuse she could for being out. She had heard of soldiers wives being delivered behind a hedge, and following the husband with the child in a short time after; and she hoped to be able to do as much herself. She was taken ill of a cholic, as she thought, in the night; put on some clothes, both to keep her warm, and that she might be ready to run out, if her labour should come on. After waiting some time, she suddenly fell into such racking pain and terror, that she found she had neither strength nor courage to go down stairs, and through the street, in that condition, and in the night. In despair she threw

herself upon the bed, and by the terror and anguish which she suffered, she lost her senses, and fainted. When she came to a little recollection, she found herself in a deluge of discharges, and a dead child lying by her limbs. She first of all attended to the child, and found that it was certainly dead. She lay upon the bed some time, considering what she should do; and by the time that there was a little daylight, she got up, put all the wet cloaths and the child into her box, put the room and bed into order, and went into it. The woman of whom she hired the room, and who had received a small sum of money as earnest, though she did not know who she was, swore to her person, and confirmed that part of her story. Mr. Pinkstan and I declared that we thought her tale very credible, and reconciled the circumstance of the swimming of the lungs, to the satisfaction of the

jury, as we shall hereafter do to the reader. She was acquitted; and I had the satisfaction of believing her to be innocent of murder.

In most of those cases we are apt to take up an early prejudice; and when we evidently see an intention of concealing the birth, conclude that there was an intention of destroying the child: and we account for every circumstance upon that supposition, saying, why else did she do so and so? And why else did she not do so and so? Such questions would be fair, and draw forth solid conclusions, were the woman supposed at the time to be under the direction of a calm and unembarrassed mind; but the moment we reflect that her mind was violently agitated with a conflict of passions and terror, an irrational conduct may appear very natural.

Allow me to illustrate this truth by a case. A lady, who, thank God! has

now been perfectly recovered many years, in the last months of her pregnancy, on a fine summer's evening, stepped out, attended by her footman, to take a little air on a fine new pavement at her own door, in one of our most even, broad, and quiet streets. Having walked gently to the end of the street, where there was a very smooth crossing place, she thought she would go over, for a little variety, and return towards her house, by walking along the other side of the street. Being heavy, and not unmindful of her situation, she was stepping very slowly and cautiously, for fear of meeting with any accident. When she had advanced a few steps in crossing the street, a man came up on a smart trot, riding on a cart, which made a great rattling noise. He was at a sufficient distance to let her get quite over, or to return back with great deliberation; and she would have been perfectly safe, if she had stood still. But

she was struck with a panic, lost her judgment and senses, and in the horror of and confusion between going on, or returning back, both of which she attempted, she crossed the horse at the precise point of time to be caught and entangled in the wheel, was thrown down, so torn and mashed in her flesh and bones, that she was taken up perfectly senseless, and carried home without the least prospect of a recovery. This lady was in the prime of life, living in affluence, beloved by her family, and respected by all the world. No imagination could suggest an idea of her intending to destroy herself; but if her situation in life at that time could have favoured such a supposition, we see in fact that the most unquestionable proof that she could have saved herself, either by going on, or by turning back, or by standing still, would have signified nothing towards proving that she had intended to put an end to her own life

and to that of her child. One shudders to think that innocent women may have suffered an ignominious death, from such equivocal proofs and inconclusive reasoning.

Most of these reflections would naturally occur to any unprejudiced person, and therefore upon a trial in this country, where we are so happy as to be under the protection of judges, who by their education, studies, and habits, are above the reach of vulgar prejudices, and make it a rule for their conduct to suppose the accused party innocent, till guilt be proved: with such judges, I say, there will be little danger of an innocent woman being condemned by false reasoning. But danger, in the cases of which we are now treating, may arise from the evidence and opinions given by physical people, who are called in to settle questions in science, which judges and jurymen are supposed not to know with accuracy.

In general I am afraid too much has been left to our decision. Many of our profession are not so conversant with science as the world may think: and some of us are a little disposed to grasp at authority in a public examination, by giving a quick and decided opinion, where it should have been guarded with doubt; a character which no man should be ambitious to acquire, who in his profession is presumed every day to be deciding nice questions upon which the life of a patient may depend.

To form a solid judgment about the birth of a new-born child, from the examination of its body, a professional man should have seen many new-born children, both still-born, and such as had outlived their birth a short time only: and he should have dissected, or attended the dissections of a number of bodies in the different stages of advancing putrefaction. I have often seen various common and natu-

ral appearances, both internal and external, mistaken for marks of a violent death. I remember a child which was found in a compressed state and globular form, and, like hardened dough, had retained all the concave impressions which had been made where any part of the skin and flesh had been pressed inwards. The jury had got an opinion that this moulding of the flesh could not have happened, except the infant had been put into that compressed state while it was alive. My anatomical employments enabled me to remove all their doubts about the fact. I offered to make the experiment before them, if they pleased: the child should be laid in warm water, till its flesh should become soft and pliable, as in a body just dead; then it should be compressed, and remain so till cold, and then they would see the same ef-

fect produced. They were satisfied, without making the trial.

In many cases, to judge of the death of a child, it may be material to attend accurately to the force of cohesion between the skin and the scarf-skin; and still more to be well acquainted with the various appearances of the blood settling upon the external parts of the body, and transuding through all the internal parts in proportion to the time that it has been dead, and to the degree of heat in which it has been kept.

When a child's head or face looks swoln, and is very red, or black, the vulgar, because hanged people look so, are apt to conclude that it must have been strangled. But those who are in the practice of midwifery know that nothing is more common in natural births, and that the swelling and deep colour go gradually off, if the

child lives but a few days. This appearance is particularly observable in those cases where the navel-string happens to gird the child's neck, and where its head happens to be born some time before its body.

There are many other circumstances to be learned by an extensive experience in anatomy and midwifery, which, for fear of making this paper prolix, and thence less useful, I shall pass over, and come to the material question, *viz.* in suspicious cases, how far may we conclude that the child was born alive, and probably murdered by its mother, if the lungs swim in water?

First.—We may be assured that they contain air. Then we are to find out if that air be generated by putrefaction.

Secondly.—To determine this question, we are to examine the other internal parts, to see if they be emphysematous, or contain air; and we

must examine the appearance of the air-bubbles in the lungs with particular attention. If the air which is in them be that of respiration, the air-bubbles will hardly be visible to the naked eye; but if the air-bubbles be large, or if they run in lines along the fissures between the component *lobuli* of the lungs, the air is certainly emphysematous, and not air which had been taken in by breathing.

Thirdly.—If the air in the lungs be found to be contained in the natural air-vesicles, and to have the appearance of air received into them by breathing, let us next find out if that air was not perhaps blown into the lungs after the death of the infant. It is so generally known that a child, born apparently dead, may be brought to life by inflating its lungs; that the mother herself, or some other person, might have tried the experiment. It might even have been done with a

tant question of all, *viz.*—If in the case of a concealed birth, it be clearly made out that the child had breathed, may we infer that it was murdered? Certainly not. It is certainly a circumstance like the last, which amounts only to suspicion. To prove this important truth to the satisfaction of the reader, it may be thought fit to assert the following facts, which I know from experience to be true, and which will be confirmed by every person who has been much employed in midwifery.

1. If a child makes but one gasp, and instantly dies, the lungs will swim in water as readily as if it breathed longer, and had then been strangled.

2. A child will very commonly breathe as soon as its mouth is born, or protruded from the mother; and in that case, may lose its life before its body be born, especially when there

happens to be a considerable interval of time between what we may call the birth of the child's head, and the protrusion of its body. And if this may happen where the best assistance is at hand, it is still more likely to happen when there is none; that is, where the woman is delivered by herself.

3. We frequently see children born, who, from circumstances in their constitution, or in the nature of the labour, are but barely alive; and after breathing a minute or two, or an hour or two, die in spite of all our attention. And why may not that misfortune happen to a woman who is brought to bed by herself?

4. Sometimes a child is born so weak, that if it be left to itself, after breathing or sobbing, it might probably die, yet may be roused to life by blowing into its lungs, applying warmth, and volatiles, rubbing it, &c.

most diabolical intention of bringing about the condemnation of the mother.

But the most dangerous and the most common error into which we are apt to fall, is this, *viz.* supposing the experiment to have been fairly made, and that we have guarded against every deception above mentioned, we may rashly conclude that the child was born alive, and therefore must probably have been murdered; especially in a case where the mother had taken pains, by secreting the child, to conceal the birth. As this last circumstance has generally great weight with a jury, I will only observe, that in fair equity, it cannot amount to more than a ground of suspicion, and therefore should not determine a question, otherwise doubtful, between an acquittal, or an ignominious death.

Here let us suppose a case, which every body will allow to be very possible. An unmarried woman, be-

coming pregnant, is striving to conceal her shame, and laying the best scheme that she can devise, for saving her own life, and that of the child, and at the same time concealing the secret; but her plan is at once disconcerted, by her being unexpectedly and suddenly taken ill by herself, and delivered of a dead child. If the law punishes such a woman with death for not publishing her shame, does it not require more from human nature than weak human nature can bear? In a case so circumstanced, surely the only crime is the having been pregnant, which the law does not mean to punish with death; and the attempt to conceal it by fair means should not be punishable by death, as that attempt seems to arise from a principle of virtuous shame.

Having shewn that the secreting of the child amounts at most to suspicion only, let us return to the most impor-

&c. But in the cases which we have been considering, such means of saving life are not to be expected.

5. When a woman is delivered by herself, a strong child may be born perfectly alive, and die in a very few minutes for want of breath; either by being upon its face in a pool made by the natural discharges, or upon wet cloaths; or by the wet things over it collapsing and excluding air, or drawn close to its mouth and nose by the suction of breathing. An unhappy woman delivered by herself, distracted in her mind, and exhausted in her body, will not have strength or recollection enough to fly instantly to the relief of the child. To illustrate this important truth, I shall give a short case.

