

The male generative organs in health and disease, from infancy to old age : being a complete practical treatise on the anatomy and physiology of the male system ... / by Frederick Hollick.

Contributors

Hollick, Frederick, 1818-1900.
Lamar Soutter Library

Publication/Creation

New York : Nafis & Cornish, 1850.

Persistent URL

<https://wellcomecollection.org/works/djkya8bf>

License and attribution

This material has been provided by This material has been provided by the University of Massachusetts Medical School, Lamar Soutter Library, through the Medical Heritage Library. The original may be consulted at the Lamar Soutter Library at the University of Massachusetts Medical School. where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

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



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



THE
MALE ORGANS

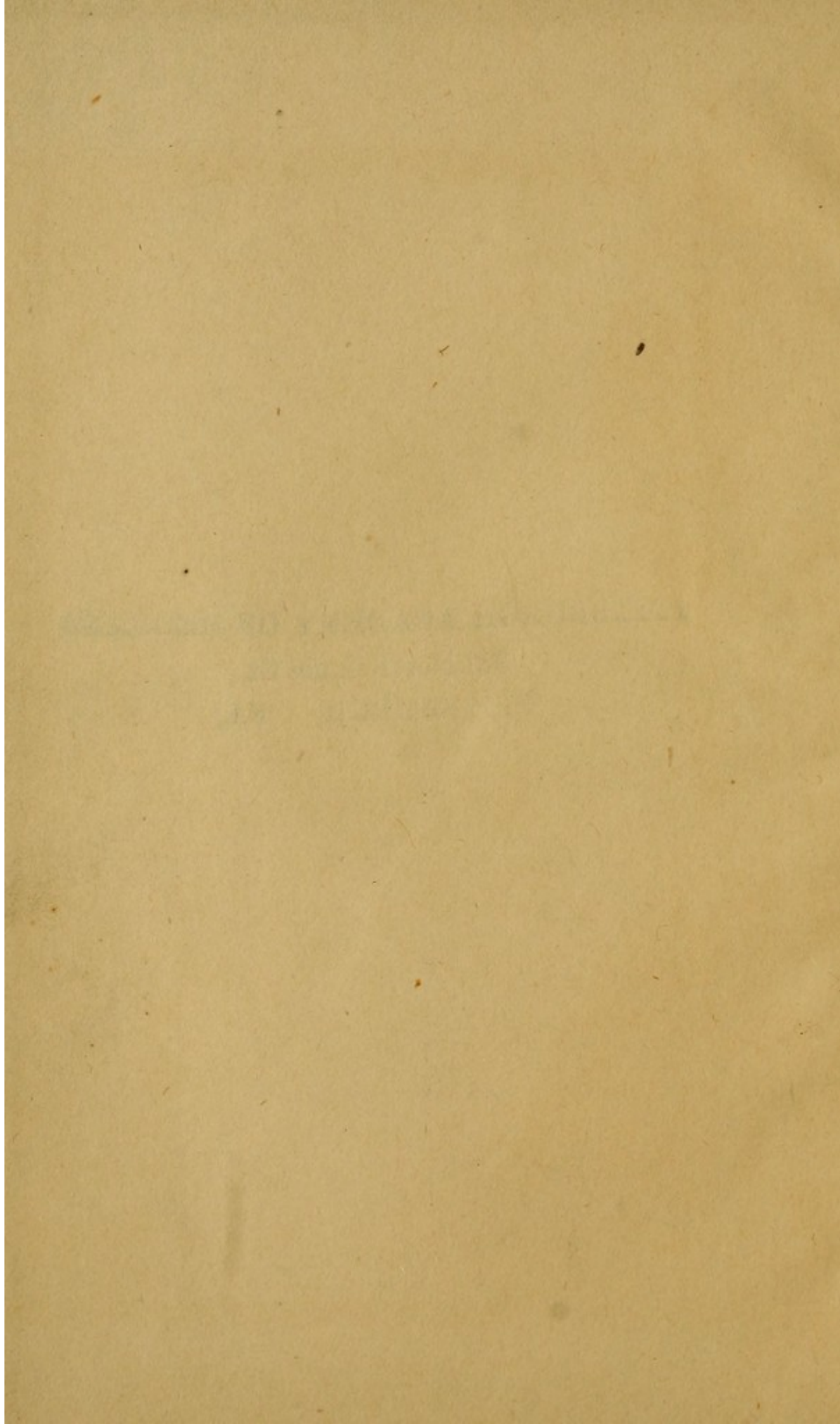
HOLLICK.

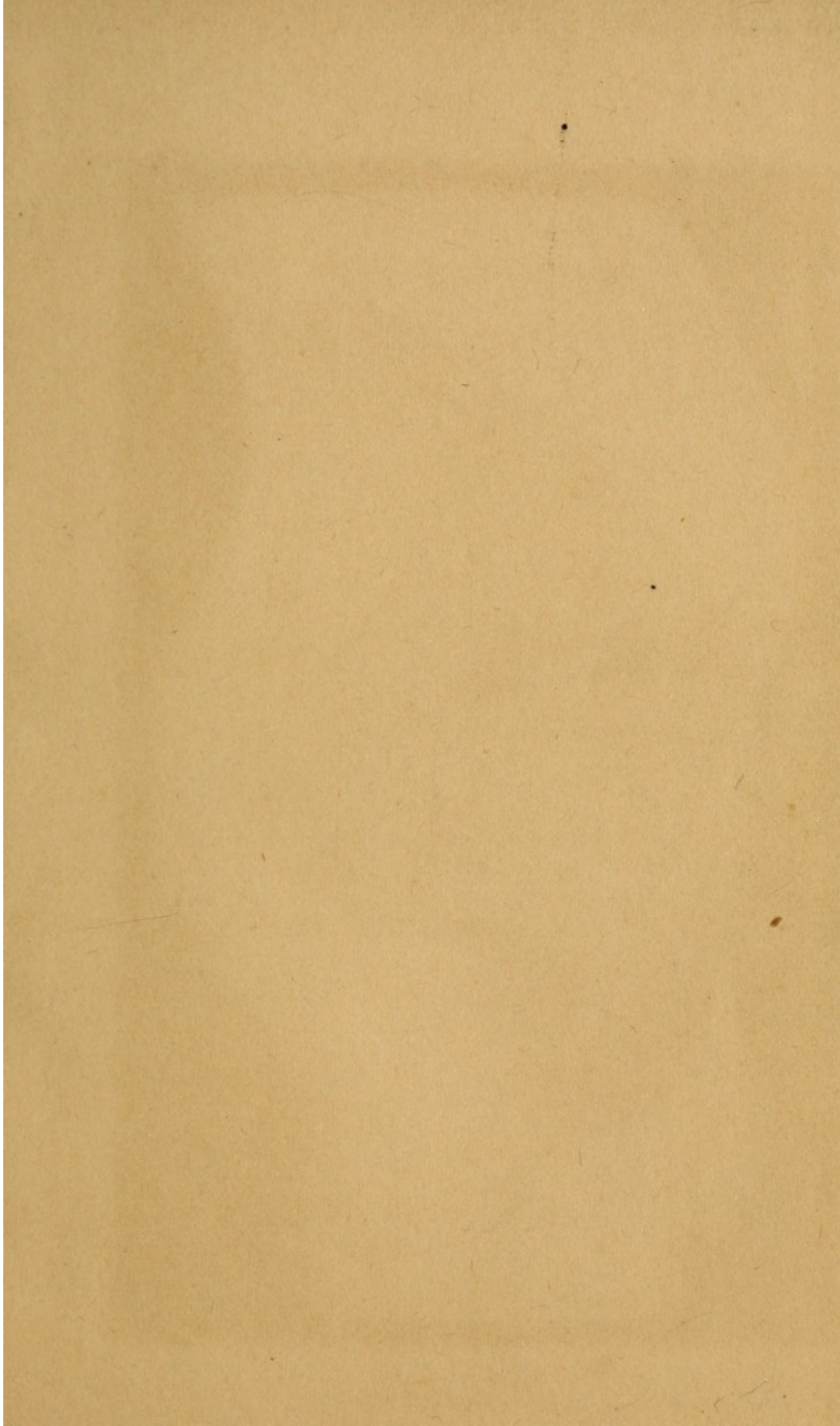


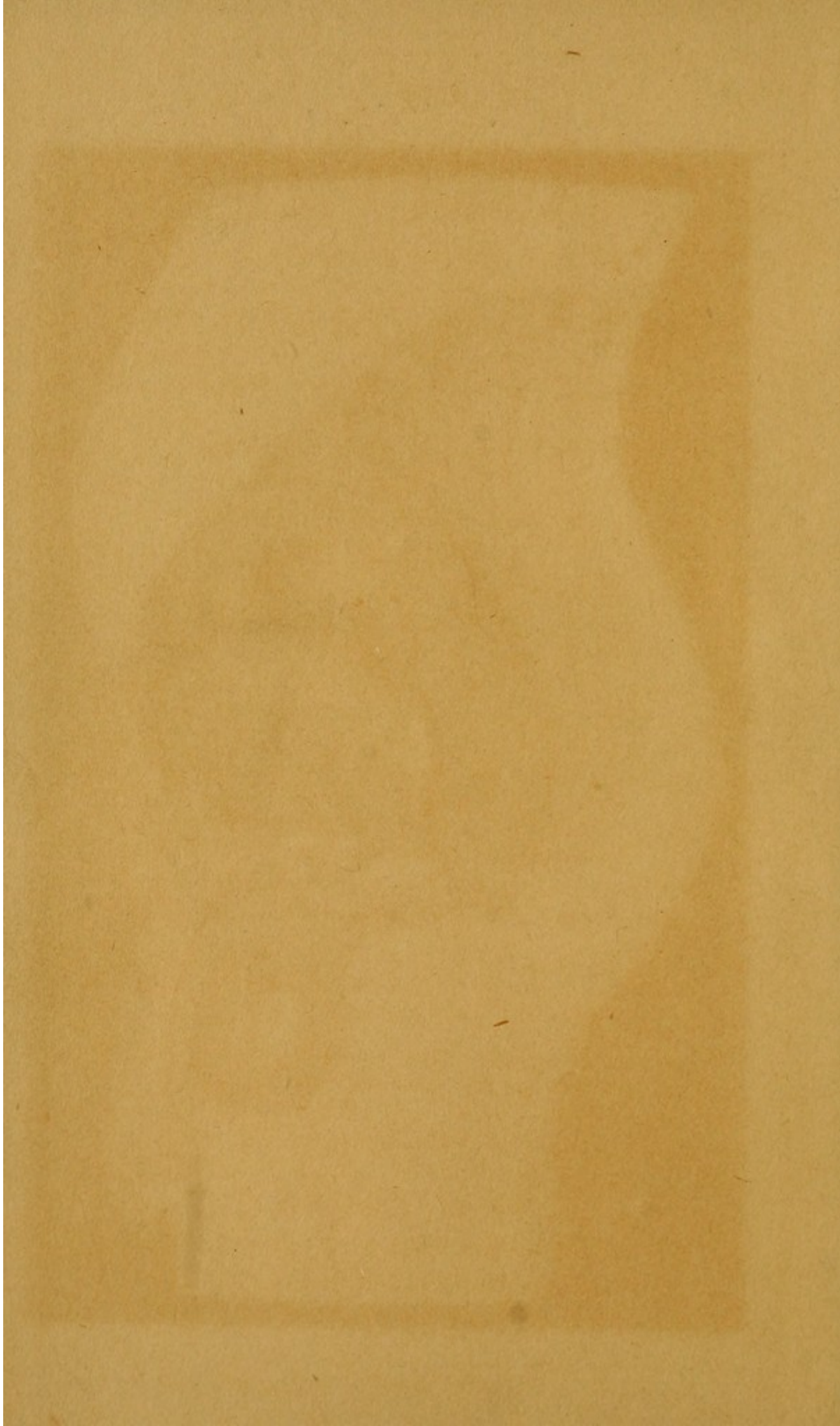
Presented by
Dr Benson A. Cahoe

PITTSBURGH ACADEMY OF MEDICINE

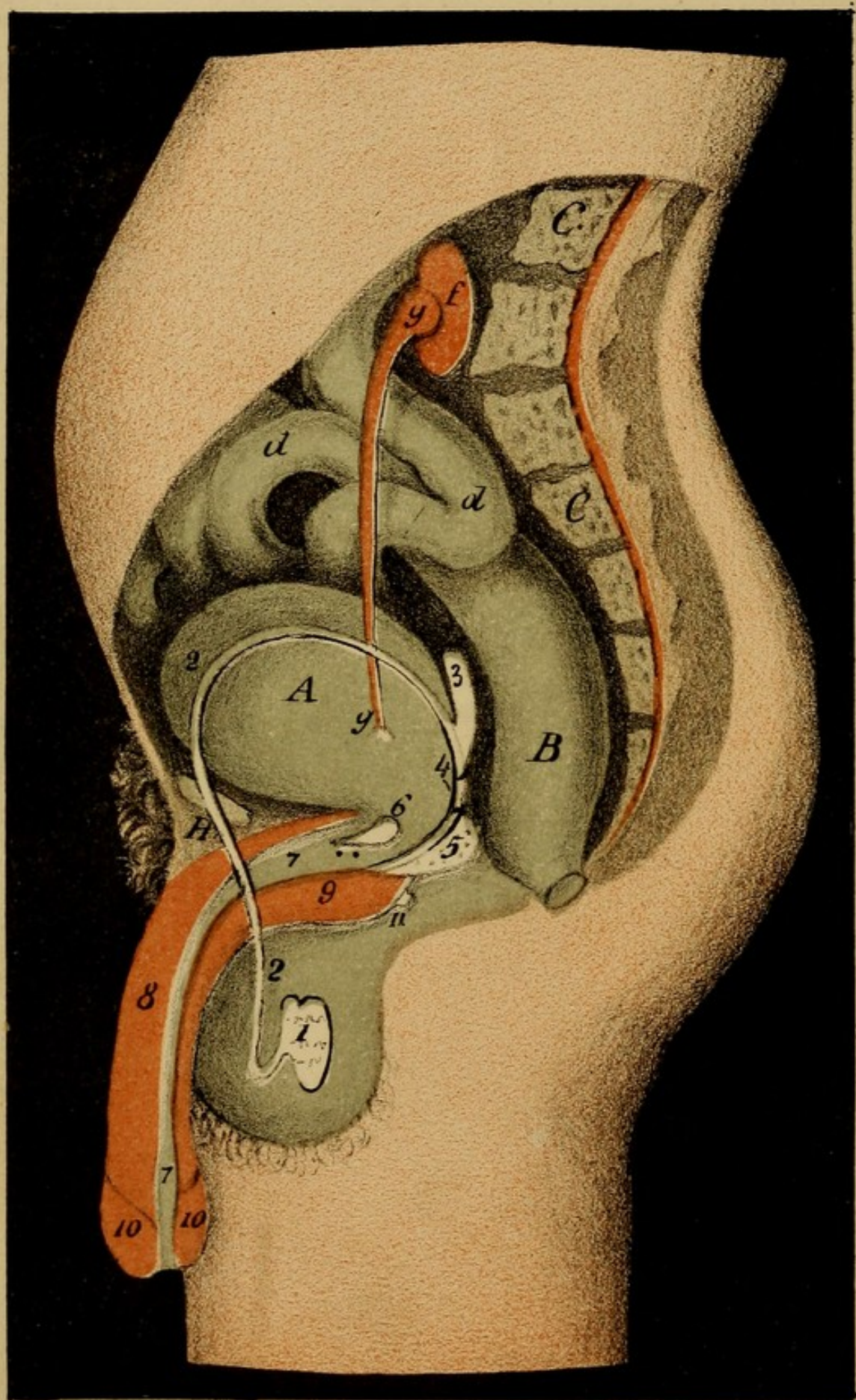
322 North Craig St.,
PITTSBURGH, PA.











Section, of Male Pelvis.

THE
MALE GENERATIVE ORGANS

IN HEALTH AND DISEASE,
FROM INFANCY TO OLD AGE.

BEING A COMPLETE PRACTICAL TREATISE ON THE
ANATOMY AND PHYSIOLOGY
OF THE MALE SYSTEM;

WITH A DESCRIPTION OF THE CAUSES, SYMPTOMS, AND
TREATMENT, OF ALL THE INFIRMITIES AND
DISEASES TO WHICH IT IS LIABLE.

ADAPTED FOR

EVERY MAN'S OWN PRIVATE USE,

AND INCLUDING AN INTRODUCTORY ACCOUNT OF ALL
THE NEW DISCOVERIES CONCERNING THE
PHYSIOLOGY OF THE FEMALE SYSTEM AND
THE PROCESS OF REPRODUCTION.

By **FREDERICK HOLLICK, M. D.**

AUTHOR OF "THE ORIGIN OF LIFE," — "THE DISEASES OF WOMAN," —
OUTLINES OF ANATOMY AND PHYSIOLOGY, FOR POPULAR
USE," — AND "THE MATRON'S MANUAL."

ILLUSTRATED BY NUMEROUS APPROPRIATE ANATOMICAL PLATES,
EXPRESSLY DESIGNED FOR THIS WORK.

NEW YORK:

PUBLISHED BY NAFIS & CORNISH,
ST. LOUIS, Mo: NAFIS, CORNISH & CO.

1850.

17 K
H 72A

Entered according to Act of Congress, in the year 1849,
By **FREDERICK HOLLICK, M. D.,**
in the Clerk's Office of the District Court of the United States for
the Southern District of New York.

Stereotyped by Vincent Dill, Jr.,
No. 21 Ann Street, N. Y.

PITTSBURGH ACADEMY OF MEDICINE
322 North Craig St.,
PITTSBURGH, PA.

P R E F A C E .

IN the course of my practice, and more especially at the termination of my Lectures to Gentlemen, I have been repeatedly asked whether I could not refer them to some book, that would give a plain and practical explanation of the Male System, and its various derangements, adapted for every man's own use and instruction? In short a book was wanted that should serve the same purposes for Gentlemen that my "*Diseases of Woman*" did for Ladies; explaining fully all those affections peculiar to their own systems, and none others. No such work, however, was extant, and I saw that the only way to supply what seemed a general want was to *write one*. It is true there were works professing to treat on the Male System, for popular use, but they were all, without exception, principally devoted to *Venereal diseases*, and those who made the enquiry of me were not persons at all liable to such affections, nor feeling any particular interest in them. My audience would frequently say, "We are not subjects of syphilis, and probably never shall be, but still we are liable to many other diseases, most of which could doubtless be prevented if we knew their nature and causes; but unfortunately for us, with the exception of your Lectures, there is no source of information on such matters open to us. We want a Book that will treat on these things in the same style that your Lectures do, and it will be a public service if you will write such a one." For a long time I

17986

was desirous of complying with this request, but my time was so incessantly occupied that I could not do so. The *materials* I had in profusion, for I had consulted every book on these subjects that was worth reading, both in the English and other languages, and I had besides my own notes of cases, as numerous and varied as perhaps any one practitioner ever met with, but still all these materials required arranging and writing out. I had besides to make a number of direct experiments, with animals, and of dissections of the human body, for the purpose of testing the new discoveries on Generation, announced by the European Physiologists, which were so utterly opposed to old notions and doctrines. In addition to these causes of delay, I had also several peculiar and highly instructive cases in hand, the termination of which I was desirous to see, so that I could make use of the novel experience they gave.

Had it not been for all these causes combined I should have published this book earlier. The delay, however, has been necessary in order to have it complete, and I was determined it should not be issued till it was so. It may be advisable to state also, for the information of those not acquainted with me or my previous publications, that my course of study, and long practice, has been almost exclusively devoted to the physiology and derangements of the *Reproductive System*, in both sexes, respecting which I have had unusual opportunities for obtaining information, both in this country and in Europe. Whenever any new discovery, or mode of treatment, has been announced, I have immediately tested it thoroughly, and have further made every allowable experiment suggested to myself.

There are certain difficulties connected with the Reproductive System that are very important, as affecting human health and happiness, but which are scarcely ever made the subjects of study by medical men at all, at least not in this country. The consequence is, that the treat-

ment they receive is mostly empirical, and as liable to do harm as good. So evident is this, that many persons so afflicted never apply for medical assistance, but prefer to suffer on and not complain. This is particularly the case with many difficulties experienced by young persons, and with many troubles *incident to Marriage*, such as *Impotence* and *Sterility*, *aversion or indifference*, and physical or moral *unsuitability*. In the old world there are men of the greatest eminence who devote their sole attention to those matters, and who are the alleviators of misery, and the dispensers of unexpected happiness to thousands. In this country I am not aware of any one, besides myself, that has embraced this peculiar line of practice, and I have found the greatest want of information prevailing, even amongst medical men, respecting the means of relief that are really at our command: In all probability many of the modes of practice, and many of the resources, pointed out in this work, will be entirely new to thousands, and will give hope to many who had previously been sunk in despair.

As far as my professional duties would allow, I have endeavored to instruct the public on those matters by my Lectures, which have been attended by thousands of both sexes, and which I intend to continue, as far as possible, in various parts of the Union. These Lectures are devoted, like the present work, to the Physiology of the Reproductive System, and to its derangements and diseases, excepting those of a Venereal character, which my audience seldom enquire about. My Book on "*The Diseases of Woman*," and my Lectures to them alone, treat on the female system only. The present work, and my Lectures to Gentlemen alone, treat on the male system only, so that a source of interesting and useful study, and of practical advice, is open to both.

I am aware that such an attempt as the present will appear strange to some, and may meet with slight objec-

tion with the unreflecting and prejudiced; but I feel assured that any reasonable person, on due reflection, will approve of it. That such afflictions as those I have described *do exist* is unfortunately too true, and it therefore becomes the duty of every one, as far as lies in his power, to alleviate them. This I am persuaded can be accomplished, to a great extent, by such information as that I have here given, and I sincerely wish it may do as much good as I intended and desire it to do.

In addition to every subject relating directly and exclusively to the Male System, I have thought it necessary to give a general description of the *Female System* also, and of the process of *Reproduction*, in order to explain more fully and clearly certain difficulties that could not be well understood without such information. This description will be found to include the most recent information on these subjects, with several interesting discoveries of my own, and will therefore supply every item of information necessary to a full understanding of the Generative System and its functions in both sexes. A great part of this information cannot be found in any other work in the English language, and is now for the first time laid before the public.

Many parts of this book will be found as useful to *Medical men* as others, because there are few of them that are fully acquainted with the subjects on which it treats, or who know where to seek for the requisite information.

F. HOLLICK, M. D.

New York.

CONTENTS.

	Page
DESCRIPTION OF FRONTISPIECE,	13

PART I.

REPRODUCTION,	15
-------------------------	----

CHAPTER I.

THE FEMALE SYSTEM,	21
------------------------------	----

CHAPTER II.

THE MALE SYSTEM,	43
----------------------------	----

CHAPTER III.

THE SEMEN,	46
----------------------	----

P A R T II.

	Page
DISEASES, MALFORMATIONS AND DERANGEMENTS OF THE MALE SYSTEM,	63

CHAPTER IV.

THE DISEASES, DEFICIENCIES AND MALFORMATIONS OF THE TESTES, THEIR ENVELOPS, AND THE PARTS MORE IMMEDIATELY CONNECTED WITH THEM,	69
Anomalies in the size and apparent number of the Testes,	73
Hydrocele, or Dropsy of the Testicles,	79
Sarcocele, or Chronic Fleishy Swelling of the Testicle,	94
Fungus of the Testicle,	98
Hernia Humoralis, Orchitis, or Inflammation of the Testicles,	100
Ossification of the Testicle,	109
Arrest of Development and Wasting of the Testes,	110
Tubercular Disease, or Consumption of the Testicle,	117
Foreign Bodies in the Scrotum along with the Testicles,	119
Nervous Affections of the Testicles,	ib.
Spermatocele, or Swelling of the Testes from engorgment of Semen,	126
Scrotocele or Rupture of the Intestines or Omentum into the Scrotum,	127
Varicocele and Circoccele, or Swelling of the Veins of the Scrotum and Spermatic Cord,	130
Hæmatocele, or Swelling of the Scrotum and Spermatic Cord from the effusion of Blood,	134
Prurigo, or Itching of the Scrotum,	135
Elephantiasis Scroti,	137
Falling of the Spermatic Cord,	139
Relaxation of the Scrotum,	140
Diseases of the Vasa Deferentia,	141
Diseases of the Seminal Vesicles,	147

CHAPTER V.

THE STRUCTURE, DISEASES AND MALFORMATIONS OF THE PENIS AND THE PARTS IMMEDIATELY CONNECTED WITH IT, .	148
Absence and Malformation of the Penis,	152
Hypospadias,	156
Epispadias,	160
Phymosis,	ib.
Paraphymosis,	161
Want of Development, or congenital small size of the Penis,	164
Paralysis of the Muscles of the Penis,	179
Priapism, or Involuntary Erection,	ib.
Diseases of the Urethra and the parts contained therein,	186
The Prostate Gland,	191

CHAPTER VI.

FUNCTIONAL AND SYMPATHETIC DISEASES OF THE GENITAL ORGANS,	197
Influence of the Brain on the Generative Powers,	200
Influence of the Mind over the Generative Organs,	207
Excessive Sensibility of the Genital Organs,	216

CHAPTER VII.

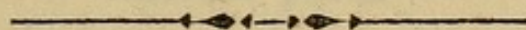
SPERMATORRHŒA, OR EXCESSIVE LOSS OF SEMEN,	219
Causes of Spermatorrhœa,	226
Particular effects of Spermatorrhœa,	231
Symptoms by which the Spermatorrhœa may be detected,	264
Impotence from Involuntary Emission,	270
Treatment of Spermatorrhœa,	291

CHAPTER VIII.

THE INFLUENCE OF MEDICINES IN PRODUCING AND CURING IMPOTENCE AND SPERMATORRHŒA,	302
---	-----

	Page
CHAPTER IX.	
MASTURBATION AND OTHER SEXUAL ABUSES,	321
CHAPTER X.	
EROTOMANIA AND SATYRIASIS,	390
CHAPTER XI.	
GENERAL REMARKS ON THE PRESERVATION AND RESTORATION OF THE SEXUAL POWERS,	398

I L L U S T R A T I O N S.



	Page
PLATE I.	
SECTION OF FEMALE PELVIS, . . .	19
PLATE II.	
FRONT VIEW OF THE FEMALE PELVIS, . .	25
PLATE III.	
OVARIES AND VESICLES, . . .	31
PLATE IV.	
UTERUS AND APPENDAGES LAID OPEN, . .	41
PLATE V.	
SEMINAL ANIMALCULES, . . .	49
PLATE VI.	
UTERUS AT FOUR MONTHS, . . .	55
PLATE VII.	
SECTION OF THE WOMB, NATURAL SIZE, .	61
PLATE VIII.	
SEMINAL TUBES OF THE TESTICLE, . .	67
PLATE IX.	
HYDROCELE, . . .	81
PLATE X.	
SECTION OF PENIS AND BLADDER, . .	145

17	PLATE I. SECTION OF REMAINS FROM THE TERRACE OF THE MOUND.
27	PLATE II. FRONT VIEW OF THE MOUND.
31	PLATE III. OVERVIEW AND SECTION.
41	PLATE IV. TERRACE AND SECTION OF THE MOUND.
49	PLATE V. REMAINS OF THE MOUND.
55	PLATE VI. TERRACE OF THE MOUND.
61	PLATE VII. SECTION OF THE MOUND.
67	PLATE VIII. REMAINS OF THE MOUND.
81	PLATE IX. REMAINS OF THE MOUND.
105	PLATE X. SECTION OF REMAINS FROM THE TERRACE OF THE MOUND.

DESCRIPTION OF FRONTISPIECE.

Section of the Male Pelvis to show the situations of the different parts.

A. The Bladder.—B. The Rectum, or end of the large Intestine.—C. The lower part of the back bone, or Sacrum.—*d. d.* The small Intestines.—*f.* One of the Kidneys.—*g. g.* The Ureter, or Tube which conveys the Urine from the Kidneys into the Bladder.—*h.* The Pubic or Frontal Bone of the Pelvis.

1. The left Testicle.—2. 2. The Vas Deferens, or Tube which conveys the Semen from the Testicle.—3. The left Seminal Vesicle, with which the Vas Deferens is connected.—4. The Ejaculatory Canal, into which the Semen next passes.—5. The Prostate Gland, with which the Ejaculatory Canal connects, and through which the Semen passes into the Urethra, or Urinary passage from the Bladder, (7).—6. Is the Veru Montanum, or small protuberance which partly closes the neck of the Bladder.—7. 7. The Urethra, or passage by which the Urine escapes from the Bladder down the Penis.—8. The upper part of the Penis, or Corpus Cavernosum.—9. The lower part, or Corpus Spongiosum.—10. The Glans, or head of the Penis.—11. One of Cowper's Glands.

The course of the Semen is from the Teste along the Vas Deferens to the Seminal Vesicle, then along the Ejaculatory Canal and through the Prostate Gland into the Urethra, which it enters by the lower part of the Veru Montanum, at the part indicated by the two black dots. It then escapes from the body in the same way as the Urine does.

DESCRIPTION OF FIGURES

Section of the Male Pelvis to show the situation of the
different parts.

A. The Bladder.—B. The Rectum, or end of the large
Intestine.—C. The lower part of the back bone, or
Sacrum.—D. The small Intestine.—E. One of the Uteri.
F. The Uterus, or Tube which conveys the
Urine from the Kidney into the Bladder.—G. The Urethra
or Frontal Bone of the Pelvis.

1. The left Testicle.—2. The Vas Deferens, or Tube
which conveys the Semen from the Testicle.—3. The Seminal
Vesicle, with which the Vas Deferens is con-
nected.—4. The Ejaculatory Canal, into which the Semen
next passes.—5. The Prostate Gland, with which the
Ejaculatory Canal connects, and through which the Semen
passes into the Urethra, or Uterine passage from the
Bladder.—6. Is the Vas Deferens, or small duct,
permeable which partly closes the neck of the Bladder.—
7. The Uterus, or passage by which the Urine escapes
from the Bladder down the Penis.—8. The upper part of
the Penis, or Corpus Cavernosum.—9. The lower part, or
Corpus Spongiosum.—10. The Glans, or head of the
Penis.—11. One of Cowper's Glands.

The course of the Semen is from the Teste along the Vas
Deferens to the Seminal Vesicle, then along the Ejacula-
tory Canal and through the Prostate Gland into the Uterus,
which it enters by the lower part of the Pen-
Montanum, at the part indicated by the two black dots.
It then escapes from the body in the same way as the
Urine does.

PART I.



REPRODUCTION.

THE Reproductive process in the human being, as in all other perfectly organized animals, requires the concurrent action of two different organizations, the male and the female, each performing a distinct part, one as necessary as the other. Neither of these organizations alone can effect the *whole* process of reproducing a new being, though in certain cases they may *partly* do so, in an imperfect manner. To understand fully the action of each, which is requisite before their derangements and diseases can be understood, it is requisite to give a general description of both, and also of Reproduction itself. This description can now be given with something like accuracy, owing to the valuable discoveries of modern science, and a correct idea can be obtained, of the main steps at least, of this wonderful phenomenon, though hitherto it has been shrouded in such impenetrable mystery.

PART I.

REPRODUCTION.

The Reproductive process in the human being, as in all other perfectly organized animals, requires the concurrent action of two different organizations, the male and the female, each performing a distinct part, one as necessary as the other. Neither of these organizations alone can effect the whole process of reproducing a new being, though in certain cases they may partly do so, in an imperfect manner. To understand fully the action of each, which is to point before their determinations and diseases can be understood, it is requisite to give a general description of both, and also of Reproduction itself. This description can now be given with something like accuracy, owing to the valuable discoveries of modern science, and a correct idea can be obtained, of the main steps at least, of this wonderful phenomenon, though hitherto it has been shrouded in such insuperable mystery.

PLATE I.

Section of the Female Pelvis.

- A. The Bladder.
 B. The Vagina.
 C. The Uterus.
 D. The Cervix or neck of the Uterus.
 E. The Ovary.
 F. The Fallopian Tube.
 G. The Ovary, or Mass of the Uterus, which opens into the Vagina.
 H. The Uterus, or Mass of the Bladder, by which the Uterus opens.
 I. The Cervix or neck of the Uterus.
 J. The Fallopian Tube.
 K. The Fallopian Tube, or Fallopian Tube.
 L. The Fallopian Tube.
 M. The Fallopian Tube.
 N. The Fallopian Tube.
 O. The Fallopian Tube.
 P. The Fallopian Tube.
 Q. The Fallopian Tube.

PLATE I.

Section of the Female Pelvis.

- A. The Bladder.
- B. The Womb.
- C. The Vagina.
- D. The Rectum, or end of the large Intestine.
- e.* One of the Ovaries.
- f.* The Corresponding Fallopian Tube.
- g.* The Os Tincæ, or Mouth of the Womb, which opens into the Vagina, or lower passage.
- h.* The Meatus Urinarius, or Mouth of the Bladder, by which the Urine escapes.
- i. i.* The Small Intestines.
- j. j.* The Sacrum, or lower part of the back bone.
- k.* The Pubic, or Front Bone of the Pelvis.
- l.* The Right External Lip.
- m.* The Right Internal Lip, or Nympha.
- n.* The Hymen.
- o.* The Opening through the Hymen.
- p.* The Clitoris.
- q.* The Perineum.

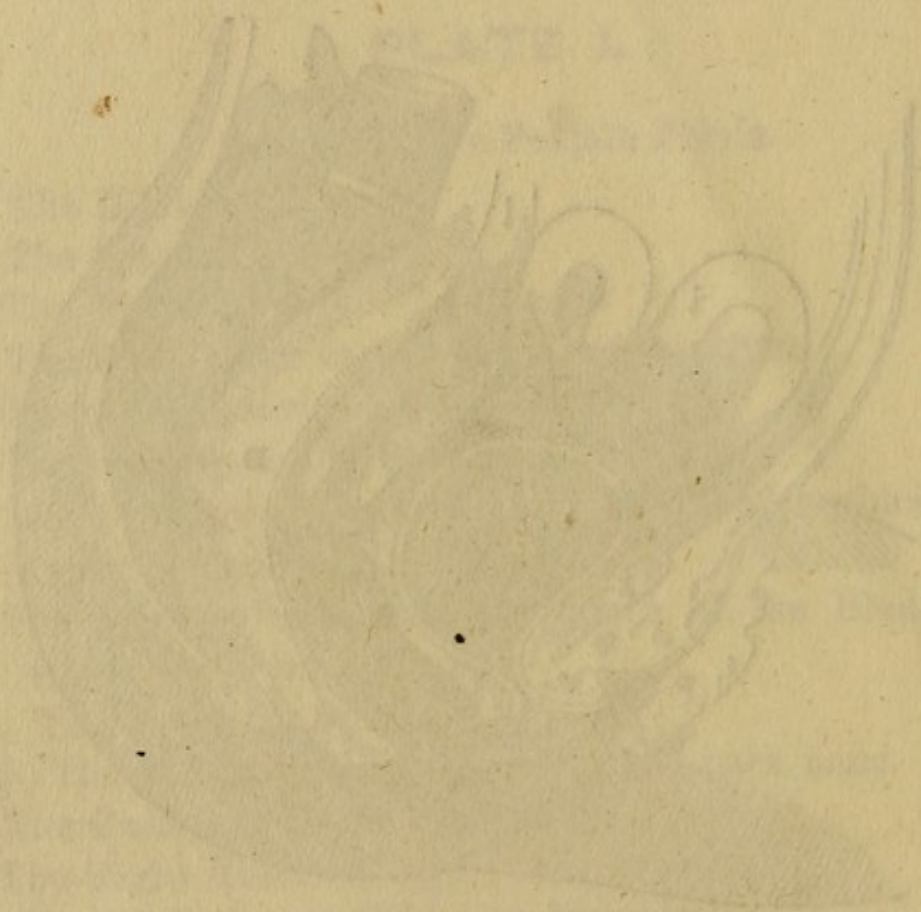


Plate I

Section of Fossil Brachiopod

CHAPTER I.

THE FEMALE SYSTEM.

THE office of the female system is twofold: it has to produce in the first place one of the original principles, or primary parts, from which the new being begins; and also to effect its development into the perfect form. The female organs are therefore much more complicated than those of the male, and her part of the process is more extended.

The most essential parts of the female organization are two organs termed the *Ovaries*, which are located in the abdomen, one on each side, just above the groin. These organs have the power, when their full development is attained, to produce certain little bodies called *Ova*, or *Eggs*, essentially the same as the eggs of birds, one of which is always required in the commencement of a new being.

These organs are small in early life, and comparatively inactive, but at a certain period, termed puberty, they become larger, and commence a series of curious and important physiological processes, the object of which is to develop the egg and to effect its expulsion from the body.

When the ripe Ovaries are dissected they are found to contain a number of cells, or vesicles, which may be compared to those of a honey-comb,

and in each of those cells is contained one of the germs or eggs, surrounded by a white fluid like the white of an egg. These cells are termed the *Graafian Vesicles*, after the Anatomist Graaf, who first described them; they are about as large, when fully developed, as a small pea, but are not all of the same size at once, some being small or merely rudimentary, and others approaching perfection. Before the age of puberty these cells and the eggs they contain, are all undeveloped and small, but at that time their gradual and successive development commences. It is found, from recent observations, that only one of them is perfected at a time, and that it requires a certain period before another can be produced. In the adult ovary therefore we find them at every stage, some being only in the rudimentary state, others just commencing to grow, and others having attained a considerable size, there being always *one* more ripe than any of the others, and evidently approaching to perfection.

When the egg is fully developed it is thrown out of the Ovary, and after a time makes its escape from the body, in a very curious manner only recently discovered. There are therefore two different actions performed by the Ovaries, first the forming or developing of the eggs in successive order, and secondly, the expulsion of them from the Ovary, and ultimately from the body.

This development of the eggs it must be remembered is entirely independent of sexual union or excitement, and is totally unconnected with *conception*, except as a preparation for it. In every female, whether virgin or not, from the age of puberty till the turn of life in old age, this development of the

eggs is always going on, excepting in certain diseases, and during gestation and nursing, when it is usually suspended. It is also performed in certain definite and regular periods, which are nearly the same in all persons alike. This period is usually *one month*, or twenty-eight days, and most females observe precisely that period with singular regularity. During every month, therefore, after puberty, with the exceptions above named, one of the Graafian Vesicles, and its included egg, arrives at perfection, and at the end of the month the egg is expelled from the body.

The egg appears to be expelled from the Ovary by a real inflammatory action, similar to what nature establishes to effect the expulsion of an injurious foreign substance in any other part of the body. Towards the end of the month the Vesicle begins to swell very much, and is filled with blood, instead of the white fluid seen there at other times; the egg, which was formerly at the bottom of the Vesicle, is now lifted up to the top, by the fluid underneath, and is at last pressed forcibly against the envelop or skin of the Vesicle. This pressure becomes eventually so great that the envelop bursts and the egg escaping through the rent reaches the outside of the Ovary. It is then taken to a particular part of the body to remain for a certain number of days, during which it may be impregnated, or receive the male principle, and if this takes place, they both remain and develop into the new being, but if no impregnation is effected then, at the end of that time the egg is passed out of the body and lost. From this it is evident that impregnation, or conception, can take place only during those days after the egg is expelled from the Ovary,

PLATE II.

Front View of the Female Pelvis, with the External Walls removed.

- A.** The Bladder.
- B.** The Womb.
- D.** The Rectum, or Large Intestine.
- e. e.** The Ovaries.
- f. f.** The Fallopian Tubes.
- i. i.** The Small Intestines.
- r. r.** The Round Ligaments.

This shows the situation of the Organs in the front of the body, as they appear when it is first opened.

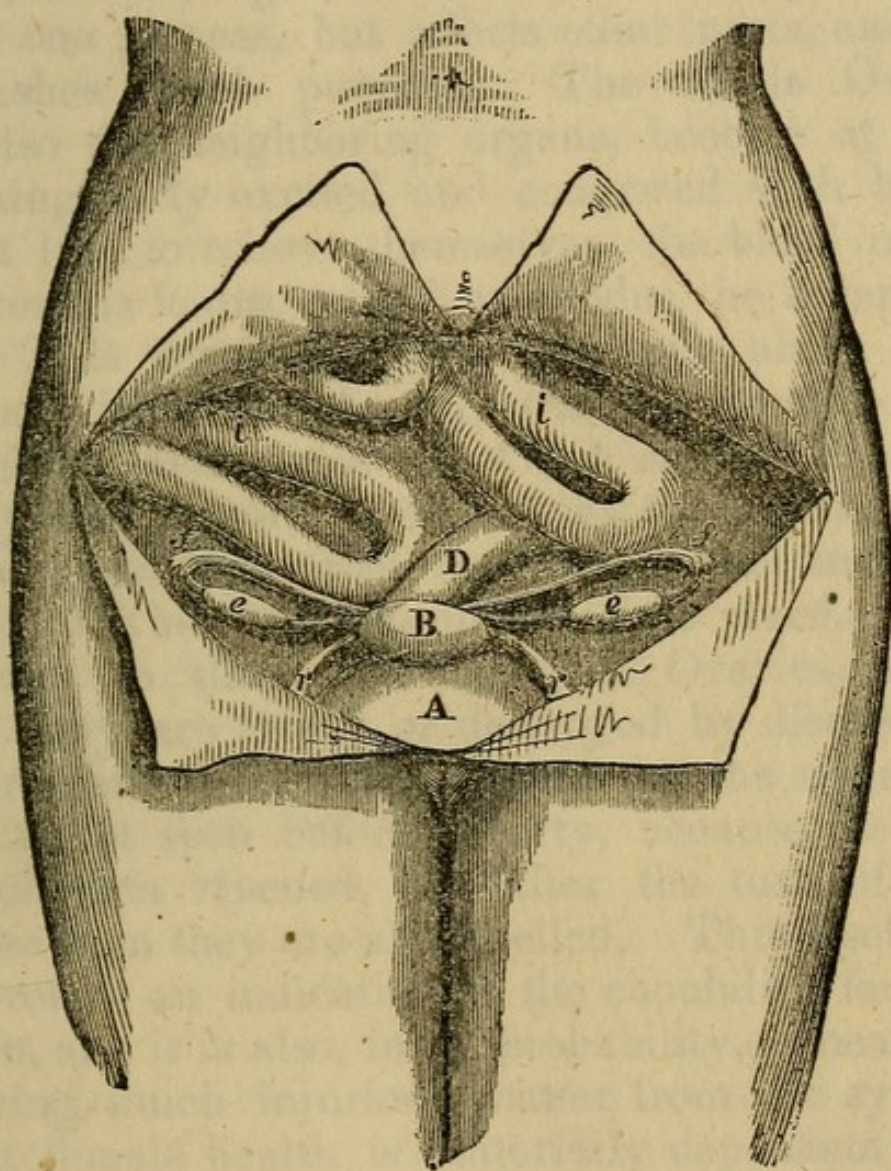


Plate II.

Front view of the Female Pelvis.

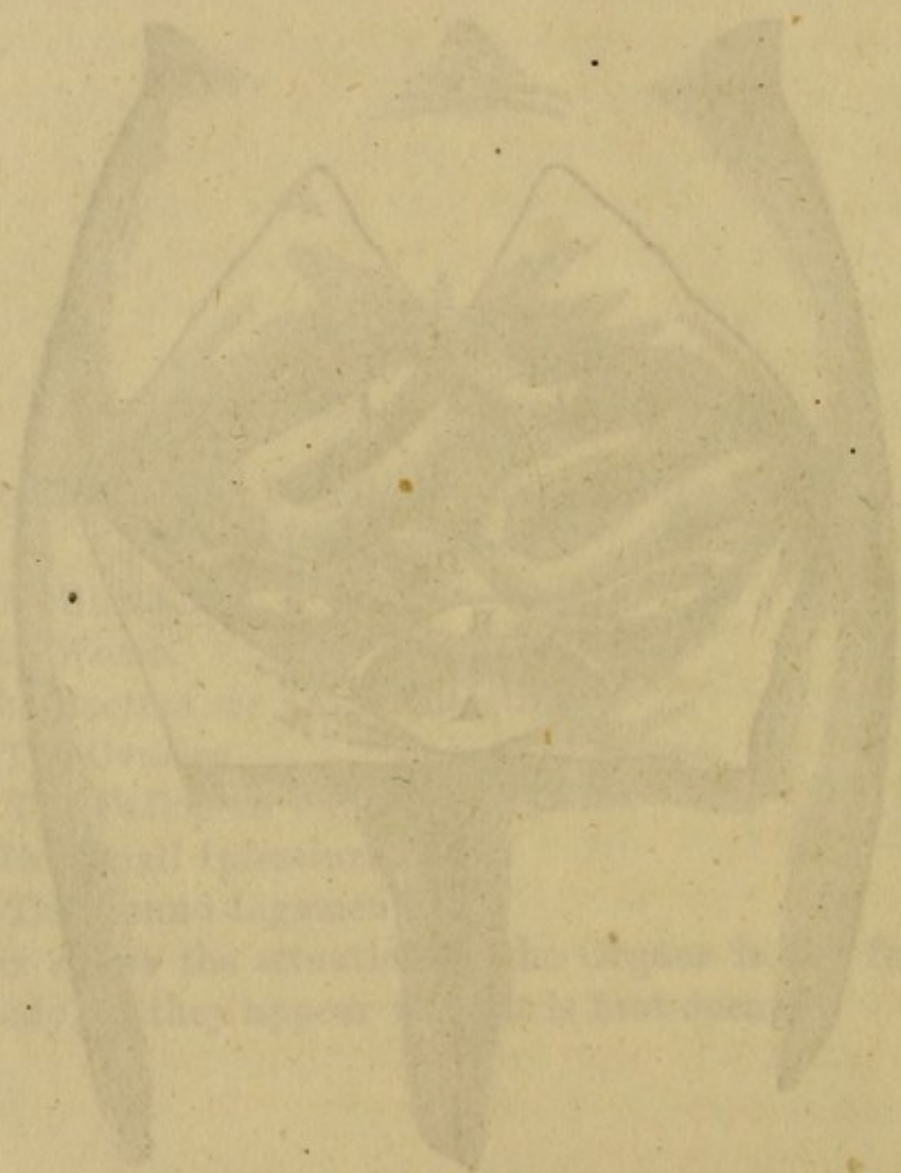


Plate II.

Front view of the female Pelvis.

and while it yet remains in the body, as will be explained more fully further on.

The inflammatory action by which the Vesicle is filled with blood, and the egg expelled from the Ovary, is not altogether confined to those parts, nor to that one process, but affects other parts, and accomplishes other purposes. The whole Ovary, and also the neighboring organs, become at that time singularly excited and congested with blood, and at last, to relieve themselves, the blood mixed with mucus is discharged, to subdue the inflammation. This discharge usually lasts about four days, and is termed the *Menstrual*, or *monthly flow*. This flow, therefore, about which so little has previously been known, is caused by the expulsion of the Ovum or Egg from the Vesicle, and indicates the period when that expulsion takes place. Consequently in those who have no Ovaries, or in whom they are torpid, or destroyed by disease, no menstruation takes place. And for the same reason it is not seen before puberty, because the eggs are not then ripened, nor after the turn of life, because then they are all expelled. This discharge is therefore an indication of the capability for conception, and it is also, in all probability, a means of removing much injurious matter from the system, so that female health is materially dependent upon it, and those in whom it does not appear, or becomes irregular, are nearly certain to become diseased. It is proper to remark, however, that it is sometimes nearly or quite colorless, and then the persons think they have no menstruation, though it may nevertheless be perfectly regular.

When the egg is fully expelled it leaves behind it the hollow Vesicle, filled with clotted blood, at

the top of which is a torn place, or rent, through which the egg escaped. In a short time this blood dries up and changes to a dull yellow color, while the rent forms a scar on the surface of the Ovary, and we thus have produced the yellow body called a *Corpus Luteum*, which was formerly thought to result from conception only, but is now known to be an old Vesicle from which an Ovum has been expelled. On the surface of the Ovary of an adult female a number of these scars are always to be seen, but as they gradually fade away and disappear, only some few, and sometimes only the last one, can be distinctly seen. The Vesicles are contained at first, in their rudimentary state, in the body of the Ovary, and appear to develop in succession, the outer ones first, each one when fully ripe projecting on the surface like a small pimple or nipple till it bursts. The egg itself, when fully developed, is only about as large as the point of a pin, in fact it can only just be seen by the naked eye. This may appear singular when compared with the large egg of a bird, but it must be recollected that the bird's egg is surrounded by the nutritious matter from which the new being is to be made, because it is totally separated from all other sources of nutrition, but the Human Ovum remains in the mother's body and derives nourishment from her blood to effect its development, it has therefore no need for any supply of nourishment to be attached to it. The *actual germ* is probably no larger in the bird than in the human female.

When the egg is fully ripe, if it receives the male principle, it will develop, to a certain extent, into the human organization in any part of the body. But it cannot fully and perfectly develop except in

a particular organ, called the *Matrix*, the *Uterus*, or *Womb*. The position of this organ in the body may be seen in the Plates. It is a small hollow organ in its natural state with very thick walls, but capable of undergoing astonishing changes, and possesses every requisite both for the perfect development of the new being, and also for its expulsion into the world when fully grown.