A lady, at a pretty distant quarter of the town, was taken with labour pains in the night-time. Her nurse,

who slept in the house, and her servants, were called up, and I was sent for. Her labour proved hasty, and the child was born before my arrival. The child cried instantly, and she felt it moving strongly. Expecting every moment to see me come into her bed-chamber, and being afraid that the child might be some way injured, if an unskilful person should take upon her the office of a midwife upon the occasion, she would not permit the nurse to touch the child, but kept herself in a very fatiguing posture, that the child might not be pressed upon, or smothered. I found it lying on its face, in a pool which was made by the discharges; and so completely dead, that all my endeavours to rouse it to life proved vain.

These facts deserve a serious consideration from the public; and as I am under a conviction of mind, that,

when generally known, they may be the means of saving some unhappy and innocent women, I regard the publication of them as an indispensable duty.

Read, July 14, 1783.

FINIS.

which generally shows they may be
the means of saving some unhappy
and innocent women. I regard the
publication of them as an indispens-
able duty.

Yours truly
John Jay

Received of the Honble the
Secretary of the Board of
Education the sum of
Twenty Dollars on the
15th day of June 1795

FINIS

Printed and Sold by
J. M. Smith, at the
Office of the Board of
Education, in the
City of New York.

May, 1818.

Modern Publications,

AND

NEW EDITIONS

OF

VALUABLE STANDARD WORKS,

PRINTED FOR

LONGMAN, HURST, REES, ORME, AND BROWN,

LONDON.

Periodical Publications and Fine Arts.

A PICTURESQUE VOYAGE ROUND GREAT BRITAIN; containing a Series of Views illustrative of the Character and prominent Features of the Coast. By WILLIAM DANIELL, A.R.A.

Vol. I. with 28 Plates, consists of a Voyage from the Land's End, Cornwall, to Holyhead. Imperial 4to. Price 7l. 10s. half-bound, Morocco back.—Vol. II. including 28 Plates, comprises a Voyage from Holyhead to Portpatrick, Price 7l. 10s. half-bound.—Vol. III. contains 42 Plates, and embraces the Western Highlands and Isles of Scotland, a district highly interesting in many Points of View, and peculiarly rich in Subjects for Graphic Illustration. Price 7l. 10s. half-bound.

The 1st No. of Vol. 4, will be published on the 1st of August.

The CATHEDRAL ANTIQUITIES of ENGLAND; or, an Historical, Architectural, and Graphical Illustration of the English Cathedral Churches. By JOHN BRITTON, F. S. A.

Price 12s. per Number in Medium 4to.; and 1l. in Imperial 4to. Fifteen Numbers are already published. Each Size to class with the *Architectural Antiquities of Great Britain*. The first portion of the above Work contains a History and Illustration of Salisbury Cathedral, with 31 Engravings, medium 4to. 3l. 3s. imperial 4to. 5l. 5s. crown folio 8l. super-royal folio 11l. boards.—The 2d Portion comprises the Cathedral of Norwich, with 25 Plates. Medium 4to. Price 2l. 10s.; imperial 4to. 4l. 4s.; crown folio 6l. 10s.; super-royal folio 8l. 16s. Bds. The 3d Portion comprises Winchester Cathedral, medium 4to. 3l. 3s.; imperial 4to. 5l. 5s.; crown folio 8l.; super-royal folio 11l. Boards. The two latter sizes correspond with the new Edition of Dugdale's Monasticon.

No. I. and II. of York Cathedral are just published.

EXCURSIONS through the **COUNTIES of ESSEX, SUFFOLK, and NORFOLK;** comprising brief Historical and Topographical Delineations of the City of Norwich, and every Town and Village; together with Descriptions of the Residences of the Nobility and Gentry, Remains of Antiquity, and every other most interesting Object of Curiosity. Forming a complete Guide for the Traveller and Tourist through the three Counties. Illustrated with *Three Hundred Engravings*. Each County will be complete in 12 Numbers, and form a distinct Work. To be comprised in Thirty-six Monthly Numbers, each to contain at least Eight Engravings and 36 Pages of Letter-press, Price 2s. 6d. 12mo.; or 4s. in 8vo. with Proof Impressions of the Plates.

Arrangements are made to publish the other Counties of England, Scotland, and Ireland, on the same Plan.

Just published, Nos. I. II. III. and IV. of ESSEX, NORFOLK, and SUFFOLK.

The ANNUAL BIOGRAPHY and OBITUARY, with Silhouette Portraits.—Comprehending the Biography of all the principal Characters. Interspersed and illustrated with a Variety of original Letters, Documents, and Anecdotes; and under the Head of neglected Biography, is given a Variety of curious and genuine Anecdotes. Vol. I. Price 15s. Boards.

Vol. 2, for 1818, is just published, price 15s. boards.

The ARCHITECTURAL ANTIQUITIES of GREAT BRITAIN, displaying a Series of Select Engravings, representing the most beautiful, curious, and interesting ancient Edifices of this Country, with an Historical and Descriptive Account of each Subject. By JOHN BRITTON.

In 4 Vols. Medium 4to. 21l.; or Imperial 4to. 32l. half-bound.

The **EDINBURGH REVIEW** and **CRITICAL JOURNAL**,
Nos. 1 to 58. Price 6s. each.

The **BORDER ANTIQUITIES** of **ENGLAND** and **SCOTLAND**;
comprising Specimens of Architecture and Sculpture, and other Vestiges of former
Ages. Accompanied by Descriptions. Together with Illustrations of remarkable
Incidents in Border History and Tradition. By **WALTER SCOTT**, Esq.

In Two handsome Volumes, containing nearly **ONE HUNDRED ENGRAVINGS**, Price 9l.
Medium Quarto; 13l. 13s. Imperial Quarto; or with India Paper Proofs of the
Plates, 27l. Boards.

The **BRITISH THEATRE**; or, a **COLLECTION** of **PLAYS**,
which are acted at the Theatres Royal, Drury-Lane, Covent-Garden, and Hay-
market, printed under the Authority and by Permission of the Managers, from the
Prompt-books, with Biographical and Critical Remarks. By **Mrs. INCHBALD**.

With elegant Engravings. In 25 Vols. royal 18mo. Price 6l. 16s. 6d.; or on fine
Paper, with Portraits and Proof Impressions of the Plates, Price 13l. in Bds.

The **MODERN THEATRE**; or, a **COLLECTION** of **SUC-
CESSFUL MODERN PLAYS**, acted at the Theatres Royal, London. Printed from
the Prompt-books by Authority of the Managers. Selected by **Mrs. INCHBALD**.

In 10 Vols. royal 18mo. to correspond with Inchbald's British Theatre, and Collec-
tion of Farces. Price 2l. 10s. and on fine Paper, Price 3l. 15s. Bds.

A **COLLECTION** of **FARCES**, and **OTHER AFTERPIECES**,
which are acted at the Theatres Royal, Drury-Lane, Covent-Garden, and Hay-
market. Printed under the Authority of the Managers from the Prompt Books.
Selected by **Mrs. INCHBALD**. In 7 Vols. royal 18mo. Price 1l. 15s. Bds. or on fine
Paper, with Portraits, Price 2l. 12s. 6d.

The **EDINBURGH GAZETTEER**; or, **GEOGRAPHICAL
DICTIONARY**; comprising a complete Body of Geography, Physical, Political,
Statistical, and Commercial.

Handsomely printed in 8vo. (double columns) and containing twenty-five
Sheets of Letter-press. Parts I. and II. Price 9s. each.

To be completed in 12 Parts.

A **NEW GENERAL ATLAS**, constructed from the latest Au-
thorities. By **A. ARROWSMITH**, Hydrographer to the Prince Regent.

Exhibiting not only the Boundaries and Divisions, but also the Chains of Moun-
tains and other Geographical Features of all the known Countries in the World;
comprehended in 53 Maps, from original Drawings, engraved in the best Style of
the Art by **SIDNEY HALL**.

In Royal Quarto, Price 1l. 16s. half-bound, or with the Maps coloured, 2l. 12s. 6d.

The **CIVIL ARCHITECTURE** of **VITRUVIUS**, comprising
those Books of the Author which relate to the Public and Private Edifices of the
Ancients. Translated by **WILLIAM WILKINS**, jun. M. A. F. A. S. Fellow of
Gonvil and Caius College, Cambridge, Member of the Society of Dilettanti, and
Author of Antiquities of Magna Græcia. With Forty Engravings, by **W. LOWRY**.
Complete in Two Parts. Price 6l. 6s. in Elephant 4to. or 12l. 12s. royal folio, Bds.

A **SERIES** of **ENGRAVINGS** to illustrate the Works, Days, and
Theogony of **HESTOD**, from Compositions of **JOHN FLAXMAN**, R. A. P. S.

In Folio, Price 2l. 12s. 6d. Bds.

ILLUSTRATIONS of the **ISLAND** of **STAFFA**, in a Series of
Views, accompanied by a Topographical and Geological Description. By **WILLIAM
DANIELL**, A. R. A. Price 2l. half-bound.

Travels, Geography, and Topography.

TRAVELS through some **PARTS** of **GERMANY**, **POLAND**,
MOLDAVIA and **TURKEY**. By **ADAM NEALE**, M. D. late Physician to the British
Embassy at Constantinople, and Physician to the Forces. In 4to. illustrated by
ELEVEN coloured Plates, price £2. 2s.