The Ovaries are attached to the Uterus, one on each side, by ligaments or bands, but have no direct connection with its cavity. The connection between the Ovaries and Womb is by means of two organs, one attached to each side of the Womb just above the Ovaries, called the *Fallopian Tubes*. A small cavity leads from the inside of the Womb down these Tubes to the end opposite the Ovaries, which is expanded like a Trumpet, and surrounded by a number of fringes or *Tentaculæ*, like the fingers of a hand.

The Womb is placed at the top of the passage or Tube called the Vagina, and opens into it by a small mouth called the *Os Tincæ*, or mouth of the Womb. The lower part of the Vagina opens externally by the mouth called the Vulva. There is therefore a direct passage from the Ovaries to the outside of the body, by which the Ova or Eggs are expelled.

After this description, the maturation and expulsion of the egg, and the process of conception can be readily understood by the following explanation and by referring to the Plates.

An egg becomes ripe at the end of every monthly period in one or the other of the Ovaries, and when expelled in the manner above described it is taken into the Womb in the following manner: At the

a particular organ called the Uterus, or Womb. The position of this organ in the body may be seen in the Plate. It is a small hollow organ in its natural state with very thick walls, but capable of undergoing astonishing changes, and possesses every requisite for the perfect development of the new being, and also for its expulsion into the world when fully grown.

PLATE III.

Ovaries, Graafian Vesicles, and Ova

1. One of the Ovaries just before the Crisis.—*a.* Is the Graafian Vesicle that is nearly ripe, and preparing to burst, the Ovum projecting upon it like a small pimple.
2. The same Ovary cut through, to show the Interior.—*a.* Is the Vesicle as seen within; the dark centre denoting the clot of blood which throws out the Egg.—*b.* Is an old Vesicle, from which an Egg has been ejected at some former crisis. It is now drying up, and forms a *Corpus Luteum*.
3. Is the Graafian Vesicle removed and magnified.—*a.* Is the Ovum, or Egg, just breaking through the rent in the Vesicle.
4. Is the Egg itself magnified, showing its granular structure.—*a.* Is the Germinal Vesicle.

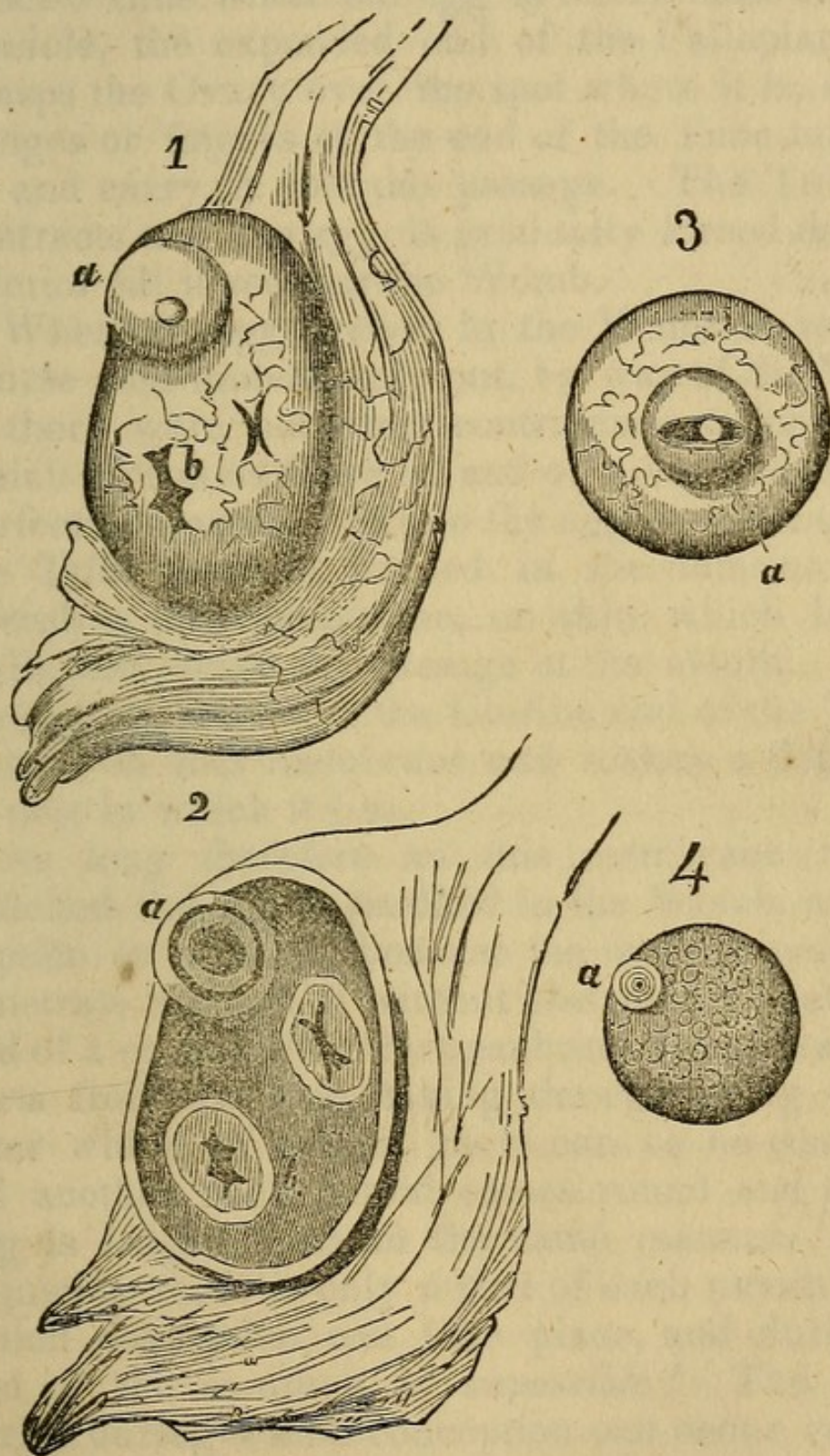


Plate III.
Ovaries and Vessicles.

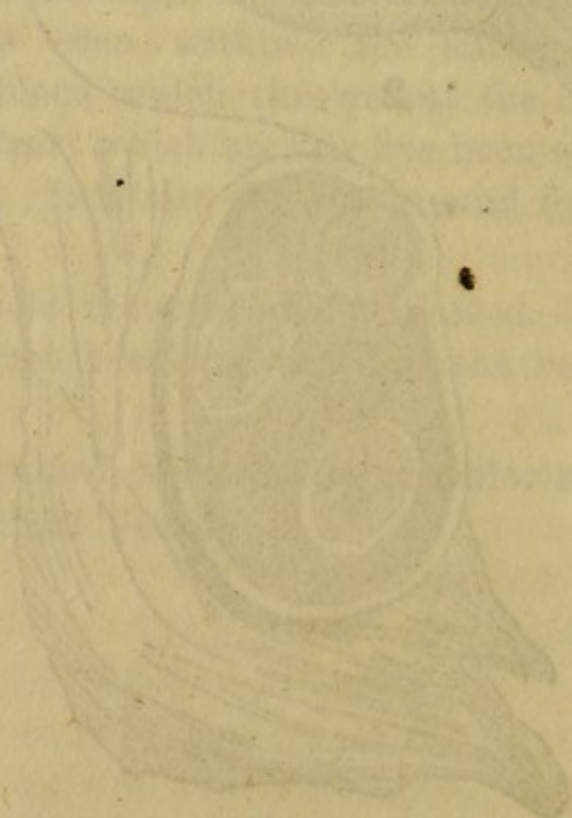
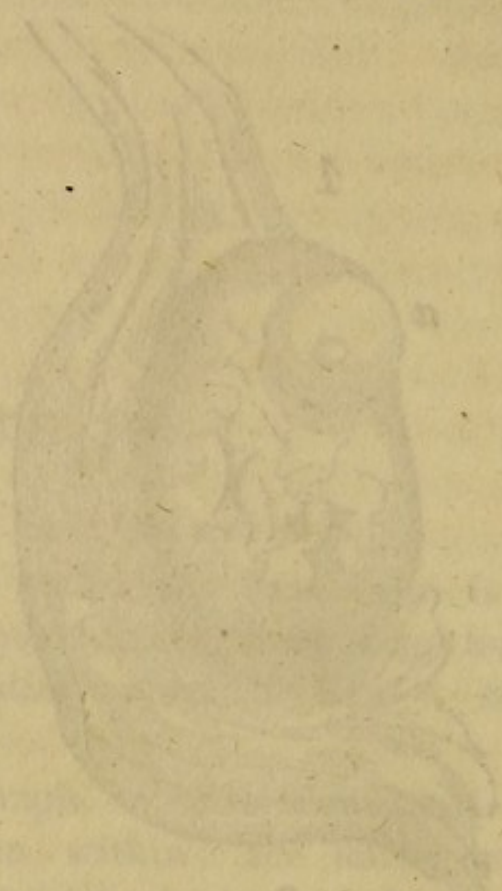


Plate III.

Ovaries and Vaginae.

precise time when the egg is fairly loose from the Vesicle, the expanded end of the Fallopian Tube grasps the Ovary over the spot where it is, and the fringes or fingers at the end of the Tube take hold of and carry it into the passage. The Tube then contracts and the egg is gradually forced down its interior till it reaches the Womb.

When the egg arrives in the Womb it would of course pass immediately out, by way of the Vagina, if there were not some contrivance to prevent it, which of course there is, and of a very simple and perfect character. While the egg is passing down the Tube there is formed in the interior of the Womb a thin membrane, or skin, which lines its walls and closes the passage at its mouth. While the egg passes out at the Uterine end of the Tube it presses on this membrane and makes a depression or nest in which it lies.

As long therefore as this membrane remains attached the egg is retained in the Womb, and conception is possible, because the male principle can penetrate through it without obstruction, but at the end of a certain time the membrane looses away and parts from the body, taking the egg along with it, after which, of course, there can be no conception till another such period comes round and another egg is lodged there in the same manner. Consequently there is only *a part* of each month during which conception can take place, and during the rest of the month it is *impossible*! The precise period during which conception can occur varies in different persons, being in some only *one or two days*, and in others much longer, but it probably never extends beyond half the month, or fourteen days. This statement I am aware will surprise many per-

sons, it being generally thought that conception may take place *at almost any time*; but there is no question that this is an error.

As near as can be ascertained, the flow occurs while the expulsion is taking place from the Ovary, and the egg does not reach the womb until the first or second day after the discharge has ceased, it is therefore from the second day after the cessation of the period that the time during which conception can take place is reckoned. This time, I think it necessary to state again, is so various in different females that no general rule can be laid down, and there are so many causes which make its commencement and duration uncertain, that it cannot be calculated upon practically, except by experienced persons. There *are* signs by which the period during which conception is impossible can be told in *every* female, with perhaps a few exceptions, but they can only be detected by those who have been long in the habit of observing them. The Membrane and Egg together are so small, and so delicate in their structure, that no female perhaps ever observed them, though passing from her body every month. I have, however, obtained them, and have pointed them out to persons, by the aid of the microscope.

A knowledge of the above mentioned facts enables us to explain many cases of *barrenness*, the causes of which were previously unknown. In some females the Ovary has not power to *perfect* the egg, and it is constantly expelled before its development is complete, and therefore is not capable of being impregnated. In others the Womb does not form the Membrane, so that the egg instead of being retained in the Womb passes immediately out, and

conception has no chance to occur. Some females can only retain the egg a few hours, or perhaps for a day, and if not impregnated during that short time they cannot be so during the rest of the month. The most probable time for conception is from the first to the fifth day after the cessation of the menstrual flow.

The actual process of conception is in itself very simple, and may be explained in a few words. The semen, or male principle, is deposited, during association, in the Vagina, and from thence conveyed upwards, through the Os Tincæ, into the cavity of the womb. If it reaches the upper part, and the egg be there, conception may occur; but there are many causes operating both to prevent its transit and also to destroy its power. The upward passage of the semen is accomplished by a peculiar *vital power* in itself, which will be explained when we describe the male system. The place of union of the two principles is therefore usually in the *upper part* of the womb, or possibly also at the uterine end of the Fallopian Tube.

Immediately after impregnation has been effected the egg attaches itself permanently to the walls of the womb and begins to develop into a human being, the womb expanding to allow of its doing so. When fully grown the walls of the womb begin to contract and eventually expel it from the body, by way of the vagina. During its growth the nutriment required is obtained, in some way not very well understood, from the mother's blood, the communication between the Fœtus and its parent being of the most wonderful and mysterious character. Instances have been known of the egg, after its impregnation, being taken back again, by a reverse

action of the Tube, to the outside of the womb, and partly developing there ; such cases are called *extra uterine* conceptions, and they are supposed to result from fright or other sudden and powerful emotions. The *natural* action of the Tube is such that it can only convey anything *from* the Ovaries towards the womb, but sudden and strong excitement of the nervous system may, for a short time, reverse this natural action, and if there should then be an impregnated egg at the uterine end of the Tube it may be brought to the outside, and thus produce an extra uterine conception. These, however, are always imperfect, and of course can never be *born*. Sometimes they form into tumors which may be carried for years, or even for life, but more frequently they decay after a time and pass away by an abscess, often with little injury or risk to the patient.

The old notion about one Ovary producing males and the other females, is incorrect, either one producing both sexes. It is also an error to suppose, as some persons do, that *sexual feeling* is requisite in the female for conception to take place. There is no question whatever that it *can* occur in certain cases, not only without sexual feeling, but also *during sleep*, or in a state of *perfect unconsciousness*, though it is not *so likely* to do so. This will be better understood, however, after the male system has been described, when it will be shown that it may be even effected ARTIFICIALLY, without any intercourse of the sexes at all.

This explanation, it will be observed, establishes a perfect correspondence between the action of the reproductive system in the human female and in all others, such as reason and analogy would lead us to expect.

The constant production of Ova, or Eggs, at regular periods, as a part of the proper action of the female system, independently of sexual union or excitement, is what universally occurs. In those animals that bring forth their young alive, it is true, we do not ordinarily see them, unless they are closely looked for, owing to their small size and to their remaining within the body to develop when impregnated. But in those who produce their young externally, as birds for instance, the eggs are larger and easily seen, and it is well known that they are regularly produced without any concurrence of the male bird. These eggs so produced, however, are infecund, that is, they cannot develop, because they have not the male principle. This is what we have shown occurs in the human female; the eggs are regularly produced, but when not impregnated are thrown off and lost.

The use of impregnation therefore is to *vivify* or perfect the egg, and not to *produce* it as the old theories supposed.

In like manner we see that in all animals a crisis is produced when the eggs are ripened and cast off, strictly analogous to the monthly crisis in the human female. The period, however, varies very much, though always constant in the same being. Thus some animals produce their Ova only once in two or three years, as the Lion and Elephant for instance, while others do so every year, usually in the spring, as the Deer and wild cattle for instance. When this occurs there is a peculiar excitement engendered in the system, called the *Rut*, or *heat*, which is accompanied by a flow, and is strictly analogous to the monthly crisis in the human being.

It is of course only at that period when the eggs are ripened that impregnation can be effected, as is well known with domestic animals, who conceive only in the season of rut, or heat, which usually occurs in the spring. They will not admit the male at any other time, because there is not the requisite excitement to create the desire to do so; but even if they were there could be no conception, simply because there is no egg to be impregnated. In the human being the ovarian development is *monthly*, and therefore conception can occur at almost any period of the year, though only at a particular part of each month. In some domestic animals, as Fowls and Rabbits for instance, the ovarian development is almost incessant, so that they produce eggs, or conceive almost without intermission.

On dissecting the ovaries of any animal at the proper period, all the appearances can be noted that we have described in the human being. The vesicles may be seen at various stages of development, the Corpora Lutea may be detected where ova have formerly been expelled, and, in birds, the eggs themselves may be seen, some merely rudimentary, others larger, and some nearly ready to be expelled. In the human being there is usually but *one* vesicle, and its egg, ripened at each period, but occasionally there are two or more, when we may have twins, and so forth. So that in those animals who have always several young at a birth, there are, of course, always as many vesicles ripened, and a Corpus Luteum is formed for each.

The structure of the egg is the same in all animals, being precisely like that of the bird. The main part is a mass of yellow granules, called

the *yelk*, in which is found a small greenish vesicle, called the *germinal vesicle*. The white portion seen so large in birds, is, like the shell, an accidental addition, and not strictly a part of the ovum; it is not needed in those Ova that are developed in the body. In its passage down the Tube the egg is broken open by the germinal vesicle bursting through its outer envelop and escaping. This breaking open of the egg is, as will be shown when the male principle is described, a necessary preparation for conception, and is in itself a very curious phenomenon.

I am aware that the facts I have stated, and the conclusions drawn from them, are totally at variance with many old theories and popular notions, and will seem very strange to those who hear them for the first time. It is, therefore, necessary for me to state that they are not advanced without the fullest authority. It is only very recently that a knowledge of these curious and important facts has been obtained, and they have not yet had time to find their way even into standard scientific works, in this country, though well known to practical Physiologists. They are the results of actual *experiment* and *investigation*, and are placed beyond the possibility of doubt. These explanations have a very different foundation, therefore, from the mere *theories* and *suppositions* contained in most physiological works, which are generally supported only by questionable statements or loosely observed facts.

the wall, in which is found a small greenish vesicle, called the germinal vesicle. The whole portion seen so large in size, is like the shell, an accidental addition, and not actually a part of the ovum; it is not needed in those Ova that are developed in the body. In its passage down the Tube the egg is broken open by the germinal vesicle pushing through its outer envelop and escaping. This breaking open of the egg is as will be shown when the next principle is described.

PLATE IV.

The Uterus and its appendages removed, to show their connections.

B. The Womb.

C. The Vagina.

e. e. The Ovaries.

f. f. The Fallopian Tubes.

g. The Neck of the Womb.

r. r. The Round Ligaments.

s. The Left Broad Ligament.

This view represents the Organs disconnected from all the other parts. The passage of the Ovum, from the Ovary down the Fallopian Tube to the Womb can be readily understood by this plate.

PLATE IV.



Plate IV.

Uterus and appendages laid open.

CHAPTER II.

THE MALE SYSTEM.

THE most essential organs in the male system are two glandular bodies, called the *Testes* or *Testicles*, which are placed, after birth, outside of the body, in an external envelop, called the scrotum, hanging from the pubic bone. The use of these organs is to produce the male principle, or *semen*, as the ovaries produce the female ova or egg. The Testes, like the Ovaries, are not capable of performing their proper functions till a certain period of life, called puberty, but unlike them, they are not liable to lose their powers at any particular age, but may preserve them indefinitely. In the early stages of existence in the womb the testes are contained in the abdomen, and only descend to the scrotum just before birth.

On dissecting one of the testicles, it is found to be chiefly composed of blood-vessels and numerous small tubes containing semen. A branch of the spermatic artery is sent from the abdomen down to each testis, in which it divides and subdivides into thousands of little branches, many of which are too small to be seen by the naked eye. It is this artery that brings to the testes the pure blood from which probably the semen is formed. The extreme ends of the minute arterial branches are apparently continuous with the commencements of the seminal tubes, so that in examining them we gradually lose sight of the blood and begin to find

semen. The seminal tubes are at first exceedingly minute, but very numerous, and they gradually unite together to form larger branches, and trunks, till eventually the whole form but one tube, called the *Vas Deferens*, by which the semen is conveyed to the Urethra. The number of these little tubes has been estimated at over *sixty thousand* in one testicle, and it has been shown, that, if they were put in a straight line, they would measure many hundreds, if not thousands of feet. There is also a branch of the spermatic *vein* connected with each testis, which ramifies in its substance similarly to the artery. This vein is to take away the impure and refuse blood when no longer needed.

The Testicles are therefore mainly composed of three kinds of tubes, or vessels, namely, *Arteries*, *Veins*, and *Seminal Tubes*. In addition to which there are also numerous *nerves*, and Lymphatics, or absorbents, the whole being connected together by a cellular substance or tissue. Each one is connected with the body by what is termed the *spermatic cord*, which is a kind of sheath, or tube, about half an inch in diameter, containing the main branches of the Artery, Nerves, and Lymphatics, going to the Testis, with the main branch of the vein, and the *Vas Deferens*, coming from it. This spermatic cord ascends into the Abdomen, when the different vessels composing it are distributed to their respective places. Each testis is also surrounded by a distinct coat, or *tunic*, beside the scrotum, or outer skin, in which both are enclosed.

The manner in which the semen is actually made is of course unknown to us; we can only point out the place where it originates and explain its progress towards the exterior of the body.

The Vas Deferens from each Testis, into which all its seminal tubes have poured their contents, ascends into the Abdomen through the spermatic cord, and rises nearly as high as the top of the bladder, behind which it turns, and then begins to descend till it meets over its lower part with two small organs called the *Seminal Vesicles*, with which it becomes connected. From the seminal vesicles the semen passes down a small tube called the *Ejaculatory Canal*, which is attached to the bladder, and which joins immediately *under* it, an organ called the *Prostate Gland*. Finally, by means of some curious openings through the prostate gland, the seminal fluid is passed into the *Urethra*, or passage down the Penis, by which the urine escapes from the bladder, and is thus ejected from the body.

These several parts comprise the whole male generative system, and in the act of impregnation each one has a special function to perform. The Testis secrete the semen, the Vas Deferens and ejaculatory canal convey it to the Urethra, and the penis deposits it in the Female Organs, while the seminal vesicles and prostate gland either secrete some necessary addition, or effect some modification in it.

This general description will be sufficient for our present purpose. A full account of each organ, and of all their different diseases, will be given further on. After the nature and properties of the Seminal Fluid have been treated upon.

(A reference to the *Frontispiece* and its explanation, will give a clear idea of the description here given, and will also make any of the subsequent articles be readily understood.)

CHAPTER III.

THE SEMEN.

THE vivifying principle secreted by the male testes is a yellowish white semi-fluid substance, having a peculiar odor. It is slightly viscid and of a saltish flavor, when fresh. On examination it is found to consist of two distinct parts, one nearly fluid and the other like globules of half-dissolved starch, which, however, both melt together when it is exposed some time to the air. The peculiar odor of the Semen appears to be derived from some of the parts through which it passes, for when taken from the testes it has scarcely any smell at all.

Chemical analysis shows us that the semen differs but little in its composition from other substances found in the body. In 1000 parts there are about 900 water; 60 animal mucilage; 10 soda; and 30 of phosphate of lime, with a peculiar animal principle, the composition of which is unknown. This analysis it must be recollected is that of the semen, as it leaves the body, that is the secretion of the Testes, Vesicles, Prostate Gland, and other parts, united together. How far the pure semen from the testis alone differs from this is not known. By some the starchy portion only is supposed to be produced by the Testes.

The Seminal Animalculæ.—The most curious peculiarity of the semen, and in many respects the most important, is that there always exists in it, when perfect, a number of remarkable living

beings, called the *Zoospermes*, or Seminal Animalculæ. These beings were discovered many years ago, but have not been accurately studied and described till very recently. The representations and descriptions given of them in old works are mostly incorrect, and sometimes very extravagant, and calculated to mislead rather than inform. Some physiologists, who saw them imperfectly, even doubted if they were living beings. The perfection of that magical instrument, the microscope, however, and the patient investigation of such men as *Pouchet* and his coadjutors have not only corrected these old errors, but also disclosed to us new truths, more wonderful even than the wild dreams of former times.

As far as yet investigated these Animalcules exist universally, in the Semen of all animals whatever, but have a peculiar form and development in each.

It is also ascertained that they are developed from a species of *egg*, or ovum, called the seminal granules, or vesicles. Under the microscope a number of these can always be detected, like little globules of mucus, and they are observed to undergo a regular series of changes similar to those of the female ovary. When first observed they are round and merely contain a number of small granules, which are the Animalcules, in a rudimentary state. At a further stage these granules are found to be developed into small Animacules, while the containing vesicles have expanded and become elongated, or egg-shaped. Finally the vesicle breaks open at one end, and the Animacules escape, being at first very small and gradually growing afterwards to the size we ordinarily see them.

The figures in the accompanying plate represent

beings, called the Zoospores, or Seminal Animalcules. These beings were discovered many years ago, but have not been accurately studied and described till very recently. The representations and descriptions given of them in old works are mostly incorrect, and sometimes very extravagant, and calculated to mislead rather than inform. Some physiologists, who saw them imperfectly, even doubted if they were living beings. The publication of that medical instrument, the microscope, however, and the patient investigation of such men as Hower and his coadjutors have not only corrected these old errors, but have also disclosed to us new truths more wonderful than the wild dreams

PLATE V.

The Seminal Animalculæ in the Human Subject.

1. One of the Vesicles, containing the Animalcules in a rudimentary state, coiled up.
2. The Vesicle broken open, and the Animalcules escaping.
- 3 and 4. Perfect Animalcules.—*a*. Is the stomach and intestines. The two round white spots at the top, indicate the mouth and the sucker by which it attaches itself.

These are magnified many thousand times.

The figures in the accompanying plate represent the changes which the seminal animalcules undergo in the human body. They are first observed in the seminal vesicles, which are situated in a rudimentary state. At a further stage these animalcules are found to be developed into small Animalcules, while the containing vesicles have expanded and become elongated, or egg-shaped. Finally the vesicle breaks open at one end, and the Animalcules escape, being at first very small and gradually growing after words to the size we ordinarily see them. The figures in the accompanying plate represent

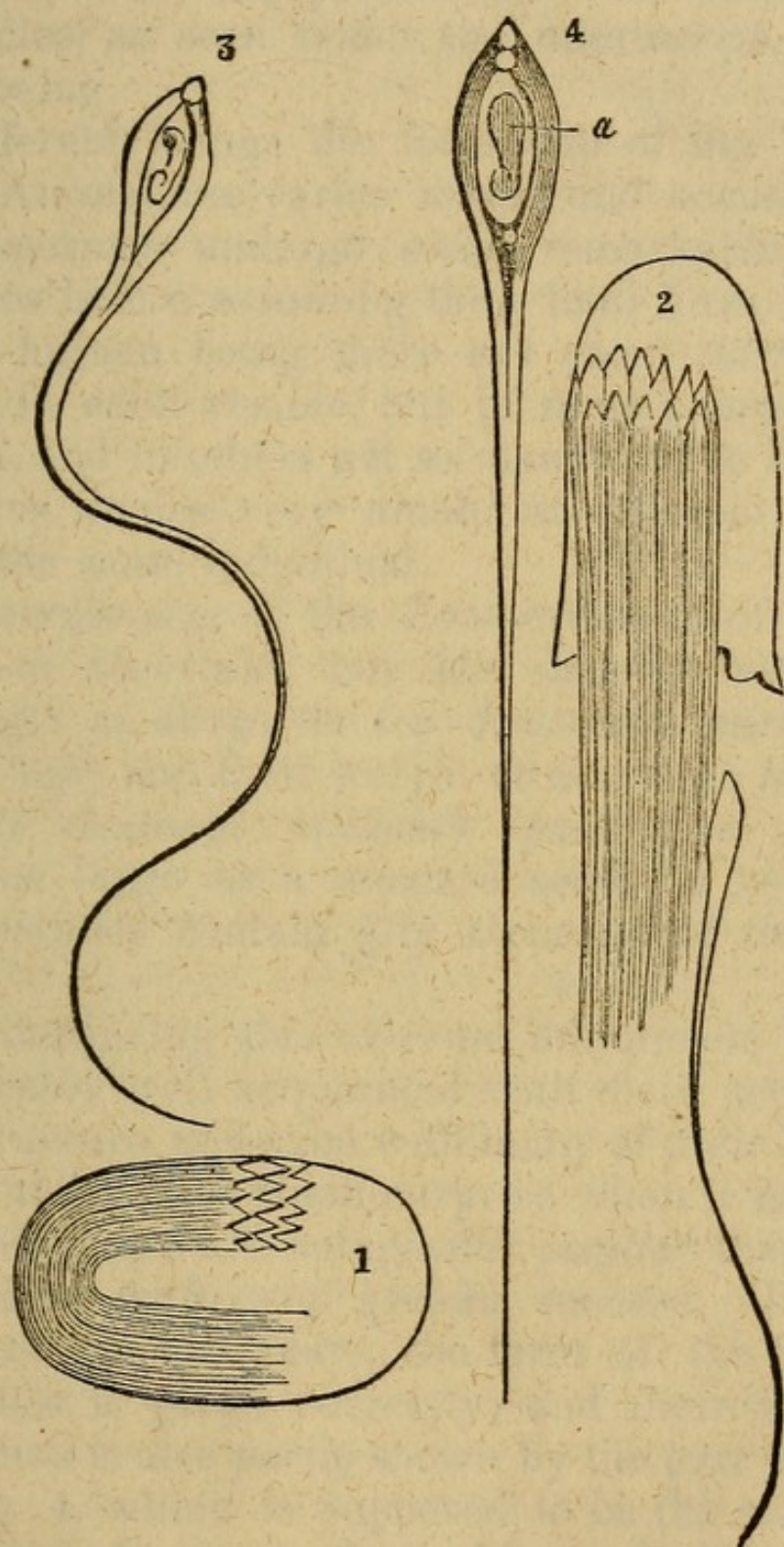


Plate V.

Seminal Animalcules.

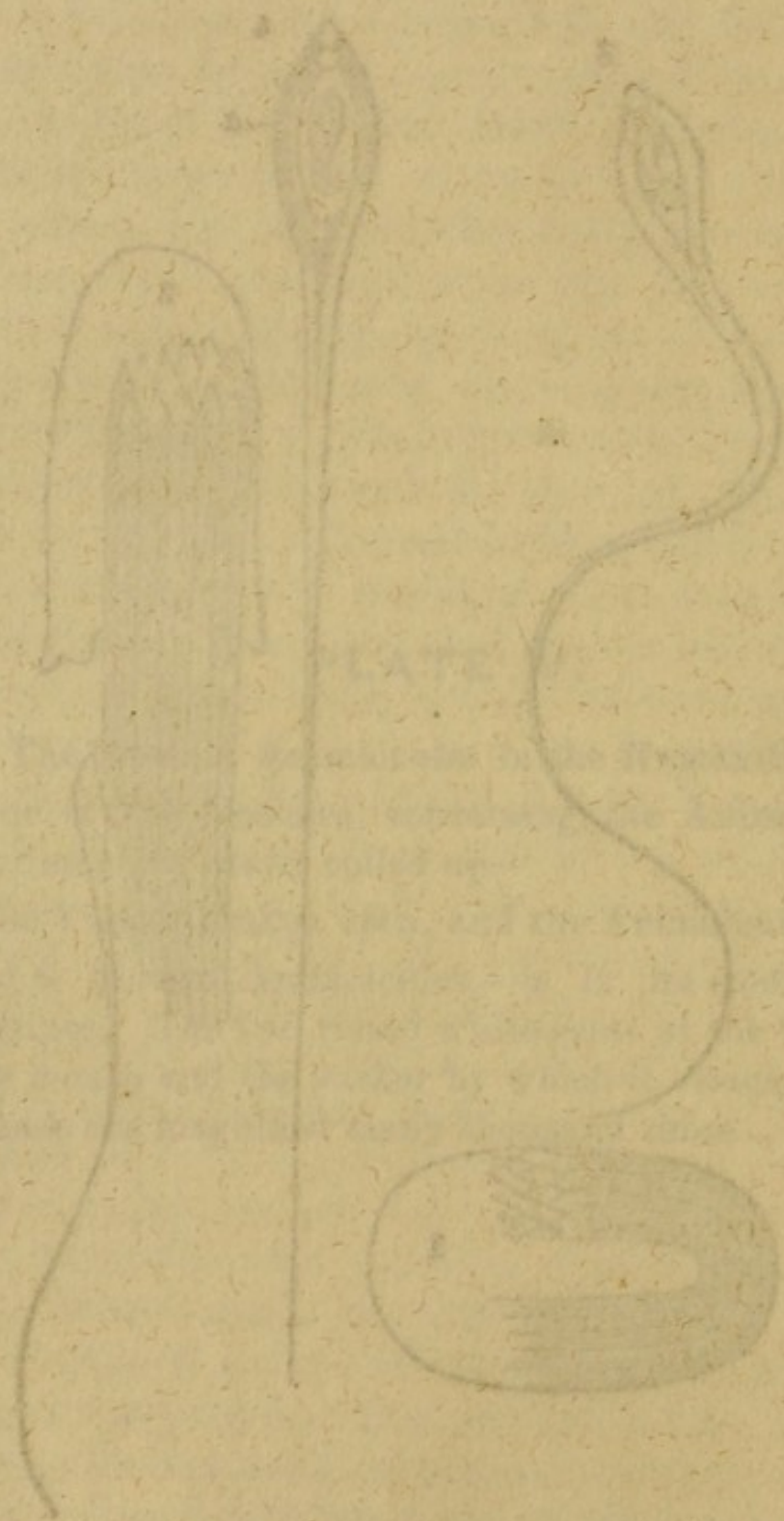


Plate V.
Botanical Anatomies.

the form of the Zoospermes and the changes in the vesicles, as seen under the microscope, in the human being.

In different beings the form both of the Vesicle and the Animaculæ varies much, and occasionally the Zoospermes undergo some remarkable metamorphoses before assuming their final form.

In the human being there are about *thirty* Zoospermes in each vesicle, but in some beings there are more, and in others not so many. The number of vesicles varies very much, at different times, even in the same individual.

The precise size of the Zoospermes is of course difficult to ascertain, but Mr. Ruchet estimates their *length* at about the *ten thousandth part of an ordinary hair*, and their weight at about the *hundred and forty thousand millionth part of a grain!* A spot as large as a mustard seed, he remarks, will sometimes contain *fifty thousand* of them, or more.

Notwithstanding this extreme minuteness we are now tolerably well acquainted with their peculiarities of structure, and even with many of their *habits*; nor need this excite much surprise when it is recollected that there are beings *still smaller* that have been studied with even greater success. In Fig. 3 and 4 of the last plate, the form of the human Zoospermes is given correctly, and their internal organization is also *partly* shown by the part marked *a. a.* Fig. 4, which is supposed to be the stomach. In the perfect state each one has a sucker at the larger end, represented by the white dot in Fig. 3 and 4, by which they can attach themselves to any object. They are observed to change their skins at certain periods, like snakes, and we some-

times find the loose skin hanging about them in shreds ; or cast off quite whole. In some animals they have a number of hairs, or cilia, by the motion of which they move in the fluid, and some even have perfect fins. One Physiologist assures us that he distinctly saw they were sexual, and that he could readily distinguish the male and female ! They are usually lively and active, with peculiar motions, some of which are performed in concert and others singly, with great perseverance and regularity ; thus a number of them will sometimes form into a ring, with their heads all one way, and run round and round in a circle for a considerable time ; or one may be seen by itself pushing before it a large globule of mucus, or blood, many times heavier than itself, for several minutes together. One peculiarity is observable in all of them, and that is an almost invariable tendency to move only *straight forward*, and they will seldom turn to go back even though they meet with an obstruction, but often attach themselves to it by the sucker and remain till they die. Very often they are seen to enter into combats, and a number of them will fight till only one is left alive. They will live for some hours out of the body, particularly if put in warm water, in which their motions may be readily seen.

The Zoospermes are not found before Puberty, nor usually in extreme old age. Many diseases also destroy them, and several drugs have the same power. In all cases where they are absent or destroyed, from whatever cause it may be, the semen cannot impregnate, though in every other respect it may be quite perfect, and the vigor of the patient seem not in the least impaired. This has been proved by filtering them away, and by destroy-

ing them. The development of the Zoospermes it will be observed is strictly analogous to that of the ova or eggs in the females. Thus they are first found in the form of little granules, enclosed in a Vesicle which bursts as they become more perfect and allows them to escape. In some animals there is even a periodical development of them, similar to that of the ova in the female, with which it usually corresponds. In such animals the Testes are small at other times, and increase in size at these periods, because the Vesicles only attain their full growth then.

In tracing the semen from its source we find that the animalcules are not developed till it reaches the Seminal Vesicles, and are sometimes not perfect till it has reached the Prostate Gland. In the Testicles we never find the Zoospermes themselves, but only the Vesicles containing the granules, which gradually develop as it proceeds further on.

The Testes may therefore be compared to the Ovaries, the Seminal Vesicles to the Graafian Vesicles, and the Seminal Granules to the ova. Some Physiologists consider the granules to be the ova of the animalcules themselves, but this we cannot yet decide, though it is certain the animalcules originate from them.

The importance of these facts, in giving us a correct knowledge of the nature and proper treatment of many diseases of these organs, will be seen as we proceed, particularly when treating on Impotence and Seminal losses.

The actual process of conception is also made more clear from some of these details. For instance the tendency which the Animalcules have to move only *straight forward*, is in all probability the

PLATE VI.

Section of the Uterus at four months of Pregnancy

- a. a. a.* The Thick Walls of the Womb.
- b. b.* The Fœtus.
- c.* The Umbilical Cord.
- d. d.* The Placenta.
- e.* The Vitellus.
- f. f. f.* The Decidua.
- g.* The Chorion.
- h.* The Amnion.
- i. i.* Vessels of Placenta.
- k. k.* The inner openings of the Fallopian Tubes, which are here cut off.
- l.* The Mouth of the Womb, opening into the Vagina.
- m.* The Vagina.

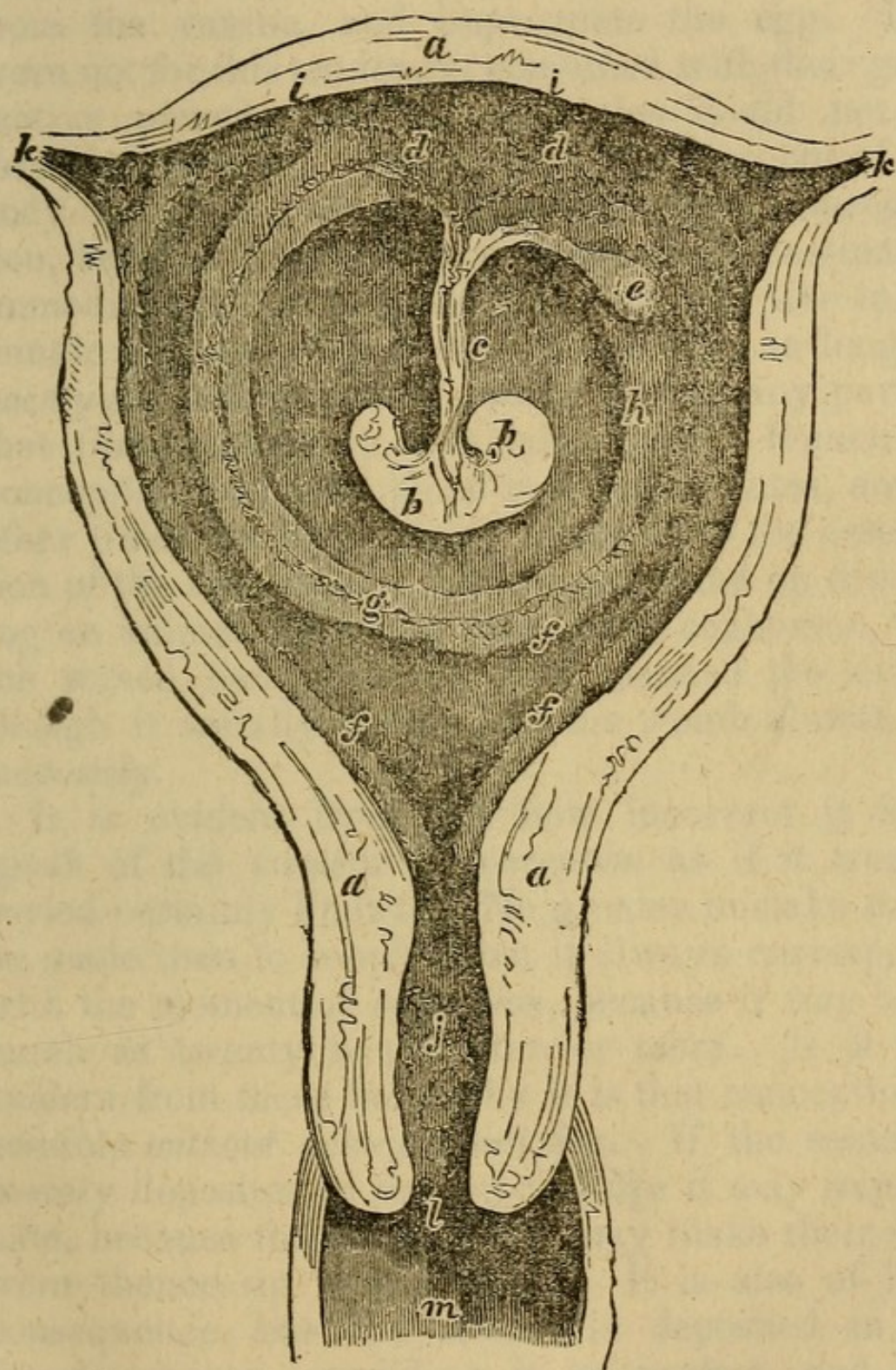


Plate VI.

Uterus at four months.

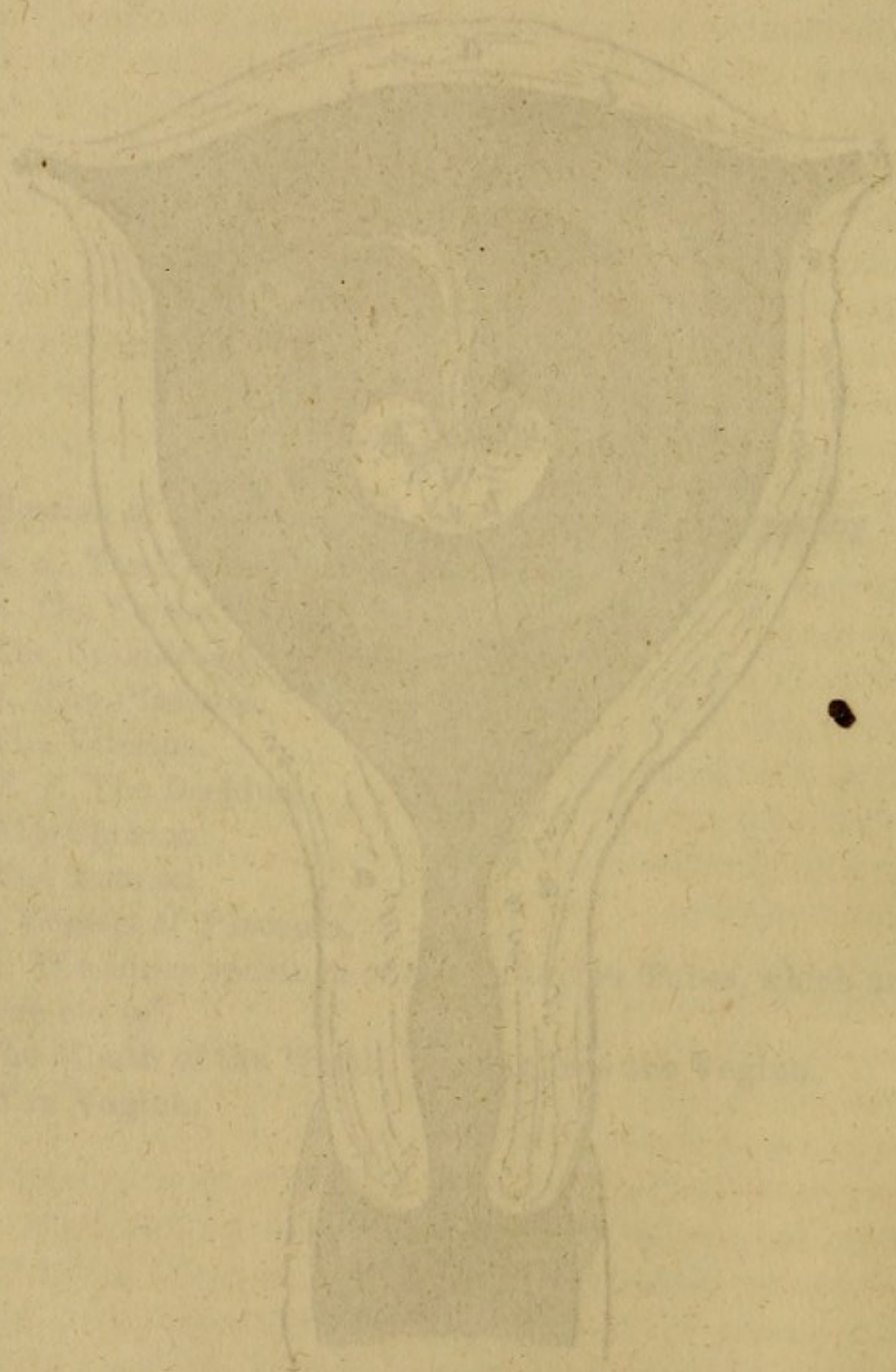


Plate VI.
Uterus at four months.

reason why they make their way up into the womb from the vagina, and impregnate the egg. If it were not for this tendency, combined with their great motive power, the two principles could not be brought together. Their power of living out of the body for some time is also necessary to impregnation, because they may not reach their destination immediately. It is found that they will live in the female organs, when these are healthy, as long as *twenty-six* hours, and of course during any part of that time conception may take place. Sometimes conception may take place in a few minutes, and at other times not till as many hours after the association of the two sexes. It has been found on dissecting an animal killed *ten hours* after connexion, that the semen had not even then reached the ovum, though it usually passes into the womb almost *immediately*.

It is evident from this how incorrect it is to speak of the *moment of conception* as if it were a period certainly known. No greater mistake could be made than to suppose that it always corresponds with the moment of *connexion*, because it *may* be as much as twenty hours after, or more. It is also evident from these facts why it is that conception is possible *without actual connexion*. If the semen is merely deposited in the *external lips* it may impregnate, because the animalcules may make their way from thence up to the womb. It is also of little consequence *how* the semen is deposited in the female organs, providing it be perfect, and this explains why it is that conception can be effected *artificially*, by merely injecting the *semen* in the female organs with a syringe, or otherwise, which has often been done. The mere presence of the

male organ is in no way essential ; which is the reason why a certain mode of attempting to *prevent* conception often fails. It was also remarked, in a previous part, that sexual *feeling* in the female was not necessary to conception, and this will now be evident when it is recollected that the Animalculæ move up into the womb by their own vital power. It is probable, however, that this feeling often *conduces* to conception, by establishing certain favorable conditions of the parts, and therefore that event is not so *likely* to occur during sleep or unconsciousness, though it is *possible* for it to do so.

The old idea that it was only the *odor* or *aura* of the semen that ascended into the female organs and impregnated the ovum, is too unfounded and obviously incorrect to need refutation.

The presence or absence of the Zoospermes in the Female Organs, and other parts, is the chief evidence sought for in cases of alleged violation, because in such cases they may certainly be found, if the act has been committed, for as long as twenty-six hours after alive, and dead for almost any period if the fluids be dried.

It is now generally considered that the Animalcule is the true rudiment or germ of the future human being, which is supposed to be developed from it in the same way as the plant is developed from the seed ; or rather the human being is thought to be one of these Zoospermes developed to a more perfect form by the power of the egg in which it is placed. In proof of this we have the fact, attested by several observers, that when the egg breaks open, during its passage down the tube, from the escape of the germinal vesicle, one of the Animalculæ, if then present, always creeps in. In

fact it has been seen to do so, and we thus have a probable explanation of the origin of human life, if we suppose this minute being is the origin of the future human being. If they are truly sexual we may also have an explanation of the cause of the difference in sex in ourselves, as this may be dependent upon the sex of the Animalcules from which we originate.

PLATE VII.

Section of the Uterus in the unimpregnated state, and of the Natural size.

- a. a.* Are its Thick Walls.
- b.* Is the Cavity in its upper part or *body*.
- c.* is the Cavity in the lower part, or *Neck*.
- d.* Is the Vagina.
- e. e.* The edges of the Walls of the Vagina, cut through.
- f. f.* Two Threads, passing through the openings of the Fallopian Tubes, and appearing in the inside.
- g.* Is the Mouth of the Womb, or Os Tincæ opening into the Vagina.

This view being of the *full size*, will give an idea of the astonishing change this organ has to undergo in the process of Gestation.