HISTORICAL ACCOUNT of DISCOVERIES and TRAVELS in AFRICA, from the earliest Ages to the present Time. By the late JOHN LEYDEN, M.D. Completed and enlarged; with Views of the present State of that Continent. By HUGH MURRAY, F.R.S.E.
Handsomely printed in two Volumes, Octavo, illustrated by Maps, Price 1*l.* 7*s.* Bds.

PERSONAL OBSERVATIONS, made during the **PROGRESS** of the **BRITISH EMBASSY THROUGH CHINA**, and on its Voyage to and from that Country, in the Years 1816 and 1817.

By CLARKE ABEL, Physician and Naturalist to the Embassy.

Under the Sanction of the Honourable East India Company, and dedicated, by Permission, to the Right Hon. Lord Amherst. In One Vol. 4to. illustrated by Maps and other Engravings,

This Work comprises the Author's **PERSONAL NARRATIVE** of the most interesting Events which befel the **BRITISH EMBASSY** from the Time of its leaving England to its Return; together with his Remarks on the *Geology, Natural History, and Manners* of the Countries visited by it.

MEMOIRS on EUROPEAN and ASIATIC TURKEY, from the Manuscript Journals of Modern Travellers in those Countries. Edited by ROBERT WALPOLE, A. M. In One Vol. Quarto. Illustrated with Plates. Price 3*l.* 3*s.* Bds.

This Work contains Manuscript Journals, and Remarks on Parts of Greece, Asia Minor, Syria, and Egypt, by late Travellers, and the Statistics, Antiquities, Natural History, and Geography of those Countries are elucidated by Drawings and Observations, which have never yet been before the Public.

A DESCRIPTION of the PEOPLE of INDIA; with particular Reference to their Separation into Casts; and the various Singularities of Customs, Habits, and Observances, which distinguish them from all other Nations: taken from a diligent Observation and Study of the People, during a Residence of many Years amongst their various Tribes, in unrestrained Intercourse and Conformity with their Habits and Manner of Life. By the ABBE J. A. DUBOIS, Missionary in the Mysore. In One Volume, Quarto. Price 2*l.* 2*s.* Bds.

TRAVELS in the IONIAN ISLES, in ALBANIA, THESSALY, and GREECE, in 1812 and 1813. Together with an Account of a Residence at Joannina, the Capital and Court of Ali Pasha; and with a more cursory Sketch of a Route through Attica, the Morea, &c. By HENRY HOLLAND, M.D. F.R.S. &c. &c. In 4to. illustrated by a Map and other Engravings, 3*l.* 3*s.* Bds.

The **PERSONAL NARRATIVE of M. DE HUMBOLDT'S TRAVELS** to the Equinoctial Regions of the New Continent: during the Years 1799-1804. Translated by HELEN MARIA WILLIAMS, under the immediate Inspection of the Author. Vol. 3, with Maps and Plates. Price 1*l.* 1*s.* Bds.

The First Two Volumes, Price 18*s.* Boards.

By the same Author,

The **RESEARCHES**, comprising the Text of the Atlas Pittoresque, and a Selection of the Plates, 2 Vols. 1*l.* 11*s.* 6*d.*

A POLITICAL ESSAY on the KINGDOM of NEW SPAIN, with Maps, in 4 Vols. 8vo. Price 3*l.* 9*s.* 6*d.* Bds.

TRAVELS in BRAZIL, during a Residence of Six Years in that Country. Illustrated by Plates of Costumes. By HENRY KOSTER.
Second Edit. in 2 Vols. 8vo. 1*l.* 4*s.* bds.

A GENERAL COLLECTION of VOYAGES and TRAVELS; forming a complete History of the Origin and Progress of Discovery, by Sea and Land, from the earliest Ages to the present Time; to which is added, a Critical Catalogue of Books of Voyages and Travels; and an ample Index to the Work.

By JOHN PINKERTON, Author of Modern Geography, &c. &c.

With nearly 200 Engravings, in 17 vols. 4to. Price 37*l.* 16*s.* Boards.

A SECOND JOURNEY through PERSIA to CONSTANTINOPLE, between the Years 1810 and 1816. With a Journal of the Voyage by the BRAZILS and BOMBAY, to the PERSIAN GULPH; together with an Account of the Proceedings of his Majesty's Embassy under his Excellency Sir Gore Ouseley, Bart. K.S.L. By JAMES MORIER, Esq. late his Majesty's Secretary of Embassy, and Minister Plenipotentiary to the Court of Persia. In royal 4to. with Maps, coloured Costumes, and other Engravings, from the Designs of the Author.

A NARRATIVE of an OVER-LAND JOURNEY from INDIA, performed in the Course of the present Year, through the principal Cities of Persia, part of Armenia, Georgia, over the Caucasus into Russia, through the Territory inhabited by the Cossacks of the Don, to Warsaw, and thence through Berlin to Hamburgh. By LIEUTENANT-COLONEL JOHNSON. In one vol. 4to. accompanied with Engravings, illustrative of the more remarkable Antiquities in those Countries, the Costume of the Inhabitants, and other interesting Subjects, from Drawings executed in the Course of the Journey.

MODERN GEOGRAPHY. A Description of the Empires, Kingdoms, States, and Colonies; with the Oceans, Seas, and Isles, in all Parts of the World; including the most recent Discoveries and Political Alterations. Digested on a new Plan. By JOHN PINKERTON. The Astronomical Introduction by the Rev. S. Vince, A. M. F. R. S. and Plumian Professor of Astronomy, and Experimental Philosophy, in the University of Cambridge. With numerous Maps, drawn under the Direction, and with the latest Improvements of Arrow-smith, and engraved by Lowry. To the whole are added, a Catalogue of the best Maps and Books of Travels and Voyages, in all Languages; and an ample Index. A new Edition. In 2 vols. 4to. Price 5*l.* 5*s.* Bds.

A NEW MODERN ATLAS. By JOHN PINKERTON. The Maps are engraved in the Size called Colombier, from Drawings executed under Mr. Pinkerton's Eye; with all the Advantages afforded by the latest Improvements in Geographical Precision; and they exhibit the utmost Beauty the State of the Arts can admit. In 20 Numbers, each containing Three Maps. Price One Guinea.

JOURNAL of a RESIDENCE in INDIA. By MARIA GRAHAM.

Second Edition. In 4to. Price 1*l.* 11*s.* 6*d.* in Boards, illustrated by Engravings.

LETTERS on INDIA. By MARIA GRAHAM, Author of a Journal of a Residence in India. With Plates. In 8vo. - Price 1*l.* Boards.

A VISIT to PARIS in 1814. Being a Review of the Moral, Political, Intellectual, and Social Condition of the French Capital. By JOHN SCOTT. The 5th Edit. In 8vo. Price 12*s.* Bds.

PARIS REVISITED in 1815, by way of Brussels, including Observations on the late Military Events, and a View of the Capital of France when in the Occupation of the English and Prussian Troops. By JOHN SCOTT. The Third Edition. In 8vo. Price 12*s.* Boards.

An ACCOUNT of the KINGDOM of CAUBUL, and its Dependencies in Persia, Tartary, and India; comprising a View of the Afghaun Nation, and a History of the Dooraunee Monarchy. By the Hon. MOUNTSTUART ELPHINSTONE, of the Honourable East India Company's Service; Resident at the Court of Poona; and late Envoy to the King of Caubul. In 1 vol. 4to. illustrated by Two Maps and 14 Plates, 13 of which are coloured. Price 3*l.* 13*s.* 6*d.* boards.

TRAVELS in BELOOCHISTAN and SINDE; accompanied by a Geographical and Historical Account of those Countries. By LIEUTENANT HENRY POTTINGER, of the Honourable East India Company's Service; Assistant to the Resident at the Court of his Highness the Peishwa; and late Assistant and Surveyor with the Missions to Sinde and Persia. In 4to. with a large Map of the Country, &c. Price 2*l.* 5*s.* boards.

TRAVELS of ALI BEY, in Morocco, Tripoli, Cyprus, Egypt, Arabia, Syria, and Turkey, between the Years 1802 and 1807. WRITTEN BY HIMSELF. In 2 Volumes 4to. Illustrated by nearly One Hundred Maps and Plates. Price 6*l.* 6*s.* boards.

TRAVELS to discover the SOURCE of the NILE in the Years 1768, 1769, 1770, 1771, 1772, and 1773.

By JAMES BRUCE, of KINNAIRD, Esq. F.R.S.

The Third Edition, corrected and enlarged; to which is prefixed, the Life of the Author, by ALEXANDER MURRAY, D.D. Professor of Oriental Languages in the University of Edinburgh. In 7 vols. 8vo. with an eighth volume, in royal 4to. consisting of Engravings, chiefly by Heath, Price 6*l.* 6*s.* in Boards.

TRAVELS to the SOURCE of the MISSOURI RIVER, and across the American Continent to the Pacific Ocean. Performed by Order of the Government of the United States in the Years 1804, 1805, and 1806. By CAPTAINS LEWIS and CLARKE. Published from the Official Report, and illustrated by a Map of the Route, and other Maps. In 3 Vols. 8vo. 3d Edit. Price 2*l.* 2*s.* Boards.

"Not often does it fall to the lot of Reviewers to make a report on volumes of such interest as the present may boast."—*Monthly Review*, July, 1815.

A JOURNEY to ROME and NAPLES, performed in 1817; Giving an Account of the present State of Society in Italy; and containing Observations on the FINE ARTS. By HENRY SASS, Student of the Royal Academy of Arts. In 1 vol. 8vo. Price 12*s.* Bds.

TRAVELS in CANADA and the UNITED STATES of AMERICA, 1816 and 1817. By LIEUT. FRANCIS HALL, 14th Light Dragoons, H.P. late Military Secretary to General Wilson, Governor in Canada.