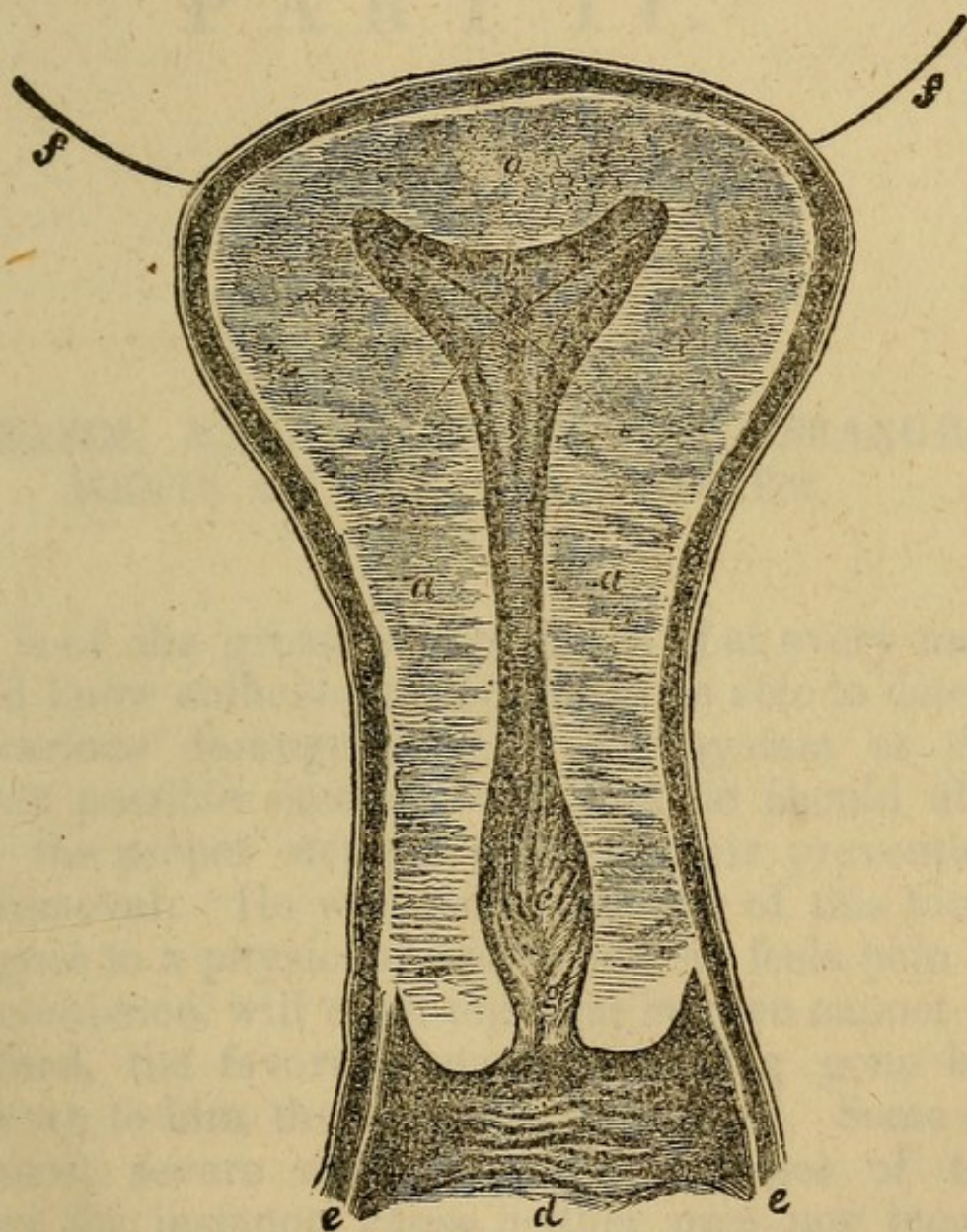


Plate VII.

Section of the Womb, natural size.

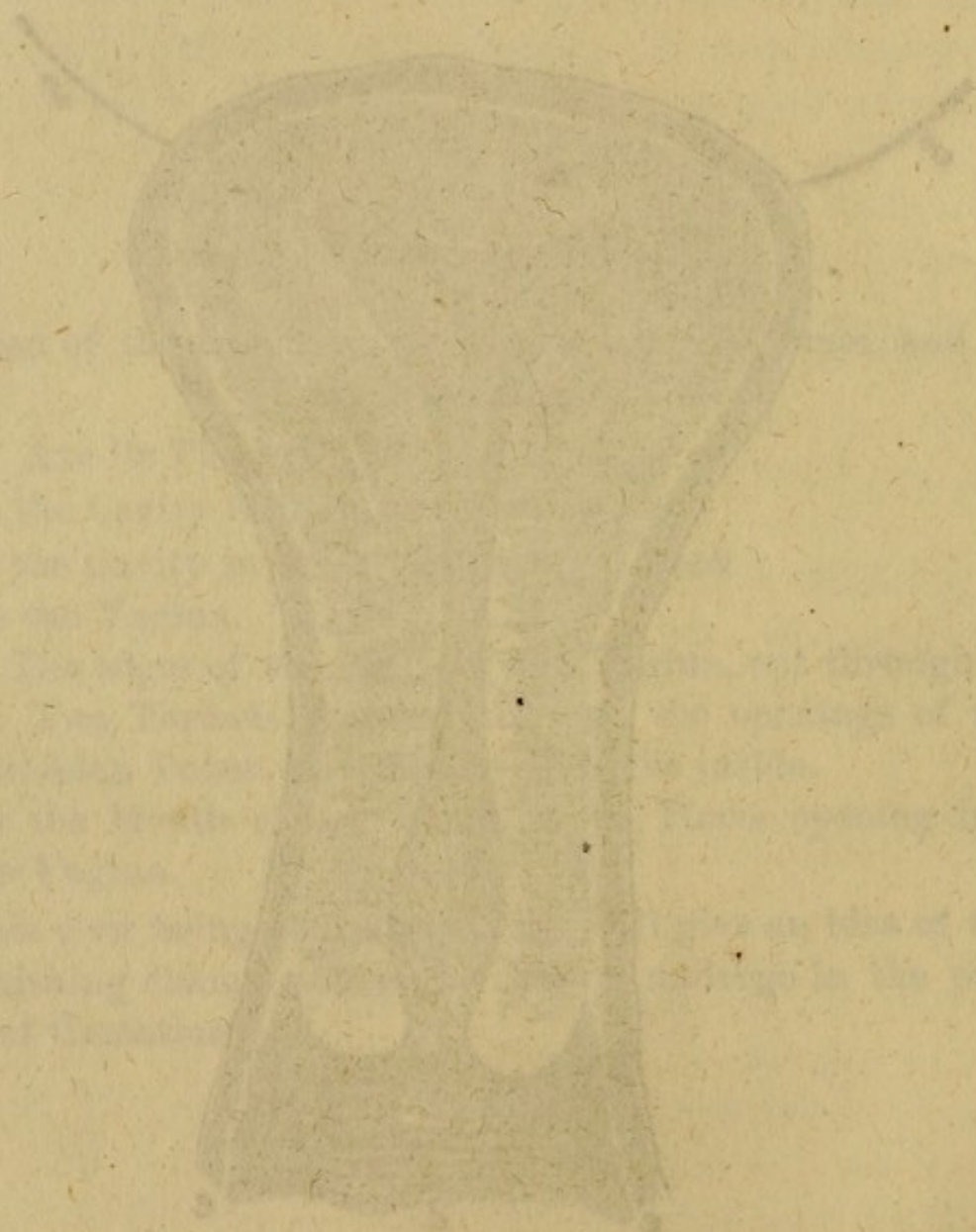
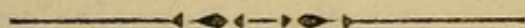


Plate VII

Section of the Head, natural size.

P A R T I I.



DISEASES, MALFORMATIONS AND DERANGEMENTS OF THE MALE SYSTEM.

It is of the greatest importance that every man should know sufficient of himself to be able to detect the various derangements of his system at the earliest possible moment, and that he should also know the proper steps to take for their prevention and removal. He who knows nothing of this kind, and goes to a physician only when he feels pain or inconvenience, will often find that he then cannot be benefited, the favorable moment having gone by, unknown to him through his ignorance. Some of the most severe and dangerous diseases of the Testes, for instance, cause neither pain nor inconvenience till they are considerably advanced. I shall therefore give all the indications, that can be relied upon, of each disease, and also the treatment to be pursued, making it in every case, as far as possible, such as may be practised by the person himself.

P A R T I I .

DISEASES, MALFORMATIONS AND DEFORMITIES
OF THE MOUTH AND THROAT.

It is of the greatest importance that every man should know sufficient of himself to be able to detect the various derangements of his system at the earliest possible moment, and that he should also know the proper steps to take for their prevention and removal. He who knows nothing of this kind, and goes to a physician only when he feels pain or inconvenience, will often find that he then cannot be benefited, the favorable moment having gone by, unknown to him through his ignorance. Some of the most severe and dangerous diseases of the Throat, for instance, arise without pain or inconvenience till they are considerably advanced. I shall therefore give all the indications that can be relied upon, of each disease, and also the treatment to be pursued, making it in every case, as far as possible, such as may be practised by the person himself.

PLATE VIII.

Seminal Tubes of the Testicle, with the Epididymis and Vas Deferens.

- a a. a.* Lobules of the small Seminiferous Tubes, similar to the Convolutions of the Brain.
- b.* The Rete Testis, a number of nearly straight Tubes into which the smaller ones enter.
- c.* The Vasa efferentia, or larger Tubes, 12 or 18 in number, into which the semen passes from the Rete Testis.
- d.* Plexuses, or conglomerations of the Vasa efferentia, which form a kind of head, almost like a small Testicle, called the Epididymis.
- e. e.* The head of the Epididymis
- f. f.* The body of the Epididymis.
- g.* An appendix of the Epididymis, called the *aberrans*. It is not always met with.
- h.* The Tail, or Cauda of the Epididymis.
- i. i.* The Vas Deferens, which is at first very much twisted, but becomes finally straight.

From this view it will be seen that the small Seminal Tubes gradually verge into the large straight ones, called the *Rete Testis*, then into the still larger called the *Vasa efferentia*, and finally they all coalesce into *one* Tube, the Vas Deferens

PLATE VIII.

Seminal Tubes of the Testis, with the Epididymis and
Vas Deferens.

a. a. Lobules of the small Seminaliferous Tubes, similar
to the Convolutions of the Brain.

A. The Rete Testis, a number of nearly straight Tubes into
which the smaller ones enter.

c. The Vas deferens, or larger Tubes, 12 or 15 in num-
ber, into which the semen passes from the Rete Testis.

d. Plexures, or convolutions in the Vas deferens,
which form a kind of head, almost like a small Testis,
called the Epididymis.

e. The head of the Epididymis.

f. The body of the Epididymis.

g. An appendix of the Epididymis, called the tubercle.
It is not always met with.

A. The Tail, or Cauda of the Epididymis.

i. The Vas Deferens, which is at first very much
twisted, but becomes finally straight.

From this view it will be seen that the small Seminal
Tubes gradually verge into the large straight ones, called
the Rete Testis, then into the still larger called the Vas
deferens, and finally they all coalesce into one Tube, the
Vas Deferens.

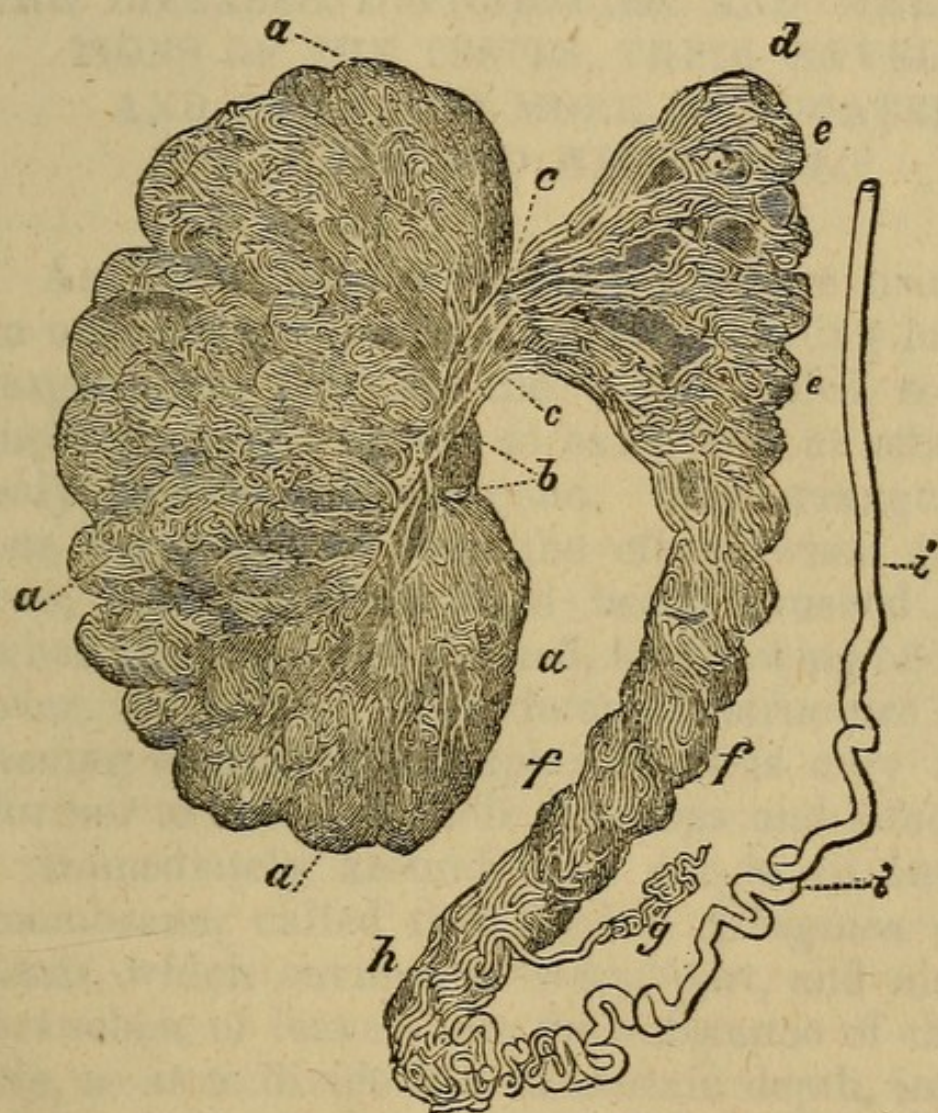


Plate VIII.

Seminal Tubes of the Testicle.

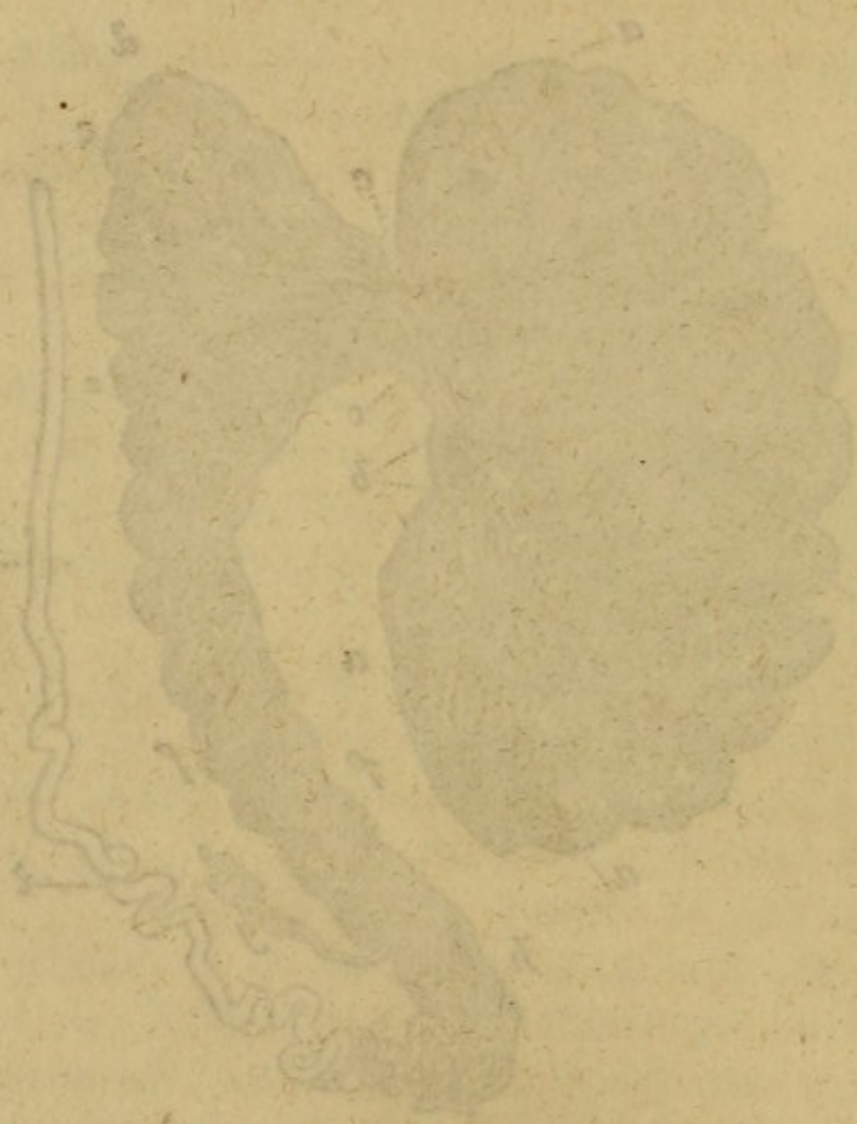


Plate VII.
Terminal Tubes of the Testicle.

CHAPTER IV.

THE DISEASES, DEFICIENCIES AND MALFORMATIONS OF THE TESTES, THEIR ENVELOPS, AND THE PARTS MORE IMMEDIATELY CONNECTED WITH THEM.

As before remarked, the Testes are usually two in number, the one on the left side being lower and larger than that on the right. But sometimes more than two appear to exist, and at other times only one, or perhaps none. The arrangement of one being higher than the other, when there are two, prevents them from being crushed together when the limbs are crossed, by allowing one to slide over the other. The internal structure of them having already been explained, it is only requisite further to describe their envelops and attachments.

Immediately around each one is an envelop or membrane, called the *Tunica Albuginea* or *Peritestis*, which surrounds every part, and also sends branches, or leaves, into the substance of the Testicle, so as to divide it to a certain depth, into lobes, or sections, similar to the lobes of the brain, only of a triangular shape.

The outside inclosure is called the *Scrotum*, or purse, and is the same as the skin of the thighs. It is divided vertically into two parts by a small ridge, called the *Raphæ*, and is usually covered with hairs at puberty. Underneath the *Scrotum* we next find a reddish cellular membrane, called the *Dartos*, which makes a separate sack for each of

the two Testicles, which are separated from each other by a vertical membrane placed between them, called the *Septum Scroti*, which acts as a partition, and thus the two organs are perfectly unconnected with each other. The nature of the *Dartos* has been a subject of dispute among anatomists, some considering it to be merely a cellular tissue, and others thinking it to be a muscle. It is undoubtedly *partly* muscular, and consists mainly of long fibres, which cross and interlace each other in every direction. It is the contraction of these fibres of the *Dartos* that corrugates or wrinkles the *Scrotum*, as is well seen when sudden cold is applied to the external parts. Next under the *Dartos* comes a true muscular coat, called the *Cremaster Muscle*, or *Tunica Erythoides*, the use of which is to draw the Testicle upwards. This is derived from one of the muscles of the abdomen, and comes down through the abdominal ring, forming part of the sheath of the spermatic cord. The last coat is called the *Tunica Vaginalis*, which is a true serous membrane interlaced with blood-vessels, and comes next to the *Tunica Albuginea*.

In a healthy state the muscular fibres of the *Scrotum* are usually contracted, so as to draw the skin into folds and brace the *Testes* up against the *Abdomen*; but during a state of debility, or from great fatigue, they become relaxed, so that the testes hang low, and pull upon the cord. It is an almost certain sign of ill health when this relaxation of the *Scrotum* occurs, at any period of life, and often its removal is the first indication of improvement. In old people, and in those of a bad habit of body, this relaxed state becomes permanent.

By inspecting antique statuary, it will be seen

that the ancients were practically acquainted with this physiological fact, and they have accordingly accurately represented it in their works of art. The figures of all their men in health and vigor have the Scrotum invariably drawn up to the abdomen, while those of old men, or sufferers, hang pendant.

As a general rule the muscles of the scrotum are independent of the will, or act involuntarily, but instances have been known of men who could make them act as they pleased. Some boys exhibit this power before puberty, being able to draw the Testes up to the abdominal ring, and let them fall again, but it is seldom this command over them continues, though one instance is on record. This man drew the Testes up into the groin, so as to form apparent ruptures, in order to escape being impressed into the service. Being detected, however, he confessed the trick, and made an exhibition of his extraordinary power to the examining physicians. He could pull up either one alone or both together, and could also make one go up while the other was coming down; in short, he had the same command over them as over his arms, and could move them as quickly. In another instance a man, who was charged with being the father of an illegitimate child, endeavored to evade the responsibility by alleging he had no Testicles, and, therefore, could not be the father, but it was discovered that he could draw them up into the groin at pleasure. In a healthy state the scrotal muscles are brought powerfully into action during coition, so as to brace the Testes tightly against the Pelvis, and one cause of partial impotence in very weak or old people, is the loss of this power, owing to which the semen is

not expelled with sufficient force. In children this relaxed or firm condition of these muscles is often a valuable indication of the state of their health.

The form of the Testis is that of a somewhat flattened oval, with one end a little larger than the other. The average weight is about one ounce.

The Vas Deferens, or common Tube into which all the small ones are emptied, commences at the *globus minor*, or lower end of the epididymis, and then passes into the spermatic cord by which it enters the Abdomen, where its course has already been traced. It is altogether about thirty-two feet long. The sheath of the spermatic cord is composed of two coats, the outer one of which is very firm, like cartilage, so that the tube is not easily compressed; the inner coat is a mucous membrane, similar to that inside the Urethra. This cord can be readily felt externally.

This description of the Testes and their envelops, combined with that before given, will be sufficient to give a clear understanding of the various diseases and derangements to which they are liable, and also of the reasons for the line of treatment laid down. It will be seen that they are so placed, without the body, as to have no direct connection with any other organs, and they may, therefore, be removed, without any other part being interfered with. This operation, termed *Castration*, is sometimes necessary in certain diseases, and sometimes it is the effect of accident, or in some parts of the world of design. The removal of the Testes, however, in whatever way it may be effected, not only destroys the power of procreation, but also interferes in a remarkable manner with the growth and functions of various other parts of the system, from which it is evident

that they are necessary for the perfection of the individual's own system, as well as for the purpose of bringing new beings into existence.

ANOMALIES IN THE SIZE AND APPARENT NUMBER OF THE TESTES.

The usual size of the Testes is about that of an ordinary pigeon's egg, and their weight, as before stated, is about *one ounce*. Occasionally, however, they are seen much larger, and sometimes much smaller, and their weight may be also considerably greater or less than the average. I have seen them as large as a full size hen's egg, yet perfectly healthy, and as small as marbles without being in any way deficient in power. This is important to bear in mind in many cases that may come under the physician's notice. I have known men hesitate about marrying when the Testes were very small, from fear that they would be deficient in power, and it was with difficulty they could be convinced to the contrary. In one instance of a young man aged twenty-six, they were no larger than those of a child of nine years old, yet his powers were but little, if any, inferior to those of persons generally. After a great deal of hesitation, and much persuasion, he married and became the father of a large family. It is necessary to remark, however, that in these cases all the other organs were of proper size, and that the smallness of the Testes had existed from childhood, and was therefore a natural state. If they had *decreased* in size, after having been properly developed, it would have been very different. The falling away or *wasting* of the Testes, which follows many diseases, and sometimes

takes place without any assignable cause, is usually a serious matter, and is nearly certain to be followed by a loss of power. The injudicious use of certain drugs, particularly of Iodine, will frequently cause the Testes to waste, and so will the exhalations from some metals, as lead for instance, many workmen in which I have known so affected. In giving an opinion in such cases therefore, their previous history must always be known, as well as the condition of the other parts, and the physician will then have but little difficulty in coming to a proper decision. Sometimes one only will be small, and the other of average size, or one only may waste away, without injuring the other.

An unusually large size of the Testes should always excite suspicion of its being the result of disease, and a most careful examination and inquiry should therefore be made. If they have always been of that size, or nearly so, from Puberty, and especially if the other organs are large also, there may be nothing to excite apprehension. The symptoms of the different diseases hereafter described should however be carefully studied, particularly those that cause *enlargement*, as Hydrocele and Hernia Humoralis, for instance. I have known the Testes of a youth of *fourteen* to be much larger than those of most men, and yet perfectly healthy; such cases of unusual development are not necessarily accompanied by extra power.

In some instances the development of all the genital organs is very tardy, owing to the slow growth of the Testes. I have seen a youth of *nineteen* that was in every respect in the same state of these parts, as when about seven years old. He was also but very little grown in other parts of the

body, having the appearance of one about twelve years old. In this case, there were perfect evidences of sexual power, though slight, and all the parts were evidently healthy. It was therefore a case of torpid action, or retarded development, and I thought that in all probability nature could be aroused. I accordingly gave him directions to use stimulating lotions, with frictions and shampooing, and to have a stimulating diet, with regular warm bathing and plenty of out-door exercise. The effects of this practice was soon evident; in less than six months an evident increase had taken place, both in the size of the parts and in the intensity of the sexual feeling. The external parts, which had previously been perfectly bare and smooth, like those of a child, became covered; the voice assumed a more manly tone, the muscles were more solid, the mind more active, and manhood began to dawn. This improvement continued going on till he was twenty-one, when there was but little difference between him and other young men of that age. If this case had not been promptly and properly attended to, in all probability no further development would *ever* have taken place, and an early death would have terminated his imperfect existence. To what age an improvement of this kind is *possible* we cannot of course tell, though I feel sure it may be effected in older persons than is generally supposed, perhaps till nearly thirty. The younger, of course, the better. Several cases have been known of the Testes growing after twenty-six years old.