SPANISH AMERICA, or an **HISTORICAL, DESCRIPTIVE,** and **GEOGRAPHICAL ACCOUNT** of the **DOMINIONS** of **SPAIN** in the **WESTERN HEMISPHERE**, continental and insular. Illustrated by a Map of Spanish North America, and the West India Islands; a Map of Spanish South America, and an Engraving representing the comparative Altitudes of the Mountains in those Regions. By **R. H. BONNYCASTLE**, Captain in the Corps of Royal Engineers.

History and Biography.

MEMOIRS of **JOHN, DUKE** of **MARLBOROUGH**; with his Original Correspondence, collected from the Family Records at Blenheim, and other authentic Sources. By **WILLIAM COXE**, M.A. F.R.S. F.S.A. Archdeacon of Wilts, and Rector of Bemerton. Vol. I. in 4to. illustrated with Portraits, Maps, and Military Plans, Price 3*l.* 3*s.*

The Work will be completed in Three Volumes; all of which will be published during the present Year.

UNIVERSAL HISTORY, in Twenty-four Books. Translated from the German of **JOHN MULLER**. In 3 Vols. 8vo.

This Work is not a mere compendium of Universal History, but contains a Philosophical Inquiry into the Moral, and more especially the Political Causes which have given rise to the most important Revolutions in the History of the Human Race.

MEMOIRS of the **COURT** of **QUEEN ELIZABETH**. By **LUCY AIKIN**. In 2 vols. 8vo. with a Portrait from the rare Print by Crispin de Passe. Price £1. 5*s.* boards.

The present Work is composed upon the Plan of uniting with the personal History of a celebrated female Sovereign, and a connected Narration of the Domestic Events of her Reign, a large Portion of Biographical Anecdote, private Memoir, and Traits illustrative of the Manners, Modes of Thinking, and Literature of an interesting Period of English History, original Letters, Speeches, and occasional Poems, are largely interspersed.

HISTORICAL SKETCHES of the **SOUTH** of **INDIA**. In an Attempt to trace the History of Mysoor. From the Origin of the Hindoo Government of that State, to the Extinction of the Mahomedan Dynasty in 1799; founded chiefly on Indian Authorities, collected by the Author while officiating for several Years as Political Resident at the Court of Mysoor. By **COLONEL MARK WILKS**. Complete in 3 Vols. Price 7*l.* half-bound, Russia backs, and lettered. Also may be had separate, Vols. II. and III. Price 4*l.* 4*s.* Boards.

"This instructive Work is entitled to much public attention, gratitude, and approbation. From documents hitherto unexplored, it brings into circulation many important facts concerning the History of Mysoor during the last two centuries." *Monthly Review*.

MEMOIRS of the late **Mrs. ELIZABETH HAMILTON**; with a Selection from her Correspondence, and other unpublished Writings. By **MISS BENDER**. In 2 vols. 8vo. with a Portrait after Raebairn, price 1*l.* 1*s.* bds.

LETTERS from the **ABBÉ EDGEWORTH** to his **FRIENDS**, written between the Years 1777 and 1807; with Memoirs of his Life, including some Account of the late Roman Catholic Bishop of Cork, Dr. Moylan, and Letters to him from the Right Hon. Edmund Burke, and other Persons of Distinction. By the **REV. THOMAS R. ENGLAND**. In 8vo. Price 8*s.* boards.

The **HISTORY** of **BRAZIL**. By **ROBERT SOUTHEY** Esq. Poet Laureate, Member of the Royal Spanish Academy. In 4to. Vol. I. Price 2*l.* 2*s.* and Vol. II. Price 2*l.* 10*s.* Bds. *The concluding Volume is in the Press.*

MEMOIRS of the **KINGS** of **SPAIN** of the **HOUSE** of **BOURBON**, from the Accession of Philip the Fifth to the Death of Charles the Third, 1700—1788. With an Introduction relative to the Government and State of Spain. Drawn from original Documents, and secret Papers, many of which have never before been published. By **WILLIAM COXE**, M.A. F.R.S. F.S.A.

The 2d edition. In 5 vols. 8vo. Price 3*l.* Boards. A few Copies in 3 vols. 4to. Price 6*l.* 6*s.* In Imperial 4to. 12*l.* 12*s.* Boards.

The **HISTORY** of **ENGLAND**, Vol. 1, from the Norman Conquest to the Accession of Edward the First. In 4to. Price 1*l.* 16*s.* boards. Vol. 2, containing the Reigns of Edward I. Edward II. Edward III. Richard II. Henry IV. and Henry V.—Also the History of Religion in England.—The History of English Poetry, and of the English Language and Prose Literature. By **SHARON TURNER**, F.S.A. In 4to. Price 2*l.* 2*s.* boards.

THE LIFE of JAMES the SECOND, KING of ENGLAND, &c. collected out of Memoirs writ of his own Hand, together with the King's Advice to his Son, and His Majesty's Will.

Published by command of his Royal Highness the Prince Regent, from the Original Stuart Manuscripts, which had been carefully preserved at Rome in the Family of the Pretender, and are now deposited in Carlton House.

By the Rev. J. S. CLARKE, LL.B. F.R.S.

Historiographer to the King, Chaplain to the Household, and Librarian to the Prince Regent. In 2 large Vols. 4to. Price 6*l.* 6*s.* in boards.

* * This Work comprises the History of Great Britain and France, from the latter Part of the Reign of Charles I. to the close of King William's Reign.

SPEECHES of the late Right Hon. EDMUND BURKE. In 4 Vols. 8vo. Price 2*l.* 16*s.*

FOX'S SPEECHES. In 6 Vols. 8vo. Price 4*l.* 4*s.* Boards.

WINDHAM'S SPEECHES. In 3 Vols. 8vo. Price 1*l.* 16*s.* Bds.

PITT'S SPEECHES. In 3 Vols. 8vo. Price 1*l.* 16*s.* Boards.

SPEECHES of the Right Hon. J. P. CURRAN, 8vo. Price 12*s.*

SPEECHES of CHARLES PHILLIPS, Esq. delivered at the Bar, and on various Public Occasions, in Ireland and England. In 1 Vol. 8vo. Price 7*s.* Bds.

This Volume is edited by Mr. Phillips himself, and is the only Publication of his Speeches authorized by him.

Medicine, Surgery, and Chemistry.

CONVERSATIONS on CHEMISTRY. In which the Elements of that Science are familiarly explained and illustrated by Experiments. In 3 Vols. 12mo. with Plates by Lowry. The 5th Edition. Price 14*s.* Boards.

A PRACTICAL DICTIONARY of POPULAR MEDICINE, comprehending the different Branches of the Healing Art, so far as they relate to the Preservation of the Health of Man, &c. By RICHARD REECE, M. D. A new Edition, in 8vo. with Additions. Price 16*s.* Boards.

The MEDICAL GUIDE, for the Use of Families and Young Practitioners, or Students in Medicine and Surgery; being a complete System of modern and domestic Medicine; to which are added a Family Dispensatory, and a Copious Appendix; containing explicit Instructions for the ordinary Management of Children, and such Cases or Accidents which require immediate Aid, &c.

By RICHARD REECE, M. D. Fellow of the Royal College of Surgeons.
The Eleventh Edition. In 8vo. Price 10*s.* 6*d.* Boards.

DELINEATIONS of the CUTANEOUS DISEASES, comprised in the Classification of the late Dr. Willan; including the greater Part of the Engravings of that Author, in an improved State, and completing the Series as intended to have been finished by him. By T. BATEMAN, M.D. F.L.S. Physician to the Public Dispensary, and to the London House of Recovery.

In One Vol. 4to. with upwards of 70 coloured Plates, Price 12*l.* 12*s.* Bds.

The Series of New Engravings, representing those Diseases which should have been figured in the subsequent Parts of Dr. Willan's unfinished Work, may be had by the Possessors of that Work, separate, Price 7*l.* Bds.

An ESSAY on the DISORDERS of OLD AGE, and on the Means for prolonging Human Life. By ANTHONY CARLISLE, F.R.S. F.S.A. F.L.S. &c. &c. In 8vo. printed on a large Type, Price 5*s.*

"Every stage of human life, except the last, is marked out by certain defined limits; old age alone has no precise and determinate boundary."—*Cicero on Old Age.*

An ESSAY on the Chemical History and Medical Treatment of Urinary Calculi. By ALEXANDER MARCET, M.D. F.R.S. one of the Physicians to Guy's Hospital. In Royal 8vo. with 10 Plates, comprising upwards of 20 Figures, many of which are beautifully coloured, Price 18*s.* Bds.

Diversity.

SERMONS. By the late Rev. WALTER BLAKE KIRWAN, Dean of Killala. With a Sketch of his Life. In 1 Vol. 8vo. With a Portrait of the Author. Price 12s. Boards.

The **HISTORY OF ALL RELIGIONS**, with Explanations of the Doctrines and Order of Worship, as held and practised by all the Denominations of professing Christians. By JOHN BELLAMY. The Second Edition, with considerable Alterations and Additions, in 12mo. Price 6s.; and in 8vo. fine paper, and hot-pressed. Price 10s. 6d. Bds.

RURAL PHILOSOPHY; or, Reflections on Knowledge, Virtue, and Happiness; chiefly in reference to a Life of Retirement in the Country. By ELY BATES, Esq. The 6th Edition. In 8vo. Price 9s. in Boards.

SCRIPTURAL ESSAYS, adapted to the Holidays of the Church of England: with Meditations on the prescribed Services. By Mrs. WEST, Author of Letters to a Young Man, &c. In 2 Vols. 12mo. Price 12s. Bds.

SERMONS, on the Nature, Office, and Character of Jesus Christ. By the Rev. T. BOWDLER, A.M.

Education.

THE CLASSICAL ENGLISH LETTER WRITER; or, **EPISTOLARY SELECTIONS**; designed to improve Young Persons in the Art of Letter Writing, and in the Principles of Virtue and Piety. With Introductory Rules and Observations on Epistolary Composition; and Biographical Notices of the Writers from whom the Letters are selected. In 12mo. Price 4s. 6d. Boards, or 5s. Bound.

LETTERS on ENGLISH HISTORY: for the Use of Schools. By J. BIGLAND. In 12mo. Price 6s. Bds.

An **INTRODUCTION to the GEOGRAPHY of the NEW TESTAMENT**; comprising a Summary Chronological and Geographical View of the Events recorded respecting the Ministry of our Saviour; principally designed for the Use of young Persons. By LANT CARPENTER, LL.D. In 12mo. with Maps. The 4th Edition. Price 4s. Boards.

An **ABRIDGMENT of Mr. PINKERTON'S MODERN GEOGRAPHY**; and Professor VINCE'S **ASTRONOMICAL INTRODUCTION**. In one large Vol. 8vo. with a Selection of the most useful Maps, accurately copied from those in the larger Work. The 4th Edition. Price 18s. Bound.

ROSE and EMILY; or, **SKETCHES of YOUTH**. By Mrs. ROBERTS, Author of Moral Views; or, the Telescope for Children. The 2d Edition. In 12mo. Price 5s. 6d. Bds.

AN INTRODUCTION to the STUDY of BOTANY. By J. E. SMITH, M.D. F.R.S. P.L.S. The 3d Edition. In 8vo. with 15 Plates, 14s. in boards, or, with the Plates coloured, Price 17. 8s. Boards.

THE NEW PANTHEON; or, an Introduction to the Mythology of the Ancients, in Question and Answer. Compiled principally for the Use of Females. By W. JILLARD HORT. The 4th Edition, with Plates. Price 5s. in Boards.

"The new Pantheon is scrupulously delicate; it is also well arranged, and well written." *Ecler. Rev.*
 "It would be unjust not to recommend this work as an elegant and useful companion to young persons of both sexes." *Gent. Mag.*

A COMPENDIUM of GEOGRAPHY, for the Use of Schools, Private Families, and those who study this necessary Science. By RICHMAL MANGNALL, Author of "Historical Questions." In 12mo. Price 9s. Bound.

HISTORICAL and MISCELLANEOUS QUESTIONS for the Use of Young People; with a Selection of British and General Biography, &c. By RICHMAL MANGNALL. The 12th Edition. In 12mo. Price 5s. Bound.

A CONCISE VIEW of the CONSTITUTION of ENGLAND.

By GEORGE CUSTANCE. The 2d Edition, corrected and enlarged. In 8vo. Price 10s. 6d. in Boards.

"We most sincerely congratulate the Public on the appearance of a work which we can safely recommend as well fitted to supply a chasm in our system of public instruction."

A NEW TREATISE on the USE of the GLOBES; or, a Philosophical View of the Earth and Heavens; comprehending an Account of the Figure, Magnitude, and Motion of the Earth; with the natural Changes of its Surface, caused by Floods, Earthquakes, &c. designed for the Instruction of Youth.

By THOMAS KEITH. In 12mo. Price 6s. in Boards.

TRAVELS at HOME, and VOYAGES by the FIRE-SIDE; for the Instruction and Entertainment of Young Persons.

Complete in 5 vols. 18mo. (including Europe, Asia, Africa, and America,) Price 15s. half-bound.

Vols. 3 to 5, containing Asia, Africa, and America, may be had separate, Price 9s. half-bound.

An EXPLANATORY PRONOUNCING DICTIONARY of the FRENCH LANGUAGE, in French and English, wherein the exact Sound and Articulation of every Syllable are distinctly marked. By L'ABBE TARDY, Late Master of Arts in the University of Paris. A new Edition, revised. In 12mo. Price 7s. Bound.

RULES for ENGLISH COMPOSITION; and particularly for THEMES; designed for the Use of Schools, and in Aid of Self-Instruction.

By JOHN RIPPINGHAM. 2d Edit. In 12mo. Price 4s. in Boards.

THE ART of EXTEMPORE PUBLIC SPEAKING, including a Course of Discipline for obtaining the Faculties of Discrimination, Arrangement, and Oral Discussion; designed for the Use of Schools, and Self-Instruction.

By JOHN RIPPINGHAM. 2d Edit. In 12mo. Price 6s. Boards.

A FAMILIAR INTRODUCTION to the ARTS and SCIENCES, for the Use of Schools and young Persons; containing a general Explication of the Fundamental Principles and Facts of the Sciences; divided into Lessons, with Questions subjoined to each, for the Examination of Pupils.

By the Rev. J. JOYCE, Author of Scientific Dialogues, &c.

In one vol. 12mo. Price 6s. in Boards, illustrated with Copper-plates by Lowry, and Wood-cuts by Branston.

"We do not hesitate to recommend this as the most useful and satisfactory epitome of human knowledge, which has yet been published."—*Anti-Jacobin Review*.

RULES for PRONOUNCING and READING the FRENCH LANGUAGE. By the Rev. ISRAEL WORSLEY. In 12mo. Price 2s. Bound.

"This little volume, with a title so unassuming, has the rare merit of performing more than it promises. We hope that this little work will meet what it deserves, extensive approbation and adoption."—*Eclectic Review*, Nov. 1814.

A FRENCH DELECTUS; or, SENTENCES and PASSAGES, collected from the most esteemed FRENCH AUTHORS, designed to facilitate a Knowledge of the French Tongue. Arranged under the several Heads of the Parts of Speech, together with promiscuous Passages and Idioms.

By the Rev. ISRAEL WORSLEY. In 12mo. Price 4s. Bound.

A SEQUEL to the POETICAL MONITOR; consisting of Pieces, Select and Original, adapted to improve the Minds and Manners of young Persons. By ELIZABETH HILL. 2d Edition. Price 3s. 6d. Bound.

Poetry.

LALLA ROOKH, an ORIENTAL ROMANCE.

By THOMAS MOORE, Esq. Sixth Edition. In 8vo. Price 14s.

Also just published, in 8vo. Price 12s.

ILLUSTRATIONS of the POEM, engraved by Charles Heath, from Paintings by R. WESTALL, R. A.

. A few of each may be had in Quarto.

The LORD of the ISLES, a Poem. By WALTER SCOTT, Esq.

The 4th Edit. In 8vo. Price 14s.; and in royal 8vo. 11. 8s. Boards.

The FUDGE FAMILY in PARIS, in a Series of Letters, from Phil. Fudge, Esq.—Miss Bidy Fudge—Mr. Bob Fudge, &c. Edited by THOMAS BROWN, the Younger, Author of the Two-Penny Post Bag. 6th Edit. In Foolscap 8vo. Price 7s. 6d. Boards.

ROKEBY. A Poem. In Six Cantos. By WALTER SCOTT, Esq. In 8vo. (the 6th Edition,) printed by Ballantyne, Price 14s. Boards, and in royal 8vo. Price 1*l.* 8s. Boards.

THE LADY of the LAKE. A Poem. In Six Cantos. By WALTER SCOTT, Esq. The 10th Edition. In 8vo. Price 14s. in Boards.

THE LAY of the LAST MINSTREL. A Poem, with Ballads and Lyrical Pieces. By WALTER SCOTT, Esq. The 13th Edit. In 8vo. Price 10s. 6d. Bds.

BALLADS and LYRICAL PIECES. By WALTER SCOTT, Esq. The 4th Edition. In one vol. 8vo. Price 7s. 6d. in Boards.

The MINSTRELSY of the SCOTTISH BORDER; consisting of Historical and Romantic Ballads, collected in the Southern Counties of Scotland; with a few of a modern Date, founded on Local Tradition. With an Introduction and Notes, by the Editor. By WALTER SCOTT, Esq. The 5th Edition. In 3 Vols. 8vo. Price 1*l.* 16s. Bds.

The DRAGON KNIGHT; a Poem, in Twelve Cantos. By SIR JAMES BLAND BURGESS, BART. Elegantly printed in 1 Vol. 8vo. Price 12s. Boards.

RODERICK, the LAST of the GOTHs, a Tragic Poem. By ROBERT SOUTHEY, Esq. Poet Laureate, and Member of the Royal Spanish Academy. 4th Edition. In 2 Vols. foolscap 8vo. Price 16s. Bds.

JOAN of ARC. An Epic Poem. By ROBERT SOUTHEY. In 2 Vols. foolscap 8vo. The 4th Edit. Price 16s. in Bds.

MINOR POEMS. By ROBERT SOUTHEY. In 3 Vols. foolscap 8vo. Price 18s. in Bds.

THALABA the DESTROYER. A Metrical Romance, with copious Notes. By ROBERT SOUTHEY. The 3d Edition, in 2 Vols. foolscap 8vo. Price 16s. in Bds.

MADOC. A Poem. By ROBERT SOUTHEY. In 2 Vols. foolscap. The 3d Edition. Price 16s. in Bds.

A few Copies of the Quarto Edition may be had, 2*l.* 2s.

The CURSE of KEHAMA. A Poem. By ROBERT SOUTHEY. The 3d Edit. In 2 Vols. 12mo. Price 14s. in Bds.

The POET'S PILGRIMAGE to WATERLOO; by ROBERT SOUTHEY, Esq. In 12mo. the Second Edition, illustrated by Eight Engravings, Price 10s. 6d. Bds.

The LAY of the LAUREATE: CARMEN NUPTIALE. By ROBERT SOUTHEY, Esq. Poet Laureate. In foolscap 8vo. Price 4s. Bds.

The PLEASURES of HOPE, and other POEMS. By THOMAS CAMPBELL. With four Engravings, foolscap 8vo. Price 7s. Bds.