Sometimes there appear to be *Three* Testicles, and *possibly* in *some* of these cases there may really be three, but more frequently one of the three bodies is either the epididymis, somewhat enlarged,

and much separated from the Testis, or else it is a small tumor. Most of those that have been observed in dissection have been small harmless tumors, existing from birth. Three perfect Testicles, however, are occasionally found, but they are not always accompanied by any unusual sexual power.

At other times there appears but *one* Testicle, or perhaps *none*, and I have known young men in the deepest distress from this cause. In some of these instances there is really but one organ, as has been proved after birth, and yet the individual has had full average powers. It is more often the case, however, that these deficiencies are apparent rather than real. Before birth the Testes are contained in the Abdomen, and they usually descend into the Scrotum in the last month. It sometimes happens, however, that the descent of one or both does not take place, and the individual then appears so far deficient. In these cases the power of the Testes is not impaired by their unusual position, but perhaps is often increased, and this has led uninformed persons to think that men sometimes had procreative powers *without Testicles*, because they could not be found. A man once died in one of the London Hospitals who had long been noted as having *no Testicles*, and yet having all the usual powers. On dissection two perfect ones were found in the Abdomen that had never come down, and thus the wonder was solved. These cases, however, are but rare. Dr. Marshall examined *Ten Thousand eight Hundred* young recruits, among whom he found *five* in whom the right Testicle had not come down, and *six* in whom the left had not; there being but one man in whom both were not descended.

It is much better for the Testes to remain totally

in the Abdomen than to descend only to the groin, as they sometimes do, because in the last position they are apt to be compressed, by the other parts crowding about them in the ring, and thus waste away. The imperfect or non-descent of the Testes must, however, always be considered an imperfection, and though it *may* not cause inconvenience, or loss of power, it is nevertheless always to be feared. The Testis itself is as liable to all its different diseases while in these unusual positions as when in the Scrotum, and unfortunately cannot then be reached. The neighboring parts also become affected from it, and thus life may be lost from a simple affection which could have been completely removed, if the Testis had been in its natural position.

In some instances the retained Testes descend late in life, and if they then become fast in the ring great swelling and severe inflammation may result, with ultimate wasting away of the organs. Such cases have been mistaken for ruptures, and some men, from want of information, have thought that the Testicles really grew at that time, all at once.

When there are really *no* Testicle from birth, there is always an imperfect development of the whole system, and a total absence of sexual power or feeling.

In some animals it is natural for the Testes *never* to descend, but always to remain in the Abdomen, and in others they descend only at certain seasons, that is, when they attain their periodical development, owing to the full growth of the animalcules.

It is stated, on the authority of several travellers,

that there is a tribe of Hottentots at the Cape of Good Hope that never have but one Testicle ; but many naturalists think that more likely it is a custom among them to remove one in youth. It is quite possible, however, that this deficiency may be natural, and it is not in any way more singular than many peculiarities observed in the genital organs of the females of those tribes. I have known two brothers, twins, one of whom had three Testes and the other but one.

In some instances the two Testes have been found *grown together*, so as apparently to form but *one*, owing to absence of the usual septum.

The Testicles are sometimes drawn so close up against the abdomen, owing to a contraction of the cremaster muscle, that they cannot be discovered without close examination, and are then often thought to be absent, though they are quite perfect, and even outside of the body. Medical men have even testified that there were no Testicles, in such cases as these, which shows the necessity for a close and thorough examination of such apparent monstrosities.

This state of things is not dangerous in itself, but had better be removed if possible, because the Testes are likely to adhere to the neighboring parts and waste away, so as to cause perfect impotence. A surgical operation is necessary to liberate them, which is both difficult and somewhat dangerous. In some few dissections the Testes have been found completely absent, and without any trace of their having existed. Sometimes the Vas Deferens exists by itself, and sometimes with the Epididymis, though at other times there are no traces of either. These cases of total congenital absence are, how-

ever, very rare, and are always indicated by deficiencies in other parts of the system.

In some rare instances the Testes have descended into the *Perineum*, instead of the Scrotum, but most probably from some imperfection in the parts about the Perineum and Scrotum.

In the course of my practice I have been consulted in many of these cases of Testicular anomalies, and have often had the pleasure of removing unfounded apprehensions, and of giving happiness and confidence to those who had previously been the victims of hopeless despair.

HYDROCELE, OR DROPSY OF THE TESTICLES.

This is sometimes called a *swelled* or *watery* Testicle. Properly speaking, this is but seldom an affection of the Testicles themselves, but of the Scrotum in which they are contained. There are three kinds of Hydrocele; first, that in which the fluid collects in the substance or tissue of the Scrotum; secondly, that in which it is secreted by one of the coats of the Scrotum; and thirdly, that in which it collects in the spermatic cord.

First Variety of Hydrocele.—This is scientifically called *Hydrocele Œdematodes*, and it is usually connected with general dropsy, or arises from the treatment of some of the other varieties. It is, however, but seldom met with, and rarely arises of itself. In some cases it has been brought on by wearing an improperly-constructed truss, by blows, or even by tight clothing, but much more frequently it is only a consequence of some other

PLATE IX.

A case of Hydrocele laid open.

Fig. 1. *a.* The Penis much contracted.—*b.* The Scrotum.—*c.* The Testicle.—*d.* The Vas Deferens.—*e.* The cut edges of the Scrotum and the different coats.—*f.* The Tunica Vaginalis, which it will be seen is double, from being *reflected* over the Testicle, which is on the *outside* of it.—*g.* Is the water, which is between the two folds of the Tunic.—*h.* The Spermatic cord.

Fig. 2. External appearance of the Hydrocele, showing the Veins also in a case of Varicocele.—1. The distended Vein.

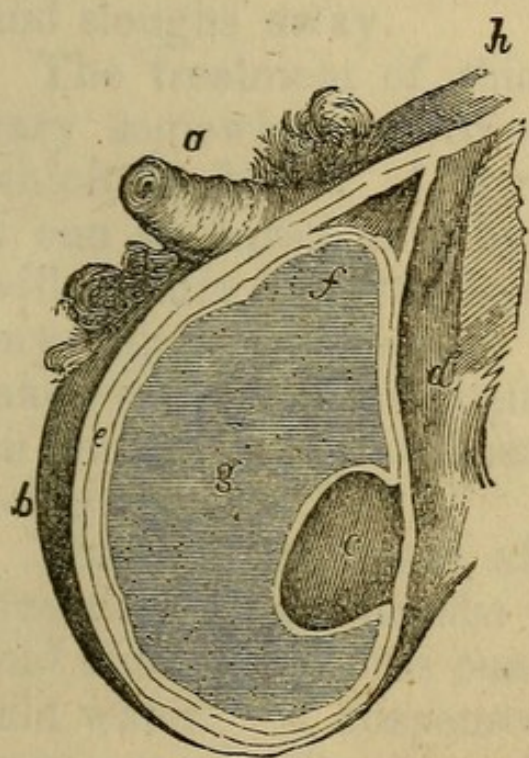


FIG. I.



FIG. II.

Plate IX.

Hydrocele.



Plate IX.
Hydrocotyle

disease, particularly dropsy of the abdomen, which is likely to extend to the Scrotum. In this form of disease the Testicle is usually softish at first, and when pressed the mark of the finger remains of a white color for some time after. As it progresses, however, the Scrotum becomes harder, and perfectly smooth, the Penis enlarges, particularly at the prepuce, and in very bad cases the skin inflames and sloughs away.

The treatment of this form of Hydrocele must vary somewhat according to the conditions under which we find it. If it results from general dropsy it can be cured only by the removal of that, and will require but little local treatment. If there be any injurious pressure it must be immediately taken away, and frequently the doing so will effect an immediate improvement without anything further being done.

The local treatment, after attending to the above directions, must consist of frequent bathing with cold alum water, one ounce to a pint, or of simple cold water. A suspensory bandage must also be worn constantly, except when the patient can remain perfectly still, without standing too long. The bowels must be kept free, and but little fluid drunk. The following mixture may be taken for four days, and then omitted four days, and so on alternately till it has been taken *twelve* days in all, unless the swelling is obviously going down after the first four days, which it will often do, in which case it need not be continued. *R.* Hydriodate of Potassa, thirty-six grains, Distilled water, one ounce. Dose, *ten drops*, morning and night, in half a tumbler of water.

Second Variety of Hydrocele.—This is usually called Hydrocele of the Tunica Vaginalis, the fluid being secreted by the inner coat of the Testicle, and, therefore, contained in the cavity of the Scrotum. The swelling is observed on one side only, in most cases, like a smooth egg or pear-shaped tumor, of a natural color. It begins at the bottom of the Scrotum, and gradually progresses upwards, until it sometimes reaches the top and presses against the abdomen. It is quite soft to the touch at first, and the fluid may be distinctly felt to fluctuate or shift its position as the tumor is moved. As the disease progresses, however, it becomes harder, and does not fluctuate, and in form it becomes more decidedly oblong.

From the above description, it will be seen that this form of Hydrocele is easily distinguished from that previously described, because in this the swelling is observed on *one side*, and commences at the *bottom*, while in the other it is diffused more or less over the whole Scrotum at once, and is evidently in the skin, or cellular tissue. Sometimes, it is true, *both* halves of the Scrotum may begin to fill up with fluid, but even then each one is sufficiently distinct from the other for both to be distinguished, and for the nature of the affection to be readily seen.

A very good way to examine a Hydrocele is to place a candle behind it and look in front, when it will usually appear semi-transparent, and sometimes so perfectly so that the Testicle may be distinctly seen in the middle of the water, like the yolk of an egg in the midst of the white. When the Testicle cannot be seen in this way, it is often difficult to find it, and its position can only be ascer-

tained by a hardish feeling in the back part of the swelling near the top.

The quantity of fluid secreted in some of these cases is very great, as much as *six quarts* having been removed by Mr. Cline, from *Gibbon* the great Historian. There may, however, be but a small portion, and it may remain for many years, or even during a person's life, without increasing, though the probability is against this, and in some cases it increases very rapidly.

It is singular also that even in some very bad cases there is but little distress, and, except from the inconvenience of its weight and size, many patients suffer but little annoyance from it. Sometimes, however, it causes an annoying sense of uneasiness and pressure in the Testes and groin, and occasionally even produces numbness of the limbs. When very large the Penis is drawn into the swelling, so that it appears smaller, and its erection becomes difficult and painful; the spermatic cord is also pulled down, and becomes tender, and the motion of the limbs is much interfered with.

There is not much to be feared from a Hydrocele of this kind, if the general health be good, unless it be complicated with a real swelling of the Testicle, the case then becomes very difficult, and nothing can be done till the Testicle itself is cured. I have known a man of sixty years of age who had a Hydrocele from the time he was fourteen; it was of a considerable size, but had never much incommoded him, nor in any way interfered with his health or functions. The difference in the symptoms of a Hydrocele and a swelled Testicle will be pointed out in the article on *Sarcocoele*.

The causes of this form of Hydrocele are but little known. It is undoubtedly brought about in some cases by injuries, such as blows, pressure upon the saddle in horse-riding, and by badly made trusses. Too much standing will also dispose to it, particularly in those with a relaxed state of the muscles. In general, however, it results from some constitutional tendency, the nature of which is unknown, and which cannot be ascertained before the effect is produced. In most instances, its beginning is altogether unknown to the patient, and it progresses so slowly and insiduously, that an advanced stage may be reached before anything wrong is suspected. I have known young men suppose it was merely a natural increased growth of the parts.

The Treatment.—In the early stages it is sometimes sufficient to use cold lotions two or three times a day, as prescribed for the first variety, particularly that of alum. Frequent cold bathing, in addition, will assist, and, if the bowels be kept free and but little fluid be drunk, the Hydrocele will occasionally go down considerably, or even disappear altogether. I would advise any one to continue this simple treatment even if it only arrested the disease, for though it might not positively cure, at first, still, if it keeps matters from becoming worse, nature herself may work a cure in time. A suspensory bandage should be worn from the very first, and as much rest should be taken as circumstances will allow. After using the simple alum-wash for some time, if the swelling still continues, the following lotion may be applied instead, night and morning.

R. Powdered Peruvian Bark, one ounce; boiling water, one pint. Boil these for ten minutes and then add, when cold, half a pint of spirits of Camphor.

This is, perhaps, the best lotion that ever was used for this purpose, and has done more good than all others put together. The parts should be bathed with it for about ten minutes before the suspensory bandage is put on in the morning, and for the same time after it is removed at night.

In some cases the following wash has been found to succeed even where the other did not.

R. Sugar of Lead, one ounce; Laudanum, a tea-spoonful; Water, one pint.

This is to be used as a lotion, the same as the other, and both must be applied cold.

Very little can be done by internal medication, except to keep the bowels free, though occasionally the following recipe may assist.

R. Vinegar of Colchicum; Vinegar of Squills; and Nitric Ether, of each *half an ounce*—to be mixed. Of this mixture a tea-spoonful may be taken in a drink of water, three or four times a day. Frequent bathing, and clothing the body warmly are also beneficial.

When all these means fail, however, as they too often do, some kind of operation must be resorted to, either to give temporary relief or with a view to cure. It is customary, for the first purpose, to puncture the sac of the Scrotum with a sharp instrument and let out the water. If nothing more be done than simply letting out the fluid, it will usually fill again, though occasionally it does not. To effect a perfect cure the Scrotum is injected through the same wound, after the fluid has all escaped, with some astringent solution. Cold water only is used by some practitioners, but more frequently a mixture of two parts port wine to one of water. Solutions of Iodine, and of Hydriodate of

Potassa have also been used, and in some cases the same fluid that was discharged, but the port wine and water appear to act the best of any.

The manner in which this injection appears to effect the cure is this; it excites a considerable degree of inflammation in the Testicle, and also in the coats of the Tunics, so that they *grow together*, and in this way the cavity in which the water accumulated is entirely obliterated.

In most cases, if properly performed, this operation is quite successful, causes but little pain, and is perfectly free from danger. In some instances, however, it is unsuccessful, owing to the fluid not being well injected, and occasionally there is much more inflammation caused by it than what is desirable, attended by serious constitutional irritation. The puncturing instrument, and the tube to convey the fluid, must be very carefully introduced, so as not to injure the Testicle, but they must also be carried sufficiently far to ensure all the water being discharged. The proper place to make the puncture is nearly at the bottom of the Tumor, behind; the fluid may remain in about five minutes, and about as much must be injected as was drawn out.

Sometimes a difficulty occurs in this way; after the fluid has escaped the Tunica Vaginalis draws together, so that the opening into it does not correspond with the opening outside, and if the instrument has become displaced, before the injection is thrown in, it is difficult again to introduce it. In fact, it is better, if this occurs, to leave off till another day, and operate again, for the attempt, if too often made, may cause serious and useless inflammation. There is also danger, if the instrument is put in again, that it may not go into the *cavity*, but merely

into the *substance* of the skin, and the fluid is then thrown into the cellular tissue, and not only does no good, but may even remain, and produce a real dropsy of the Scrotum, or *Hydrocele Edematodes*, the same as described under the head of the first variety.

In fact, some Surgeons purposely perform the operation in such a way as to change the Hydrocele into a simple dropsy of the Scrotum, by letting the fluid into the cellular tissue, by simply introducing a needle. The new disease is certainly more easily cured than the former one, and the pressure of the water on the Scrotum often prevents any more being secreted in the Tunic, but still in many cases a cure is not effected, and sometimes is made more difficult. I would much rather advise the total discharge and injection.

This operation is very simple and successful in skilful hands, but often fails from want of skill or proper care. If too much inflammation follows, poultices must be applied and other simple means used to subdue it, and the patient must keep still. It must be borne in mind, however, that considerable inflammation is *necessary*, to effect a cure. I once knew a man who operated upon himself with a common penknife and a small catheter. He effectually discharged all the water, but knew nothing about injecting anything in return. At the end of two years there was but little accumulated again, and he thought so little of what he had done, that he said he should always repeat the operation himself, as often as might be necessary.

It is sometimes necessary to do this to young children, and it must be remembered that in them the Testicle is much *lower* than in adults,

and greater care is, therefore, needed not to wound it.

A simple dressing of mild ointment, or even of wet cloths, is all that is needed after the injection is withdrawn.

Some practioners have used *Setons*, and others *Galvanism*, to cure Hydrocele, but though each method has been successful in some cases, yet they are not more so than the injection, which is much more simple, and causes much less pain. Either of these methods may, however, be tried, if that fails.

After the water is drawn off, the Testicle should be carefully examined, as it can then be readily felt, because if there be any swelling of it, or any indications of cancer, the injection must not be thrown in till that has been beneficially treated.

In some persons the water will accumulate in spite of all, and it is necessary to discharge it frequently. In infants it will often disappear spontaneously, without any treatment, but it rarely does so in adults, though I have known some in whom brisk exercise alone would disperse it.

Sometimes this form of Hydrocele is congenial, or exists from birth. In these cases the fluid descends from the Abdomen, the opening between it and the Scrotum, by which the Testicle descended, not having closed. Many persons have been deceived by this affection, and have taken it for a rupture, but a little careful examination will soon disclose the truth. By gently compressing the tumor the fluid will rise into the Abdomen, through the ring, and return again when the pressure is withdrawn. To a certain extent this trouble is more general than is supposed, and is frequently ascribed to wrong causes. It is advisable to have

it attended to as early as possible, because there is danger, if left over the first *month*, of its continuing during the whole of childhood, or perhaps even till adult age, and leading to other derangements.

In the early stages, and sometimes even after it has existed long, it is possible to cure it in a very simple manner. The water must be gently pressed back into the abdomen, and then a truss or bandage of some kind must be worn, so constructed that the pad will press exactly on the ring, and thus prevent the fluid from returning. In a short time the passage grows up, and there is then no further danger. The period required to effect a cure varies much in different cases; thus in some it will be complete in two or three weeks, while in others it requires as many months, or even much longer. Cold lotions must be used in these cases as with adults.

In case of failure, with these means, which will sometimes happen, the only other remedy is the *injection*, the same as already described. The operation is precisely the same as for an adult, but must be conducted with more care, there being more risk of serious inflammation. It must be recollected also that while the injection is being made the upper part of the Scrotum must be held firmly together, just by the ring, to prevent the injected fluid from passing up into the Abdomen, which it would otherwise do, and perhaps cause serious trouble. A truss or bandage must be worn for some time after the operation, to prevent any more fluid coming down, and also to retain the bowels in their place.

Third Variety of Hydrocele.—In this form of Hydrocele, as already explained, the seat of the watery

effusion is not in the Scrotum, but in the *Spermatic Cord*. It may occur in two ways, first in the substance, or cellular tissue of the cord; and secondly, within certain cavities in the sheath or tube itself.

The first form of Spermatic Hydrocele is very rare, and is but seldom of much account. It is of similar in its nature to the first form of Hydrocele in the Scrotum, or *Hydrocele Edematodes*; in fact, it is the same disease only confined to the sheath of the spermatic cord. Its causes are also in all probability the same, and it requires the same treatment. When it results from general dropsy, which is usually the case, no cure can be expected until that is remedied.

The palliative treatment must consist in wearing a bandage and using cold astringent lotions, and it is but seldom that anything more is required. Occasionally, however, the swelling becomes so great as to cause serious inconvenience, and the patient insists upon having relief immediately. Under such circumstances the only mode of proceeding is to open the swelling, and so let the fluid escape. There is, however, some danger in this, and in most cases it is better not to perform the operation. Many persons have mistaken this affection for a small hernia, or a swelled vein.

The other form of Spermatic Hydrocele is usually termed *Encysted Hydrocele of the Spermatic Cord*, because the fluid is contained in one or more sacs. The swelling in this case is in the form of an egg, and situated between the Testicle and the groin. It is usually firm to the touch, with no fluctuation, and perfectly distinct from the Testicle, which may be felt below it. Sometimes the sac of fluid is near to the ring, and can be pressed up

into the Abdomen, so that it will disappear, but only to return immediately the pressure is withdrawn. In such cases it may easily be mistaken for a hernia or rupture, unless proper care be taken. On examination, however, it will be found that the vessels of the spermatic cord can be distinctly felt even when the tumor is down, by merely pressing it on one side, which is not the case in rupture. The functions of the bowels also are not interfered with in Hydrocele, while they are very much so in Hernia, when it is down.

Occasionally the watery tumor descends much lower than usual, and may then be taken for Hydrocele of the Tunica Vaginalis. It is only requisite, however, to remember that when the fluid is contained in the Scrotum it *surrounds the Testicle*, which can scarcely be felt through it, but when it is contained in a sac, in the sheath of the cord, it is always either *above* or on *one side* of the Testicle, which is quite separate from it.

The treatment should consist at first in fomentations, as directed for the other varieties, and in keeping the bowels perfectly free. This plan is the best one with children, who are often afflicted in this way. A mixture of two parts alcohol and one of water, is very good to use night and morning, or either of the recipes already given. With regard to internal medicines, they are perhaps less proper in this variety than in either of the others, but if thought necessary there are none better than those before advised.

Sometimes, especially in children, a small puncture may be made and the fluid let out, but in adults this is often of little use, as the sac fills up again. To prevent this the port wine injection

must be used, or the sac must be fairly *cut out*. Some practitioners merely lance it open the whole length, and Sir Astley Cooper was accustomed to insert a *Seton*, a plan which I have known to succeed frequently, both in children and adults. The particular plan to be pursued must, however, depend upon the circumstances of the case, and I should advise every one to hesitate about submitting to any operation, if they can keep tolerably comfortable, and get *no worse* without it, which they nearly always can if they will persevere with the simple directions given, and wear a suspensory bandage.

In children the following lotion, applied freely two or three times a day, will in most cases cause the water to disperse without any further treatment.

R. Hydrochlorate of Ammonia, one ounce ; Distilled Vinegar, four ounces ; water, six ounces.

The same lotion, with half the water, will also be excellent for adults.

SARCOCELE, OR CHRONIC FLESHY SWELLING OF THE TESTICLE.

This affection is the real *swelled Testicle*, or chronic fleshy enlargement of the substance of that organ.

The causes that lead to this enlargement are various, and some of them not yet understood. Cancer and Scrofula are perhaps the two most frequent causes, but it often arises when they do not exist, and when no other immediate agency can be detected. Sometimes a chronic swelling will take place in the Testicle, and after existing for a considerable time, entirely disappear without any evil

consequences. More frequently, however, the result is more serious and a malignant tumor is eventually developed, either *Cancerous*, *Scrofulous*, or *Sarcomatous*.

Sarcomatous Tumors are of various kinds, and are the same in the Testicle as in other parts of the body. The most frequent kind, is that called *Medullary*, because it resembles the substance of the brain. It is a most dangerous affection, and unless attended to at the very earliest moment is nearly sure to be fatal. The whole substance of the Testicle is converted into a kind of white pulp, similar in appearance to the brain, and in a short time the disease is propagated along the absorbents till it attacks all the neighboring parts. The glands in the groin soon swell to an enormous size, and slough and bleed, and eventually the lower part of the abdomen becomes affected in the same way till the parts are all destroyed and the patient sinks. This is thought by some to be the same disease as *Fungus Hæmatodes*, and in many respects it closely resembles Cancer. There is, however, sufficient difference between them to enable the surgeon to distinguish with ease, but to the patient the distinction is of little consequence, each being equally dangerous, and the treatment being the same for both.

Sometimes the mistake may be made of confounding Sarcoma with Hydrocele, unless a strict examination be made. In Hydrocele it must be recollected the swelling begins *at the bottom*, and gradually extends upwards to the abdominal ring, but no farther; it is also semi-transparent, and fluctuating. In Sarcoma, on the contrary, the swelling is evidently in the whole substance of the

Testicle at once, and extends upwards into the spermatic cord ; it is also not in the least transparent, and is much heavier than water. From want of attention to these points of difference the swelled Testicle has often been punctured, *to let out the water.*

Cancer in the Testicle is precisely the same in its origin and progress as in any other part of the body. The Testicle becomes the seat of a hard tumor, through which dart deep-seated lancinating pains, which shoot up to the loins, and down the limbs. Eventually this becomes an open sloughing ulcer which destroys the substance of the organ and gradually extends to the abdomen, causing a profuse offensive discharge and a rapid impairing of the general health.

Scrofula of the Testicle.—This disease is scarcely ever met with except in those who plainly exhibit a scrofulous habit of body. It causes a swelling of the Testes similar to that of Cancer in its feel and appearance, but unaccompanied by any of the lancinating pains. When the tumor is cut into, it seems filled with a whitish or yellow substance like curds or soft cheese, along with a small quantity of pus. The commencement of this affection may be very slow and insidious, and for a long time, even after it has become fully established, nothing serious may be indicated. There is nothing to alarm the patient much till the tumor breaks open and becomes an ulcer, its progress then is often very rapid, and all the neighboring parts speedily become diseased and destroyed.

The causes of that peculiar tendency to Scrofula and Cancer which many persons exhibit are as yet unknown to us, they are, however, in all probability

what is termed *Constitutional*, and not produced by any accidental agency after birth, though there may be many causes that will *excite* or call out these diseases, when they would otherwise have remained dormant, either for a longer time or perhaps altogether.

The Treatment of the various forms of Sarcocoele above described may be given in a few words, for unfortunately but little can be done with them.

In some few cases of simple swelling, of the Medullary or fatty character, it may *perhaps* be dispersed, in *the very earliest stages*, by using Leeches and cold lotions or mercurial ointment externally, with mercury and iodine internally, but this can seldom be depended upon. Unless such means evidently decrease the swelling *immediately*, no further time should be lost with them or the chance may go by of doing good by other means. *The removal of the Testicle*, by an operation, offers the only chance of effecting a certain cure, and this is of no use either unless performed *at first*, for if the disease has progressed till the neighboring parts are attacked the removal of the Testicle will not check it. Unfortunately many patients delay having this necessary operation performed till it is too late, and they then conclude it is in itself of no use. It must be borne in mind that some of these cases are very rapid in their extension, and that the surrounding parts may be deeply affected without giving any sign of it. In Cancer especially it is necessary to operate as early as possible, for even when the Testicle itself shows but slight signs of the disease, it may have extended to the loins and abdomen. There have undoubtedly been many cases of Sarcocoele, of all the above kinds, that have

been entirely cured by removing the Testicle, and have never appeared again.

In general only *one* Testicle is diseased, and that only needs removing, though there is danger of both becoming affected by delay. The operation itself is comparatively simple, and not attended with so much pain or danger as many might suppose it to be.

It is very common, as before remarked, to find Sarcocoele accompanied by Hydrocele, and frequently on evacuating the water in Hydrocele the Testis is found enlarged, though there were previously no signs of it.

It is generally conceded that blows or other violence may produce simple induration or hardness of the Testicles, leading to medullary or fatty tumors, but not to Cancer or Scrofula, though they may excite such diseases to break out. The too frequent irritation of bougies and injections is also suspected of injuring in the same way.

FUNGUS OF THE TESTICLE.

This affection is different from either of those previously described, though it has some resemblance, at certain stages, to Cancer. It is fortunately more capable of being beneficially treated, however, and is not so likely to extend to other parts.

It is supposed to be caused by bruises or other violence, or by Gonorrhœa and Gleet, particularly when injections have been used. The first indication is a simple swelling without pain, which bursts and forms an abscess discharging pus, and from the opening a Fungus begins to protrude. This Fungus may attain an immense size, if not remov-

ed, extending to the abdomen and becoming very virulent. The discharge also may become so profuse as to cause much general debility and constitutional irritation.

In the first stages of the swelling, when it is known to arise from external violence, it may sometimes be reduced by Leeches, warm fomentations, and poultices, with purgatives used internally, and even after the abscess has opened fomentations and poultices may be sufficient to prevent any extension of the mischief. When the Fungus has appeared these simple means become useless, and resort must be had either to caustic or the knife to remove it. In my opinion the caustic is the best remedy, and seldom fails to remove the diseased growth without any injury to other parts. If the disease has not progressed too far it may often be cured without injuring the Testicle at all, though it was formerly thought necessary to castrate in every case, and some practitioners even do so now.

I once knew a man who had one of these Fungous growths, arising from a bruise, who was cured by the daily use of powdered burnt alum, dusted over the Fungus, and followed by a warm Linseed poultice. This was done morning and night, and by these means only, combined with the use of simple purgatives, and the solution of hydriodate of potassa internally, as directed for Hydrocele, he fully recovered in about six weeks. The Testicle, however, remained hard, and in all probability its power was lost.

In all cases of bruising, or other violence, the timely use of rest, poultices, and warm fomentations, may prevent many of these evils.

There are several other kinds of tumors and

swellings of the Testicles occasionally met with, besides these mentioned, but they do not differ essentially either in their nature or treatment, and often it is scarcely possible to distinguish between them. One peculiar form of Cancer is frequently met with in England amongst *chimney-sweeps*, and is caused by the irritation of the soot lodged in the furrows of the Scrotum. It is met with sometimes, but rarely, on the hand, or foot. It is commonly termed the *Sweeps' Cancer*.

HERNIA HUMORALIS, ORCHITIS, OR INFLAMMATION OF THE TESTICLES.

This sometimes appears to arise from some unknown constitutional cause, and comes on very slowly, but more usually it is from some obvious agency, and assumes from the first an acute form. It arises frequently from blows, falls, hard riding, and strains, but most generally from the use of injections and bougies, in Gonorrhœa, and stricture, or from the performing of operations like those for Hydrocele. I have also known it to follow *intense sexual excitement*, where gratification was impossible and the semen had no tendency to escape involuntarily. In children it very frequently follows, or accompanies the *Mumps*.

Inflammation of the Testicle usually commences with slight pain and soreness in the part, attended by swelling, which is at first soft and yielding, but gradually becomes hard, and sometimes hot and very painful. The Scrotum loses all its roughness by swelling so much, becoming smooth and red, and occasionally so tender that it can scarcely be touched. As the inflammation progresses the

swelling extends up the spermatic cord, and severe pains may be felt in the loins, and sometimes even in the limbs, till the patient suffers the most excruciating agony.

In many, even of the most severe cases, but little pain is experienced and the inflammation will subside, under proper treatment, leaving no evil effects whatever behind. There is danger, however, of its being followed by abscess, or hydrocele, if neglected, even if it does not excite tumor or Fungus. A loss of sexual power is also apt to follow inflammation of the Testicle, either from its deranging the structure of the organ or from its obliterating the passage in the Vas Deferens, and thus preventing ever after the passage of the Semen from the Testicles to the Urethra.

Orchitis arises much oftener from Gonorrhœa than any other cause, the inflammation extending from the Urethra, along the Vas Deferens, till it reaches the Epididymis, and finally the Testicle. The Epididymis is always first attacked in these cases, and very frequently the disease extends no further, when it is called an *Epididymitis*. If it reaches the Testicle it is then called *Hernia Humoralis*.

When the inflammation accompanies Gonorrhœa it will generally be found to arise whenever the discharge is *suddenly checked*, and immediately the discharge is allowed to return the inflammation ceases. This shows the close sympathy there is between the Urethra and the Testes, and what danger there is in irritating the Urethra in any way. I have known inflammation of the Testes arise in *one hour* after using a strong injection.

The treatment of this severe affliction must consist, in the first place, in perfect rest, on the back,

the Scrotum being supported by a suspensory bandage, or truss. Cold lotions must be freely and frequently used, and the bowels opened freely with salts or castor oil. No stimulating food or drink must be taken, and the mind must not be agitated, nor the feelings excited in any way. The best lotion is a mixture of half a pint of water to half a pint of alcohol, with a large spoonful of laudanum added. If the pain be very severe this lotion may be made hot, or a hot linseed or bread poultice may be applied. A hot bath is also frequently of service.

A perseverance in these means will usually reduce the inflammation and pain in one or two days, unless the exciting cause continues to operate. In very severe cases, however, particularly those from bruises, it may be necessary to apply Leeches, or to open some of the veins of the Scrotum, which nearly always gives relief if the blood flows freely. If the pain be so bad that the patient cannot rest he may take twenty or thirty drops of Laudanum at bed-time, in a little flax-seed tea or barley-water, or in simple water alone, if these are not to be obtained conveniently. The following pills are the best for this purpose, however, when they do not disagree with the stomach, which unfortunately they are apt to do, but they may be tried.

R. Opium, with soap, twenty grains; Camphor, half a drachm; to be made up into *twelve pills*, with as much simple mucilage as may be requisite. One of these may be taken every six hours if requisite.

The following ointment, applied externally, may also give great relief from pain when the lotion fails to do so.

R. Belladonna Ointment, two ounces; Camphor, one drachm; Paregoric Elixir, one drachm.

This must be mixed into an Ointment, and a portion rubbed carefully over the tender parts, as often as the pain becomes severe.

When the inflammation has been fully subdued there is danger of the Testicle being left permanently hardened, or indurated, which is nearly sure to destroy its power, if it does not originate other diseases. To prevent this, if the slightest hardness remains, it must be frequently bathed with hot water, and poulticed, or if these fail it must be rubbed with the *Camphorated Mercurial Ointment*. Galvanism has been used with success when the hardness resisted all other means, and as it is a safe remedy, it may be readily tried. The only internal medicine likely to be of use is the solution of Hydriodate of Potassa, before directed, and even this should be but seldom taken. The regular use of the *Camphorated Mercurial Ointment*, followed by hot fomentations, is the most generally successful treatment.

The best remedy in some cases of acute Orchitis, particularly when arising from the sudden stoppage of a Gonorrhœal discharge, is *compression*. This is effected by means of strips of sticking plaster, which are stuck firmly around the organ, and also passed underneath, the pieces being about a quarter of an inch wide, and long enough to go round and meet. These of course cross each other, and when drawn pretty tight, and made to adhere fast, they press considerably, and draw the whole organ together. The parts require to be shaved to apply them, and they must be re-applied as often as they work loose, or as fast as the swelling shrinks. In most cases the patient experiences great and immediate relief from this application, owing to the

support it gives ; it must always be used, however, *with* the suspensory bandage.

Compression is, in general, only appropriate in cases of acute Orchitis arising from Gonorrhœa, though it may be advantageously resorted to, in some few instances, when it originates from other causes. I have used it when the swelling arose from intense sexual excitement, and also in one or two instances from blows, and with advantage, but generally the treatment before given will obviate the necessity for compression, if it be persevered in. Latterly the compression has been effected by means of *Collodion*, a substance made by dissolving gun cotton in ether, which sticks much more forcibly, and is applied more readily.

The symptoms of Epididymitis are the same, and so is the treatment, as when the whole organ is attacked, which it is nearly sure to be eventually, if the Epididymitis continues.

There is always reason to fear that a severe attack of Orchitis will permanently injure the Testicle, more or less, by obliterating some of the Seminal Tubes, even if it does not close the Vas Deferens, or harden the Epididymis. One Testicle may, however, be inflamed, and suffer, while the other remains perfectly sound. After having been once inflamed the Testicle appears more susceptible of the same misfortune again, so that those who have suffered from it should be as careful as possible to avoid subsequent attacks, or the evil effects will probably increase each time. Impotence not unfrequently follows Orchitis.

Sometimes the inflammation ends in suppuration, the matter escaping by numerous little sinuses or openings, which eventually close and heal when all

is discharged. In all these cases, however, the Testicle is more or less wasted, and sometimes entirely destroyed. At other times the pus will not discharge at first, but assume the form of a firmish curdy mass, similar to the substance of the brain, and remain for a long time. The organ is then much more liable than before to inflammation, and its internal structure gradually undergoes a change by which its secreting powers are totally lost. In some of these instances the Testicle becomes nearly as hard as a stone, and on being dissected appears much like cartilage or bone.

In some persons Acute Orchitis much resembles Rheumatism, being affected by the changes of the weather or by exposure, and coming and going again in a short time. Indeed, some writers speak of it then as *Rheumatism of the Testicle*, and treat it the same as that affection in other parts of the body. I have known some men so extremely sensitive in this organ that an attack of Orchitis was sure to follow if they merely pressed the Testicles on crossing the limbs, and especially if they rode on horseback. In fact, many a severe case has arisen from being thrown forward upon the pommel of the saddle.

Inflammation of the Testicle sometimes appears in very young infants, not more than a few days old, and without our being able to assign any cause. I have thought sometimes that it arose from Teething, and at other times from an improper mode of *carrying* the child, by which these organs were bruised. I saw one instance wherein the inflammation appeared on *the day of birth*, which was very severe. In general, these infantile cases can be cured by simple fomentations, or cold lotions,

with a dose or two of castor oil. When very severe a Leech may be applied, and three or four grains of the *Powder of Mercury and Chalk* given. When arising from Mumps it usually subsides when the primary cause is removed, though it may remain afterwards, and must then be treated as above advised.

It is somewhat disputed among medical men whether these inflammations in infants ever permanently injure the Testicle or not, but I am persuaded they often do so, and, in all probability, many a man has been made impotent for life by this affection when a child. It is, therefore, of the first importance not to neglect this trouble, though it may be but slight, as the after effects may be serious.

It is proper to remark here that the Mumps arise in adults as well as in children, and that they may affect the Testicles, and cause impotence, as well at one period as at another. Such cases as these afford a singular proof of that remarkable sympathy which exists between distant parts of the body, but the nature of which we cannot explain.

Either of the following Recipes give excellent cooling lotions, applicable to all cases.

R. Lime-water, one ounce ; Alcohol, seven ounces ; mixed together.

R. Hydrochlorate of Ammonia, one drachm ; Cold Spring-water, five ounces ; Alcohol, one ounce ; mix together.

The last lotion is an excellent one to apply to the Scrotum and Perineum. In many persons, however, hot fomentations succeed much better than cold lotions.

It is often very beneficial, particularly when the

pain is severe, to cause a little nausea or vomiting. For which purpose a quarter of a grain of *Tartar Emetic* may be given every three or four hours, till the effect is produced. This frequently gives great relief, and in a short time, when all other means fail.

In very obstinate cases, attended with pain, two or three grains of *Calomel* should be given, at bedtime, mixed with eight or ten grains of *Dover's Powder*. This may be given two or three times a week.

It is sometimes a good plan to use the *Plaster of Ammonia and Mercury* to strap the Testicle with, in the manner before described, so as to gain the advantages of *Compression* and the effects of *Mercury* together.

If the inflammation and tenderness all subsides, but the swelling and hardness continues, the following solution may be rubbed over the Scrotum every three or four days.

R. Iodine, one drachm ; Iodide of Potassium, half a drachm ; Alcohol, one ounce ; dissolve all together.

In many persons, particularly those of a *Scrofulous* habit, Acute Orchitis has a tendency to assume the *Chronic* form, after the first severe symptoms have subsided, and this is perhaps a worse state than the other. In Chronic Orchitis a deposit of yellowish matter takes place, in different parts of the Testicle, at first soft but gradually becoming harder, till at last the organ feels like a stone. This matter blocks up the Semmiferous Tubes and destroys their power of secretion, so that impotence ensues. It was formerly the custom to call such cases *Schirrhus*, but this is improper, as it might lead to the idea that they assume a malign-

nant form, which is not the case. Chronic Orchitis may either follow from the acute form, or it may arise spontaneously, like Scrofulous affections of other parts; and it also frequently follows a long course of intemperance or licentious indulgence, and may even be produced by the long continued and injudicious use of Mercury.

This form of the disease may give rise to but little inconvenience for a long time, though the swelling may be of considerable size, unless a blow, or strain be experienced, when the symptoms become immediately acute, and relief is sought for. Usually in a few weeks the swelling is observed to *point* in some particular part of the Scrotum, and eventually it breaks, discharging some pus, together with a Fungus-looking body, which appears rough and bleeding. In a short time the opening enlarges and more or less of the Testicle itself passes through, the whole forming a granulated tumor of a yellowish white color, studded with pale red or black patches. This tumor is tightly embraced round its neck by the edges of the opening through which it passed, and which become very thick and red. A thin watery discharge flows from it, often mixed with semen, but rarely with blood.

As soon as this break occurs, and the parts pass through, great relief is felt, and the disease may remain for a long time without undergoing any further change. The tumor itself is rarely tender, but may be handled, cut, or burnt with caustic, with but little inconvenience. It is not unusual to find this singular protrusion in Scrofulous children who have had inflammation of the Testicle.

It was formerly the custom always to remove the whole Testicle when afflicted with this Fungous

growth, but now the practice is seldom resorted to. The protruding part is cut off with the knife, or burnt off with caustic, and the skin of the Scrotum being then brought over it the wound is healed and no further trouble is experienced. In many cases a cure is even effected spontaneously, or by means of a simple wash of six grains of Nitrate of Silver to one ounce of water, with some internal alterative medicine.

The best medicine in Chronic Orchitis is *Blue Pill*, five grains of which should be given every night, with one grain of *Opium*, till the gums feel a little sore.

In some cases a better treatment is to administer the Compound Extract of *Sarsaparilla* internally, and sprinkle the Fungus itself with equal parts of powdered *savin* and *sulphate of copper*. Occasionally varying the medicine by giving a little of the *Wine of Iron*, particularly if the patient be weakly and sinking.

It must be admitted, however, that Inflammation of the Testicle is, in any form and under any mode of treatment, a disease extremely dangerous to the patient's sexual powers, though it may not compromise his life, nor interfere much with his general health.

OSSIFICATION OF THE TESTICLE.

In some few cases the Testicle has been known to *Ossify* or become more or less converted into *Bone*. The causes of this degeneration are unknown, and unfortunately we know of no remedy. I have thought, in some few cases I have seen, that it was more likely owing to excessive con-

tinence than anything else, but it is impossible to decide.

The Ossification generally commences in the middle, and may be felt like a hard kernel, which gradually extends till the whole organ is affected. In all cases when a hardness of this kind is felt immediate resort should be had to fomentations and poultices, because it may be but a simple induration which they will remove.

It is propable that Ossification and induration most frequently arise from *Orchitis*, particularly when there has been many consecutive attacks.

ARREST OF DEVELOPMENT AND WASTING OF THE TESTES.

The Testes, like other parts of the body, are liable to be arrested in their development, from causes unknown to us, and this arrest may either be permanent or the development may be completed at some after period of life. I have known instances of men, at various ages, with Testes remarkably small, and passions nearly dormant, in whom a sudden development took place from the sight of some female who excited their desires to an unusual degree. In all probability these persons would always have remained as they were, but for this occurrence, as many others similarly circumstanced do; and we have thus a proof of the decided influence that the awakened feelings may have on physical development.

In one instance where I was consulted, in a case of this kind, the left Testis was about the size of a small hazel-nut, and the other still smaller, the person being about twenty-eight, and possessing the

usual feelings of his sex, though in a slight degree. Many circumstances induced me to think that the organs were healthy, and that in all probability their further growth would ensue, under proper treatment, and from the new impetus given to his desires by his wish to marry. I, therefore, advised a stimulant plan of treatment, similar to that which will be directed in a subsequent article, and advised him to wait patiently. The result justified my opinion, the organs began to enlarge very soon, and in two years' time were of full average size, so that he had no misgivings whatever about marrying.

It is very often the case that persons who had Scrotal Hernia in childhood have the Testes small, owing to the pressure on the cord of the instrument worn to cure it, and with some who have had Mumps their full growth is never attained.

Any causes that prevent the full supply of blood from going to the Testes will prevent their growth, or cause them to waste, and it is from this cause that many such cases arise. If the *spermatic arteries* be small, which supply them with blood, they do not receive sufficient nutriment, and, therefore, cannot grow nor secrete much semen. These arteries are very long, and exposed to several causes of injury as they proceed through the abdomen, so that they frequently become more or less injured, and the Testicles suffer in consequence. Sometimes they are pressed upon by the other parts, in passing through the ring, and at other times they are affected by aneurism or their walls thicken and partly close up the passages. In old people the spermatic arteries are very apt to become more or less obliterated, and this is the chief cause of that wasting of the Testes so often seen at that

period of life. To fully prove this the spermatic artery of a dog has been tied, leading to one of the Testes, and that in a short time was completely wasted away, while the other remained perfect. It has even been proposed to perform this operation, which is comparatively simple, instead of castration, when we wish to destroy the procreative power in animals. Such facts make it evident that the power of the Testes, and consequently the *amative propensity* of any man, depends materially upon *the size of the spermatic arteries*, probably much more so than upon any peculiar structure of the brain. It is certain that if these arteries be destroyed in early life no *amateness* can ever be felt, nor any procreative power be established. A knowledge of this fact teaches us that the extent, both of the power and the propensity is very much, *if not entirely*, under our control, if the supply of blood admitted to the Testes can be duly regulated. This is a point never before attended to in medical practice, that I am aware of, but I have satisfied myself of its correctness by repeated experiments, and I look upon it as being of the greatest value. There are many means by which the amount of blood flowing to the Testes may be regulated to a great extent, some of them increasing and others decreasing it, as I have shown in many of the cases described. It is often the case that badly fitted Trusses, by pressing on the arteries, will cause the Testes to *waste*, while, on the contrary, an ill-made suspensory bandage or even tight clothing, by chafing the parts, will draw the blood to them till they are intensely excited, or even till inflammation ensues. This shows us what principle to act upon in practice, adopting the appliances to the peculiar circumstances of the case.

Hot stimulant applications will bring the blood *to* any part, while cold astringent ones will *drive it away*, and these alone, judiciously used, will often accomplish more than all the internal medication, or mere *moral chiding* ever yet tried. Besides these, however, there are various other means, mechanical and medical, which will be described as we proceed, and sometimes *instruments* may be constructed, for special cases, that will effect almost miraculous results.

I have sometimes used a modification of the instrument called the *Congester*, which will be described in a subsequent article, for the purpose of drawing blood to the Testes and of enlarging permanently the spermatic artery. In short all the means resorted to for causing an increased flow of blood to the *Penis* may be used, to a certain extent, and in a modified form, to the Testes. As before remarked, I have had numerous patients, of all ages, whose Testes had always been too small and inactive for the performance of their functions, and yet, by appropriate treatment, most of them have attained their proper growth and full powers.

Wasting of the Testes, after they have been of a proper size, is a much more serious matter, as it usually results from some disease that is likely to permanently destroy them, though occasionally the causes of it are under our control, and the loss may be repaired. In addition to all the causes above enumerated that prevent development, we may also enumerate Hydrocele and Hæmatocele, of long standing, and also Scrotal Hernia, all of which may cause the Testes to waste by the continued pressure which they exert. Spermatocele will also lead to the same result as stated in the article on that dis-

ease. Too long continued and strict *continence* will also waste the Testes, in many persons, notwithstanding what is said to the contrary by some writers. These organs can no more preserve their powers when entirely disused than others can, nor is it in any way conducive to their health to leave them totally inactive. I am aware that it has been said that those who take vows of celibacy still preserve these organs, and in full development, but that has very little weight because no one can tell what may have been the actual observance of those vows, nor how far *involuntary action* may have taken place. I am myself fully convinced, from numerous observations, that total inaction of the Testes, *in every form*, is most certainly followed, in most cases, by their wasting and decay. I have known men who boasted that they were strictly continent, and had been so for years without any apparent injury of this kind, but on proper examination I have satisfied them that the semen passed almost constantly, *in the Urine*. It is scarcely necessary to say that such an action was unnatural, and decidedly injurious. The assertion, made by some theorizing physiologists, that the semen, when not discharged, is absorbed into the blood and invigorates the system, is unsupported by a single fact, or even by plausible reasoning, and, therefore, requires no refutation. Many a man who has prided himself upon his immaculate purity, and denounced those who were unable or unwilling to totally abstain, has been himself the victim of a constant *pollution*, both unpleasant and injurious. I have here spoken openly and fully, as a medical man ought, and no one with common sense or honest intentions, can accuse me of encouraging

anything approaching to licentiousness in what I have said. True virtue consists in a proper *use* of those powers given to us, and not in their total abrogation.

There are several causes of a nervous character that will also lead to wasting of the Testes, such as paralysis of the lower part of the body, or injury of the spine in the neighborhood of the Nerves leading to them, and sometimes even long-continued anxiety of mind. The most frequent causes, however, are probably *Inflammation* and the *Mumps*, particularly in early life. Excessive indulgence not unfrequently ends in gradual wasting, and Masturbation still oftener, especially if accompanied by intemperance in strong drink. I have known intense excitement followed by inflammation and subsequent wasting, in a very short time, and I have known inebriates wake from their dreams of intoxication to find themselves impotent, in numerous instances.

There are some drugs which exert an influence this way occasionally, and to a very marked degree. Mercury will in some, if long continued, so will Opium, and Iodine still more frequently, and decidedly. It is, therefore, the duty of the physician to watch well the effects of all such remedies. *Tobacco*, I am satisfied, is decidedly injurious to many men, and when used to excess will impair the tone and energy of these organs to a great extent; in several instances I have had good reason to attribute wasting of the Testes to its influence.

Injuries of the head must also be enumerated as occasional causes of wasting of the Testes, though we cannot explain why. Several instances of the kind have been noticed, particularly by Army Sur-

geons, and the fact is established beyond doubt. Baron Larrey gives a remarkable case, which came under his own notice. It was that of a soldier, a healthy, robust man, with strong sexual propensities and endowments, who had a portion of the back part of his head cut off by a sabre wound. He recovered from the wound, but lost the senses of sight and hearing on the right side. Pain was also experienced down the spine, and a peculiar creeping feeling in the Testicles, which also began to waste, and *in fifteen days* were no larger than beans. He completely lost all desire for sexual enjoyment, and apparently even all remembrance of it. M. Lallemand also mentions a case, of a French soldier, similarly injured in the expedition to Algiers, who speedily experienced wasting of the Testes, loss of sexual desire and all power of erection.