GERTRUDE of WYOMING, or the PENNSYLVANIAN COTTAGE, and other Poems. To which is added, an ODE to the MEMORY of BURNS. By THOMAS CAMPBELL.

In foolscap 8vo. the Sixth Edition, with a fine Engraving, Price 9s. Bds.

The WHITE DOE of RYLSTONE; or, the FATE of the NORTONS, a Poem. By WILLIAM WORDSWORTH. In 4to. Price 1*l.* 1s. Bds.

The EXCURSION, being a Portion of the RECLUSE. A POEM. By WILLIAM WORDSWORTH. In 4to. Price 2*l.* 2s. Boards.

POEMS, including LYRICAL BALLADS, and Miscellaneous Pieces, with Additions. By WILLIAM WORDSWORTH.

In 2 Vols. 8vo. Price 1*l.* 8s. Boards.

The **WORLD BEFORE THE FLOOD**, a Poem, in Ten Cantos. With other occasional Pieces. By **JAMES MONTGOMERY**. In foolscap 8vo. The 3d Edition. Price 9s. Boards.

The **WANDERER of SWITZERLAND**, and other Poems. By **JAMES MONTGOMERY**. The 6th Edit. In 1 Vol. foolscap 8vo. Price 6s. Bds.

The **WEST INDIES**, and **OTHER POEMS**. By **JAMES MONTGOMERY**. In one Vol. foolscap 8vo. Fourth Edition. Price 6s. in Boards.

PSYCHE; or, the **LEGEND of LOVE**: and other Poems. By the late Mrs. **HENRY TIGHE**. With a Portrait of the Author, engraved by Scriven. The 4th Edition, 8vo. Price 12s. in Boards.

BRIDAL of TRIERMALIN; or, the **VALE of ST. JOHN**: In Three Cantos. In 12mo. (the Fourth Edition) Price 7s. 6d. Bds.

"This Poem, which is ushered to the world in a form the most unassuming, is distinguished by excellencies of no ordinary rank."—*Quarterly Review*, July, 1813.

HAROLD the DAUNTLESS, a Poem in Six Cantos. By the Author of "The **BRIDAL of TRIERMALIN**;" to which Work it forms a Second Volume. In foolscap 8vo. Price 7s. 6d. Bds.

Novels, Romances, &c.

ROB ROY. A Novel. By the **AUTHOR of WAVERLEY, &c.** In Three Volumes, 12mo. Price 1*l.* 4s.

The **KNIGHT of St. JOHN**. A Romance. By Miss **ANNA MARIA PORTER**, Author of the *Recluse of Norway, &c. &c. &c.* In 3 Vols. 12mo. Price 1*l.* 1s. Bds.

The **PASTOR'S FIRE-SIDE**. A Novel. By Miss **JANE PORTER**, Author of *Thaddeus of Warsaw, Scottish Chiefs, &c.* The 2d Edition, in 4 Vols. 12mo. Price 1*l.* 11s. 6d. Bds.

The **WELSH MOUNTAINEER**; a Novel. By **CATHERINE HUTTON**. In 3 Vols. 12mo. Price 16s. 6d. Bds.

The **ANTIQUARY**. A Novel. By the **AUTHOR of "WAVERLEY, and GUY MANNERING."** In 3 Vols. 12mo. a new Edition. Price 1*l.* 4s. Bds.

GUY MANNERING; or, the **ASTROLOGER**. By the **AUTHOR of WAVERLEY**. The 3d Edit. In 3 Vols. 12mo. Price 1*l.* 1s. Bds.

The **BACHELOR and the MARRIED MAN**; or, the **EQUILIBRIUM of the "BALANCE of COMFORT,"** a Novel. In 3 Vols. 12mo. 16s. 6d. Bds.

TALES of REAL LIFE. By Mrs. **OPIE**. In 3 vols. 12mo. The 3d Edition. Price 18s. in Bds.

DUTY, a Novel. By the late Mrs. **ROBERTS**, Author of "*Rose and Emily.*" Interspersed with Poetry, and preceded by a Character of the Author. By Mrs. **OPIE**. In 3 Vols. 12mo. Price 12s. Boards.

VALENTINE'S EVE. A Novel. By Mrs. **OPIE**. In 3 Volumes, 12mo. Price 1*l.* 1s. Boards.

The **SCOTTISH CHIEFS**. A Romance. By Miss **JANE PORTER**, Author of "*Thaddeus of Warsaw,*" and "*Remarks on Sir Philip Sidney's Aphorisms.*" In 5 Vols. 12mo. The 3d Edition. Price 1*l.* 15s. Bds.

THADDEUS of WARSAW. A Novel. By Miss **JANE PORTER**. The 7th Edition. In 4 Vols. Price 18s. Bds.

"Thaddeus is a work of genius, and has nothing to fear at the candid bar of taste: he has to receive the precious meed of sympathy from every reader of unsophisticated sentiment and genuine feeling."—*Imp. Rev.*

"This work has more merit than can be ascribed to the crowd of productions of this class, and inculcates virtuous and magnanimous sentiments."—*Mon. Rev.*

The RECLUSE of NORWAY. By Miss ANNA MARIA PORTER.
The 2d Edition. In 4 Vols. 12mo. Price 1*l.* 4*s.* Bds.

CORRECTION. A Novel. In 3 vols. 12mo. Price 1*l.* 1*s.* boards.

"The seducing images of luxury, of splendour, and of homages, of power and independence, are too seldom counteracted by the only preservative—a religious education. The world is too generally entered upon as a scene of pleasure instead of trial; as a theatre of amusement, not action."—*Hannah More.*

SKETCHES of CHARACTER; or, SPECIMENS of REAL LIFE. Three Vols. The 3d Edit. Price 15*s.* Bds.

VARIETIES of LIFE; or, CONDUCT and CONSEQUENCES. A Novel. By the AUTHOR of SKETCHES of CHARACTER. In 3 Vols. 12mo. Price 18*s.* Bds.

The HISTORY of FICTION; being a CRITICAL ACCOUNT of the most celebrated *Prose Works of Fiction*, from the earliest Greek Romances to the Novels of the present Age. By JOHN DUNLOP.

The Second Edition, enlarged. In 3 Vols. post 8vo. Price 2*l.* 2*s.* Bds.

The PHYSIOGNOMIST. A Novel. In 3 Vols. 12mo. By the Author of "The BACHELOR and the MARRIED MAN."

SOPHIA; or, the DANGEROUS INDISCRETION.

A Novel. In 3 Vols. 12mo.

LIONEL; or, the LAST of the PEVENSEYS. A Novel.

In 3 Vols. 12mo.

NEW TALES. By Mrs. OPIE. In 3 Vols. 12mo.

Gardening, &c.

ELEMENTS of AGRICULTURAL CHEMISTRY, in a Course of Lectures for the Board of Agriculture. By Sir HUMPHRY DAVY, LL. D. F. R. S. L. and E. M. R. I. The 2d Edition. In 8vo. illustrated with 10 Engravings, by Lowry, Milton, and Scott. Price 18*s.* in Boards.

A TREATISE on the CULTURE and MANAGEMENT of FRUIT TREES, in which a new Method of Pruning and Training is fully described. To which is added, a new and improved Edition of "Observations on the Diseases, Defects, and Injuries, in all Kinds of Fruit and Forest Trees; with an Account of a particular Method of Cure." Published by Order of Government. By WILLIAM FORSYTH, F. A. S. and F. S. A. & c. The 5th Edit.

The GARDENER'S CALENDAR; or, Monthly Directory of Operations in every Branch of Horticulture. The 3d Edition. In one large vol. 8vo. Price 14*s.* Bds.

The VILLA GARDEN DIRECTORY; or, Monthly Index of Work to be done in Town and Villa Gardens, Parterres, &c. with Hints on the Treatment of Plants and Flowers kept in the Green Room, the Lobby, and the Drawing Room.

By WALTER NICOL.

The 2d Edition, much improved. In foolscap 8vo. Price 7*s.* 6*d.*

HINTS ADDRESSED to PROPRIETORS of ORCHARDS, and to GROWERS of FRUIT in general. By WILLIAM SALISBURY.

In one Vol. 12mo. with Plates. Price 6*s.* 6*d.*

The BOTANIST'S COMPANION; or, an Introduction to the Knowledge of Practical Botany, and the Uses of Plants, either growing wild in Great Britain, or cultivated for the Purposes of Agriculture, Medicine, Rural Economy, or the Arts, on a new Plan. By WILLIAM SALISBURY.

In 2 Vols. 12mo. Price 12*s.* Bds.

COMPENDIUM FLORÆ BRITANNICÆ. Auctore JACOBO EDUARDO SMITH, EQU. AUR. M. D. Societatis Linnæanæ Præside, &c. &c.

The Second Edition, corrected, and continued to the End of the Third Volume of the FLORA BRITANNICA, with all new-discovered Plants from the ENGLISH BOTANY, and References to that Work throughout. In 12mo. Price 7*s.* 6*d.* Bds.

The **CLASSES and ORDERS** of the **LINNÆAN SYSTEM** of **BOTANY**. Illustrated by 240 Plates of Select Specimens of Foreign and Indigenous Plants. In 3 Vols. royal 8vo. Price 4*l.* 16*s.* or with coloured Plates, 7*l.* 4*s.* Bds.

CONVERSATIONS on BOTANY, with Twenty Engravings.

In One Vol. 12mo. Price 7*s.* 6*d.* plain, or 10*s.* 6*d.* coloured.

The object of this Work is to enable young persons to acquire a knowledge of the vegetable productions of their native country; for this purpose the arrangement of Linnæus is briefly explained, and a native plant of each class (with a few exceptions) is examined, and illustrated by an Engraving; and a short Account is added of some of the principal foreign species.

Miscellaneous.

An INTRODUCTION to ENTOMOLOGY: or, Elements of the Natural History of Insects. Illustrated by coloured Plates.

By **WILLIAM KIRBY**, M.A. F.L.S. and **WILLIAM SPENCE**, Esq. F.L.S.

Vol. I. 3d Edition, enlarged and improved, Price 18*s.*—Vol. II. 2d Edition Price 18*s.*

This Work is intended as a general and popular history of Insects, and contains an account of the injuries they occasion, the benefits derived from them, the metamorphoses they undergo, their affection for their young, their various kinds of food, and the means by which they procure it, a description of their habitations, &c. &c.

SYSTEMATIC EDUCATION; or, **ELEMENTARY INSTRUCTION** in the various Departments of Literature and Science, with Practical Rules for studying each Branch of Useful Knowledge. By the Rev. **W. SHEPHERD**, the Rev. **LANT CARPENTER**, LL. D., and the Rev. **J. JOYCE**. Second Edit. In 2 vols. 8vo. illustrated with Plates by Lowry, &c. Price 1*l.* 11*s.* 6*d.* Bds.

RECREATIONS in MATHEMATICS, and **NATURAL PHILOSOPHY**.

First composed by **M. OZANAM**, of the Royal Academy of Sciences, &c. lately re-composed, and greatly enlarged, in a new Edition, by the celebrated **M. MONTUCLA**, and now translated into English, and improved with many Additions and Observations. By **CHARLES HUTTON**, LL. D. and F. R. S. &c. The Second Edition. In 4 Vols. 8vo. (with Plates) Price 3*l.* 3*s.* Bds.

CONVERSATIONS on POLITICAL ECONOMY; in which the Elements of that Science are familiarly explained. By the **AUTHOR** of "**CONVERSATIONS on CHEMISTRY**." The Second Edition, improved, in One large Vol. 12mo. Price 9*s.* Boards.

A SELECTION of CURIOUS ARTICLES from the **GEN-TLEMAN'S MAGAZINE**.

Containing,—1. Researches, Historical and Antiquarian—2. Ancient and Modern Literature, Criticism, and Philology—3. Philosophy and Natural History—4. Letters to and from eminent Persons—5. Miscellaneous Articles, including Anecdotes of extraordinary Persons, useful Projects and Inventions—6. Biographical Memoirs, Literary Anecdotes and Characters, Topographical Notices, &c.

By **JOHN WALKER**, LL.B. Fellow of New College, Oxford.

The 4th Edition. In 4 large Vols. 8vo. Price 2*l.* 12*s.* 6*d.*

A SYSTEM of MINERALOGY. By **ROBERT JAMESON**, Regius Professor of Natural History in the University of Edinburgh.

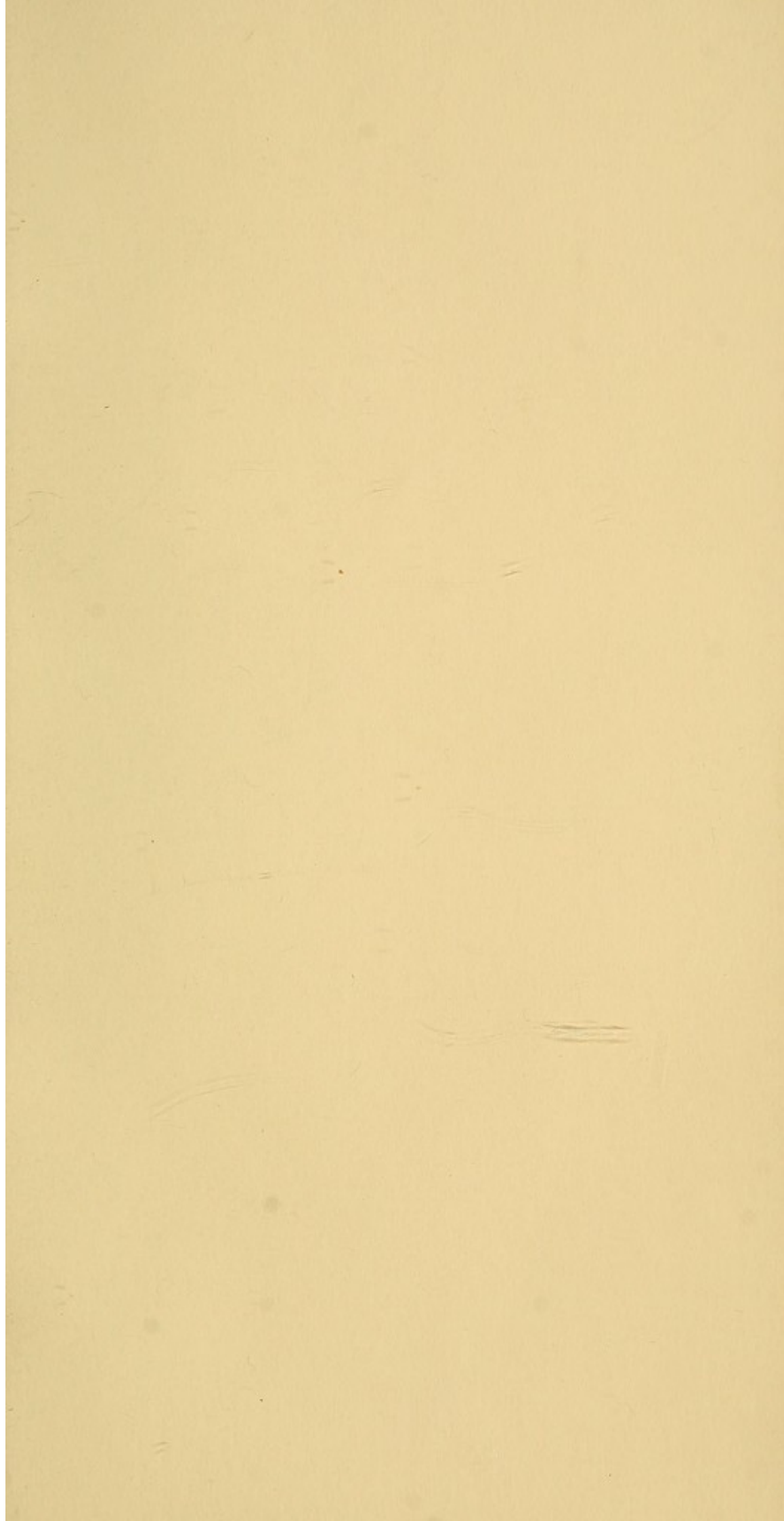
The *Second Edition*, with numerous Plates, illustrative of the various Crystallizations that occur in the Mineral Kingdom. In 3 large Volumes, 8vo. Price 2*l.* 12*s.* 6*d.* Boards.

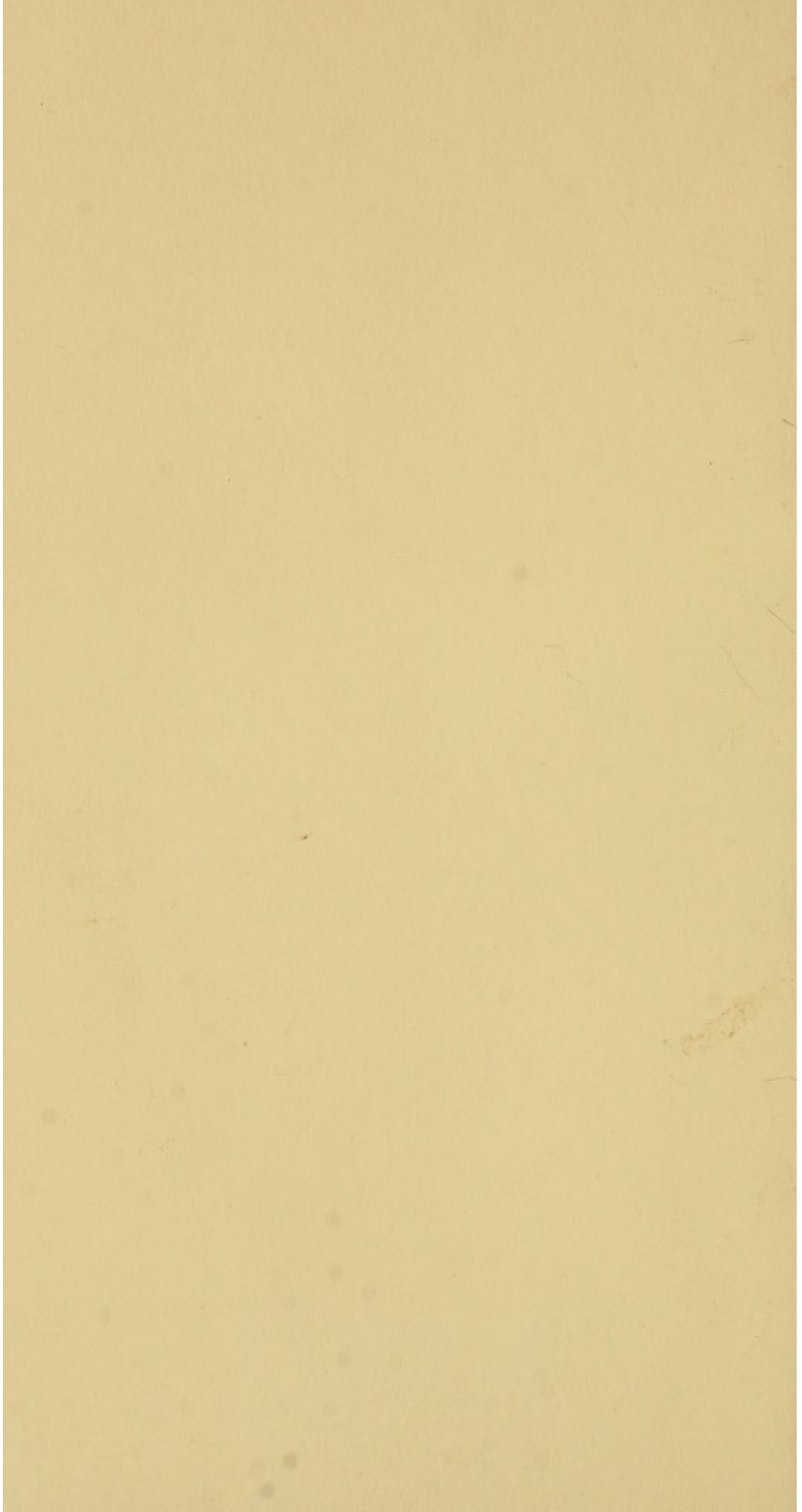
REMARKS on the ART of Making WINE, with Suggestions for the Application of its Principles to the Improvement of Domestic Wines.

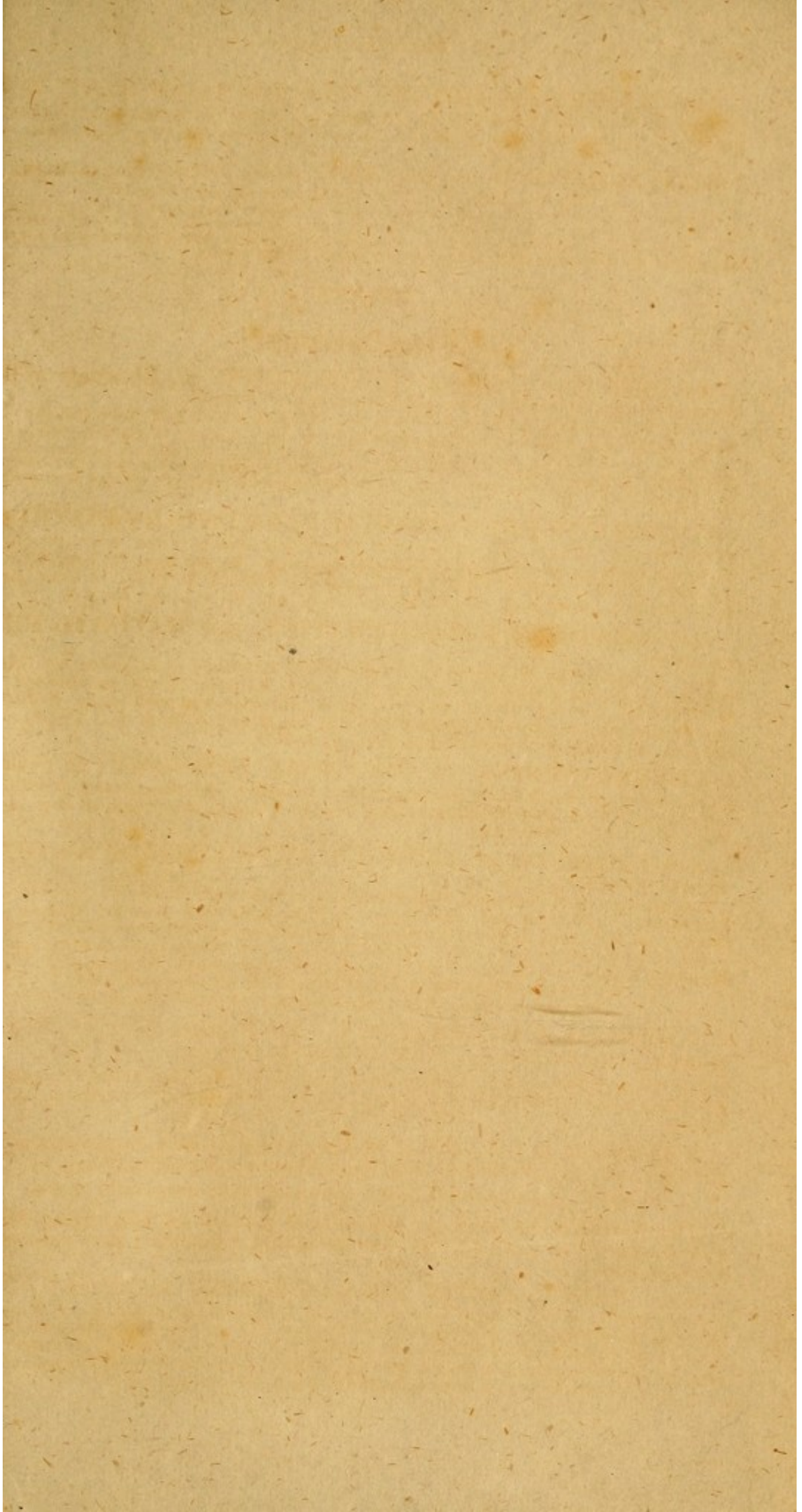
By **JOHN MACCULLOCH**, M.D. The 2d Edit. in 12mo. Price 7*s.* Bds.

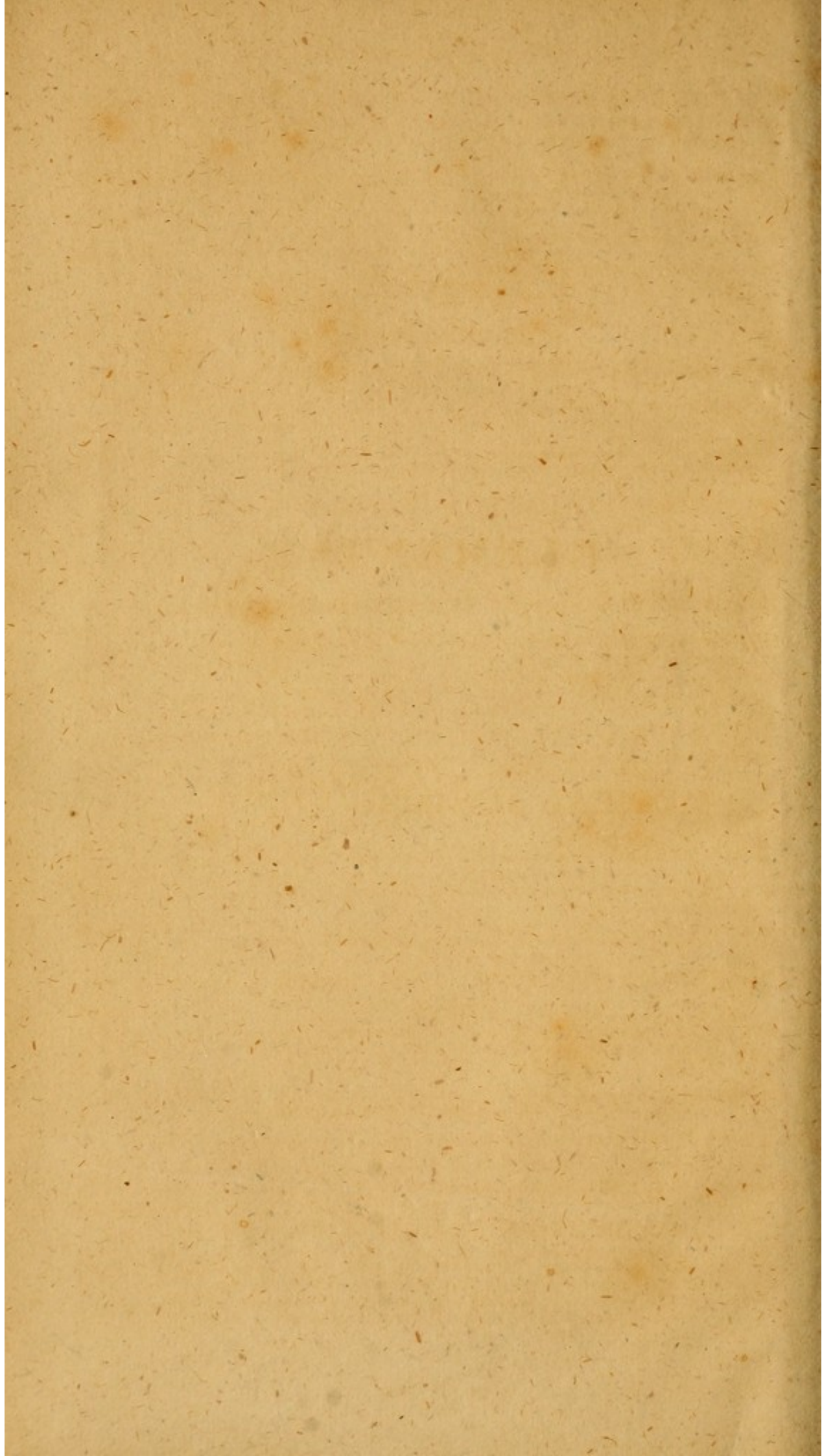
The **ROUND TABLE**, a Collection of Essays, on Literature, Men, and Manners. By **LEIGH HUNT** and **WILLIAM HAZLITT**. In 2 Vols. 12mo. Price 14*s.* Bds.

The **NATURALIST'S POCKET-BOOK**; or, **TOURIST'S COMPANION**, being a brief Introduction to the different Branches of Natural History, with approved Methods for collecting and preserving the various Productions of Nature. By **GEORGE GRAVES**, F.L.S. Author of *British Ornithology*, *Ovarium Britannicum*, and Editor of the New Edition of *Curtis's Flora Londinensis*. In 8vo. with Plates, Price 14*s.* plain, or, 21*s.* coloured.









34.A.8

COUNTWAY LIBRARY OF MEDICINE

RA
1050
F24
1815

RARE BOOKS DEPARTMENT

COUNTWAY