Bruises of the Testes are nearly certain to be followed by inflammation and wasting, if severe, and few injuries cause more acute physical suffering, or affect the system more generally. Sickness, vomiting, and death-like fainting generally result from bruises of the organs, and sometimes even delirium. Constant pressure, from almost any cause, even though slight, will also cause wasting, as is seen in many persons who pass much time on horseback. It was even the custom formerly, in Turkey, to *make Eunuchs* by squeezing the Testes instead of Castrating, and some persons operate upon animals in the same way now, when they wish to emasculate them, the squeezing causing them to waste away. *Cutting* these organs, with *sharp* instruments, so as not to bruise them, may not be followed by any evil effects whatever. Many instances have been known of their being cut and

torn considerably, both by accidents and during surgical operations, but with no detriment to their powers, unless inflammation or mortification has ensued. Fanatics and insane people have injured themselves in this way frequently.

All that we can do in those cases of wasting of the Testes is to find out, if possible, the immediate or exciting cause, and remove it. Very frequently, however, no cause whatever can be ascertained, and often when it can be it is not under our control. Still no such case should be left unattended to, and its treatment, if any be thought advisable, should not be neglected a single day.

TUBERCULAR DISEASE, OR CONSUMPTION OF THE TESTICLE.

This is essentially the same disease as Consumption of the Lungs, being characterized by the production of *Tubercles* in the substance of the organ, which eventually suppurate and break, and entirely destroy its substance. In most instances, the patients are either decidedly *Scrofulous* or evidently disposed to consumption, and generally both Testes are attacked, either together or consecutively.

The symptoms are usually a slight uneasiness, in some particular part of the Testicle, which is soon followed by violent swelling, either in the body of the organ or in the Epididymis, but with very little acute pain, if any. The swelling feels uneven, or studded with little lumps, one of which eventually projects and bursts, discharging a quantity of pus, and thick curdy matter of a yellowish color. It may, however, be a year or more after the swelling occurs before it breaks, though when

one opening is formed others are apt to follow. The opening evidently communicates with the interior of the organ, and after venereal excitement it is not unusual for semen to flow from it, along with the pus.

In some few cases the Tubercle will heal, and the wound close, leaving the Testicle only partially wasted, but more frequently they continue to discharge till it is all completely gone, or till the whole system is so affected that death ensues. Occasionally the whole Testicle will pass through the wound, and will remain protruded till it is entirely gone.

This affection occurs sometimes in children, of a scrofulous habit, and completely destroys the Testes in a short time.

The treatment must depend upon many circumstances, such as the patient's age, general health and habit of body, and mode of life. As a general rule it must be general, or calculated to act on the whole system, so as to induce a beneficial change in its action. The *alterative* medicines are therefore most to be relied upon, as Mercury, Iodine, and Sarsaparilla, and in cases of tonic debility *Iron* must be administered. Attention to the diet, air, and climate, are also of the greatest importance. Consumptive people are always more or less liable to this affection, and I am persuaded that in many it exists sufficiently to impair the power of the organ, and cause partial impotence when it does not proceed to the suppurative stage.

FOREIGN BODIES IN THE SCROTUM ALONG WITH THE TESTICLES.

Sometimes little round bodies like peas are found in the Tunics, composed of firm Cartilaginous matter or bone. I have seen one as large as a marble, and hard as ivory. It is seldom there are more than three of them. The origin of these bodies can only be conjectured, though they are probably only diseased secretions, like those sometimes found in the joints, which were first attached to the Tunics, and then became loose.

Worms, Hydatids, and other living beings are very rarely met with, though they have been occasionally seen.

In some instances the Scrotum has contained the remains of a *Fœtus*, which had evidently descended from the Abdomen along with the Testicle. M. Velpeau communicated a case of this kind to the Academy of Science in the year 1840, in which he removed nearly all the parts of a Fœtus from the Scrotum of a man aged twenty-seven. The patient had suffered from the enlargement from birth, but its character was not suspected till M. Velpeau performed the operation for its removal.

(To understand how this inclusion of one Fœtus in another can take place, the reader is referred to "The Origin of Life," if he be curious in such singular cases.)

NERVOUS AFFECTIONS OF THE TESTICLES.

The Testes, like other parts of the body, are subject to several kinds of nervous affections, which

frequently cause exquisite misery, though they may not lead to any positive injury.

Irritable Testis.—This is a form of nervous disease in which the Testis is in a constant state of peculiar *uneasiness* and *irritation*, rather than acute pain, though sometimes it is more painful in one particular spot. It is so exceedingly sensitive that the touching of the dress, or the mere rubbing of the Scrotum against the limbs, causes such distressing annoyance that the sufferer dislikes even to move. Sometimes the irritation extends up the cord, so that the movements of the bowels, or the passage of urine, become exciting causes, and the patient cannot even cough without an increase of his misery taking place.

In some cases this morbid sensibility affects both Testes, and in others only one, which is usually the left. It does not appear to cause any alteration in the parts nor swelling, except occasionally a little fulness, particularly of the cord, and some relaxation of the Scrotum. It is seldom that an attack passes off very soon, but more usually it lasts several months, during which the sufferer loses all relish for society, and almost all capability for enjoyment in any form. All his thoughts are fixed upon his sufferings, and the idea takes possession of his mind that he will never be better, or that he will be impotent or die of Cancer, and some request their physicians to castrate them, to avoid these dreaded evils.

The causes of this distressing affection are partly constitutional, it being chiefly met with in those who are naturally weak, irritable, and disinclined to physical exertion, or in the hypochondrical and

dyspeptic. It is however immediately produced, in most cases, by some derangement of the genital organs themselves, more especially such as are brought on by masturbation, excessive indulgence, or involuntary emissions. Young persons of a nervous habit and strong sexual feelings, are also liable to it while unmarried, and I have been consulted in many such cases which could not be benefited by any kind of treatment till marriage took place. In a modified form it is often experienced about the period of puberty, in consequence of the great and unusual activity of the organs at that time, and much evil may result if a word of advice and caution be not then given. The young person will in all probability discover that a temporary relief can be obtained by the vicious practice of self-indulgence, and not knowing that this will really *increase* the irritation, eventually, he goes on with the practice till his health is seriously impaired and his sufferings aggravated almost beyond endurance.

The treatment of irritable Testis depends in a great measure upon the peculiar condition of the patient, and the state of his general health. In many cases it is so entirely of a *nervous* character that we need merely advise a change of air and scene, or cheerful company, or some interesting mental occupation, in short, any thing that will arouse the sufferer to activity, and turn his thoughts away from his affection. If he be dyspeptic it is essential that his digestive organs should be attended to, and if he be costive, which is often the case, the bowels must be brought to a more regular state before improvement can even be hoped for. In cases where there is great debility, tonics must be

used, such as the *Steel drops*, or *Peruvian bark*, and a generous diet must be advised, with a little wine. The use of *cold water* externally is of the very first importance, as it gives tone to the parts, and removes the morbid sensibility, more perhaps than any thing else. The parts should be freely bathed with it two or three times a day if possible, or at least night and morning. In obstinate cases a plaster of *Belladonna Ointment* may be placed over the whole Scrotum, or laudanum may be used as a lotion. A good suspensory bandage is also very frequently of great service.

In addition to any treatment, however, *and still more essential*, is a knowledge of the cause of the trouble. If any of the above named practices are persisted in, or if the patient's situation in life is unsuited to his temperament, no great good can possibly result from medical treatment alone. These things must therefore be spoken of, either to the patient himself or to his guardians.

It is not necessary to perform castration for this disease, as it is for some others, because it is not a serious one, and generally either subsides of itself in time or can be relieved by appropriate treatment.

In one instance a gentleman was affected with this morbid irritability, in one of his Testes, just before the time appointed for his marriage, and was so convinced that it was but the beginning of a greater evil, that in spite of all advice to the contrary he insisted upon having the organ removed, which was done. Directly after, however, the other began to be as irritable as the lost one had been, but this of course he was not so desirous of parting with, and therefore bore with the trouble.

He was married and had no further trouble afterwards. The removed Testicle was perfectly healthy and sound.

Neuralgia of the Testes.—This is a nervous disease of a much more serious character than the one already described, and more difficult to treat. It is characterized by acute pains, sometimes lancinating and at others dragging or pricking, which are usually accompanied by spasms of the cremaster muscles by which the Testes are drawn forcibly up to the groin. In general these pains come on periodically, as in other cases of Neuralgia, and between the paroxysm the Testes are often perfectly free from pain, even when handled, though there is occasionally a little morbid sensibility in them, and perhaps a little soreness on the edge of the hip-bone. The attack may last only a few minutes or many hours, and is usually confined to only one Testis; some patients have it come on twice a day, others once a day, and some again only once in several days. Some are affected with sickness and vomiting, and others with shiverings and cold perspirations, while others again experience such intense agony that they roll upon the ground and groan, or perhaps faint away.

In nearly every instance when examinations have been made of the Testes so affected, after their removal, no alteration whatever has been detected in their structure, nor any indication of disease to which the neuralgia could be ascribed. In some long-continued cases, where the pain has been great, there has been a little swelling and inflammation, but this is rare.

The causes of Neuralgia of the Testes are but little known, or rather, perhaps, not known at all.

It is met with at all ages, and in almost every variety of constitution, though most frequently attacking those who are subject to derangements of the digestive organs. It very often appears to result from some disease of the Testes, particularly Orchitis, and from Varicocele, or disease of the Kidneys. Many persons experience it from Gravel, and still more from the passage of a stone from the Kidneys to the Bladder. Gouty subjects are liable to it, and so are those affected with enlargement of the Prostate Gland.

In the treatment of Neuralgia of the Testes, the first thing is to ascertain if there exists any other disease, which may possibly cause it. The Digestive Organs must be attended to, and the patient must be advised to avoid all causes of mental disquiet, or nervous agitation. Internal medication is seldom of much use, though in some cases relief is obtained by taking *Iron*, in various forms, particularly the *Pills of the Carbonate of Iron*, and if the attacks be regularly periodical, *Quinine* may be of service, in doses of *five grains*, three or four times a day. Turpentine is occasionally very efficacious, in the following form :

R. The yolk of one Egg ; oil of Turpentine, three drachms ; syrup of Orange-peel, and syrup of Tolu, of each two ounces ; Laudanum, one drachm.

These are all to be well mixed together, and three table-spoonfuls to be taken daily.

Warm fomentations of hops, or poppy heads, will sometimes benefit, but at other times *ice-water* will be still better. A blister may be put upon the Scrotum, if all other means fail, and a quarter of a grain of Morphia placed on the raw surface. A

Belladonna Plaster will sometimes relieve, or an Ointment composed of *one grain of Aconite* to one drachm of Lard, rubbed over the parts twice a day. The *Tincture of Aconite* is sometimes still more efficacious when rubbed on the Scrotum with a sponge, and will often so numb the parts that no pain will be felt for hours. Twenty or thirty drops of Laudanum are sometimes beneficial, internally, and the following preparation still oftener.

R. Extract of Hyoscyamus, five grains; Acetate of Morphia, half a grain; to be taken twice a day.

Neither bleeding nor Mercury appear to be of any use in this disease, but *Galvanism*, properly applied, is frequently of great service.

When the disease is too severe to be borne, or seriously affects the patient's health, if all other means fail, *Castration* may be performed. It should not be done prematurely, however, nor without due consideration, for sometimes the disease will subside spontaneously, after enduring a long time, and even when the operation has been performed the Neuralgia has often remained in the cord as severe as ever. I have known the disease remain for two years, causing the most agonizing suffering nearly the whole time, and then go off and never return.

Several cases of this singular disease have lately come under my care, and in no two of them has the same treatment been beneficial. Each one has had to be studied and prescribed for separately, but in none was an operation necessary.

SPERMATOCELE, OR SWELLING OF THE TESTES FROM
ENGORGMENT OF SEMEN.

It is very seldom that this affection is met with, though it sometimes occurs from obstructions in the Vas Deferens, and Urethra. It may also arise in falling of the Cord, from its becoming twisted or knotted, and from swelling of the prostate Gland, causing pressure on the ejaculatory ducts. The symptoms are swelling and heat in the Testes, with a distinct sense of fulness in them and aching pain. There is also usually considerable *priapism*, and intensity of sexual desire, but not always.

The treatment consists first in removing all causes of obstruction, if any exist, and then in cold lotions and rest, with purgatives. Sometimes Spermatocoele is met with as the simple result of *undue continence*, but this is rare. The effects of it, if long continued, may be inflammation of the Testicle, with Hydrocele, and ultimately complete impotence. If the means above directed do not give relief Leeches may be applied to the perineum, or general bleeding may be practised from the arm. The diet should also be very spare and simple, and the drink cold water. The mind must not be allowed to be idle, nor the imagination too much excited, and the body must be inured to regular and brisk exercise in the open air. If, notwithstanding all these, the trouble still continues, and threatens to be serious, nature indicates but one more mode of relief, which is sure to succeed. In very obstinate cases of Spermatocoele, the pressure of the Semen has been known to *burst* the seminiferous Tubes, and I am persuaded, from what I have seen, that it

frequently injures the structure of the Testicle. I once saw the testicles of a young man dissected who died in an epileptic fit, brought on by an intense struggle to suppress all sexual desire. They presented the most confirmed case of Spermatocoele perhaps ever seen, being engorged with semen till much larger than the natural size, and evidently in a state of chronic inflammation. The tubes were blocked up with *hardened semen*, almost of the consistence of *cheese*, and many of them were broken and run together. In a short time the structure of the organs would have been completely destroyed. The Vas Deferens and Epididymis were also engorged in the same manner, and in many parts were beginning to change their structure.

SCROTOCELE OR RUPTURE OF THE INTESTINES OR
OMENTUM INTO THE SCROTUM.

To understand the nature of this affection it is necessary to refer back to what has already been stated. During Fœtal life the Testes are contained in the Abdomen, from which they descend into the Scrotum about the ninth month, by an opening called the abdominal ring. After they have descended this opening usually closes, and no further direct communication then exists between the two cavities. In some cases, however, this closing up is not accomplished before birth, and then there is a liability for the Intestines, or their covering the *Omentum*, or both to descend after the Testes into the Scrotum, forming a *Scrotal Hernia*. In most cases, this takes place very early, but it may be delayed some months, or years, and has taken place as late as the thirtieth year. The symptoms are

much the same as those of other ruptures, excepting that the tumor is found in the Scrotum. If the bowel is compressed in the ring till the passage in it is obstructed, great suffering results, with inflammation, and nearly certain death if relief is not obtained. I have known infants suffer severely from this trouble, and in fact be almost lost from it, without any idea on the part of their parents as to what they ailed. I have also known boys become subject to it suddenly from leaping, or from straining of the bowels, and suffer the most dreadful tortures before they told how they suffered, or before any one found out what was wrong.

If the Rupture exists from birth the Testes cannot be felt while it is down, because they are covered by it, but when the Rupture occurs in after-life the Testes can be felt behind, in the lower part of the Scrotum. In some cases the Hernia is small, and descends only a small distance, so that no great inconvenience is experienced, and it may exist in this way for years, or even for life, but there is always danger of its becoming worse. Occasionally a quantity of fluid descends from the abdomen, either with a Rupture or without, constituting a true Hydrocele, but differing from that occurring in after-life by the fluid returning into the abdomen, when pressed upwards. Children are sometimes born with a large accumulation of fluid in this way, and in others it appears a few days after birth. In these cases the fluid also usually disappears into the abdomen when the patient lies down, and may be kept there when erect by pressing the finger on the abdominal ring, but immediately the finger is taken away it re-appears.

The treatment of Scrotal Hernia is much the

same as that of other ruptures, and when properly conducted usually produces a cure, unless there is some malformation of the parts that cannot be corrected. The protruded parts are first pushed back into the abdomen, leaving the Testes in their place, and then a properly-constructed Truss is worn that presses on the abdominal ring, to prevent their return. If this be worn regularly, and the parts never allowed to fall again, the passage will generally close up, and the cure be thus made complete in a few weeks. The older the patient is, however, the longer time it will require to effect a cure, and the greater chance there is that it may not take place at all, in which case a Truss must be constantly worn.

Great care is required in applying the Truss that it does not press *on* the Intestine, or on the Testes, for if it does so, great pain and perhaps inflammation may result. It must also be carefully ascertained that the Testes are in the Scrotum, because if they are not the truss will be improper, as it will prevent their descent.

In Congenital Hydrocele the fluid may be kept back, more or less completely, in the same way as the Intestines, and in young persons it usually absorbs in the course of time. In very bad cases of Scrotal Hernia, when the Intestine is strangulated, and cannot be replaced by external manipulation, an operation is needed, which consists in cutting the neck of the sac, or the ring, a little larger, so as to allow of its return. This, however, must always be performed by an experienced Surgeon, and in such hands is perfectly safe and comparatively easy.

Parents cannot be too careful in observing their

children, so as to detect any trouble of this kind at the earliest moment. From want of attention this way a Scrotal Hernia may take place, and produce serious effects, before anything of the kind is suspected, and the proper treatment may thus be too long neglected. A severe fit of crying is very likely to bring this on, in infants who are disposed to it, and hard coughing may do the same in after years. It is very seldom cured, so as to do without a truss, after puberty.

VARICOCELE AND CIRCOCELE, OR SWELLING OF THE
VEINS OF THE SCROTUM AND SPERMATIC CORD.

Varicocele is simply a swelling of the veins on the surface of the Scrotum, and is never of a serious nature, unless caused by other diseases. It appears to arise spontaneously in many cases, but more frequently follows severe fatigue, long standing, or debilitating diseases. All that is required is for the patient to wear a suspensory bandage, use the cold astringent lotions directed in Hydrocele, and rest. If he be of a full habit of body it may also be requisite to order a low diet for a time, and the strict use of cold water as a drink.

Circocele is a swelling of the primary veins of the spermatic cord, within the Scrotum, and may become much more troublesome than Varicocele, though it is but seldom serious. The swelling is felt in the Scrotum like a firm knotty tumor, on one side of the Testicle, and becomes larger when the patient coughs or strains, but subsides when he lies down. It is on this account that Circocele has sometimes been mistaken for a rupture of the Omentum into the Scrotum. It only needs a proper

examination, however, to show the truth. When the patient lies down push the tumor up into the abdomen, and press the finger firmly on the abdominal ring, then let him rise, and if it be a rupture the tumor cannot descend again while the finger is held there, but if it be a Circocoele it re-appears immediately.

It is seldom that anything more is experienced than a sense of weight and uneasiness in the parts, except in severe cases, and then there may be pains in the back and loins, with weakness in the thighs, and eventually a wasting of the Testicle.

The treatment must be almost precisely the same as given for other swellings. Cold astringent lotions, the suspensory bandage, purgatives, and rest, by lying upon the back, is all that can be generally advised, though there may be particular circumstances in each case to indicate something more. There are cases so severe as to require the removal of the Testicle, but fortunately they are rare.

Many sufferers would escape this affliction if they would wear a suspensory bandage in time, when the swelling and inconvenience are first observed, and many would have no return of it if they did not leave off the supporter too soon. The veins on the right side appear to be seldom subject to swelling, nearly all the cases being on the left side, though occasionally both are affected, but the left always the most so. This is probably owing to the position of the Colon, or lower part of the large Intestine, which descends on the left side, and by pressing on the veins prevents the blood from freely returning, and thus causes the swelling below. It is on this account that persons who suf-

fer from Constipation are most liable to Varicocele, and that it is always worse when the bowels have been long unmoved and are full. It is for the same reason also that the left ovary, in females, is most apt to be affected with Varicocele. Among other general causes of this disease may be mentioned excessive indulgence, Masturbation, Inflammation of the Testicles, and Ruptures or Tumors in the Abdomen. Very fat people are sometimes affected with it, owing to the pressure of the fat in the lower part of the abdomen, and those who wear trusses are liable to it from the pressure of the instrument, unless it be well made, and carefully adjusted. Riding, hard running, leaping, and lifting will also bring on swelled veins, and sometimes even burst them, particularly if the Scrotum be much relaxed. It is most frequent at the age of puberty, though met with occasionally at other periods.

The characteristics of this disease are so clearly marked that a mistake can seldom occur in regard to it, the cord is plainly observed to be swelled, the enlargement being greatest below, on the Testicle, and on pressure it feels like a roll of knotted cords, or a bunch of earth-worms. This swelling is always greatest at night, or after exertion, and from coughing or straining in any way. It may also be reduced by lying down, and by the application of cold. Many patients discover that it is nearly always much better *after coition*, and they are, therefore, apt to indulge frequently, under the idea that it does them good. This, however, is a great and fatal mistake, the temporary relief being merely owing to the contraction of the Scrotum, and to the increased speed of the circulation, which always occur immediately after coition. As soon

as this temporary excitement is over the relaxation is greater than before, and the swelling of the veins increases, as all those who have tried the experiment well know.

In general, if taken early, the disease may be readily checked by the means already described, but if neglected it may become very severe and obstinate, and sometimes gives rise to Neuralgic symptoms. There is also danger of wasting of the Testes, as before remarked, owing to the circulation of the blood being impeded, and the usual supply of nutriment being thus cut off. Many instances of this kind are related in medical works, and I have seen several myself. In some cases the Testes will waste away, and almost totally disappear, in a few months after the Varicocele commences. This, of course, destroys all sexual power and feeling, and makes the patient an eunuch. It is therefore advisable, if all the usual means fail of arresting the swelling, and particularly if wasting commences, to resort to some other treatment, and several modes have been adopted by different Surgeons with various success. Sir Astley Cooper, and some others, used to cut away a piece of the Scrotum, and then draw the parts together and let them heal. This, of course, made the Scrotum less, and by drawing the Testes firmly up to the abdomen afforded a beneficial support to the parts above. In many instances this operation has effected a cure, but in others the relief from it has been but slight. The disease has also reappeared, with all its former severity, many years after being cured in this way. This operation is not applicable to all cases of the disease, and even in skilful hands is frequently attended by great danger.

Besides this plan, some surgeons have cut through the veins, or tied them, and sometimes even cut part of them out. Of course either of these plans leads to the destruction of the Testes, besides being liable to cause inflammation of the veins, and other serious results, and they are therefore very objectionable though often successful in curing the Varicocele. M. Delpech, a celebrated French surgeon, operated upon a man in this way, and cured him, but the Testes afterwards wasted away, and this being unexpected, and undesired, the man was so enraged that he assassinated the surgeon.

The only treatment that can effect a cure without sacrificing the Testes is the application of *pressure*, in such a way as to *lessen* the circulation of the blood in the veins, without stopping it entirely. This can sometimes be accomplished by a peculiarly formed Truss, or bandage, and at other times by a ring; but the making and fitting of these instruments is a matter of great difficulty, and requires to be done for each case separately. I have often had the pleasure of affording relief in this way, but only after immense trouble on my own part, and great perseverance and patience on the part of the patient.

When nothing else can be done, castration must be performed; and our surgical records give us many instances of this operation being resorted to.

HÆMATOCELE, OR SWELLING OF THE SCROTUM AND SPERMATIC CORD FROM THE EFFUSION OF BLOOD.

This affection differs from Hydrocele in being an effusion of blood, instead of water, either into the

Scrotum or spermatic cord. It is sometimes caused in performing the operation for removing the fluid in Hydrocele, by wounding one of the blood-vessels, and thus allowing the blood to run into the cellular Tissue or Tunica Vaginalis. It may also occur, spontaneously, from the rupture of a branch of the spermatic veins, and may result from blows or sprains, the same as effusions of blood in other parts of the body.

This accident is rare, and seldom serious. If the patient keeps perfectly still, supports the Scrotum with a bandage, and uses fomentations of hops, boiled in vinegar, or spirits of wine and water, or vinegar and water, and keeps the bowels gently relaxed, nothing more will in general be required. Sometimes, however, the blood-vessel remains open, the blood keeps flowing, and the swelling becomes so large, and presses so much on the Testes that great distress is experienced. In these cases an incision must be made, the blood let out and the vessel tied, unless it can be closed by pinching it together externally, which may be done if the place of rupture is discovered. If there be any inflammation it must be combated by leeches, cold lotions, and other usual remedies, and if it suppurates a poultice must be applied.

PRURIGO, OR ITCHING OF THE SCROTUM.

This is one of those annoying complaints, which, though not at all serious, are still sufficient to make any one suffering from them completely miserable, and even sometimes almost desirous of death, as the only means of relief. The itching is sometimes felt without there being any unusual appearances in

the parts, but more frequently a number of roundish red pimples are seen on the Scrotum, which, by the patient scratching to relieve himself, often become much enlarged, and highly inflamed. In long continued cases the skin becomes considerably thickened and very hard, and a disagreeable discharge takes place from the sebaceous glands. I have known persons so tormented with this disease as to be frequently delirious, and utterly unable to obtain the slightest alleviation of their distress.

The real causes of Prurigo are entirely unknown to us, but it is undoubtedly much aggravated, if not brought on, in many instances, by want of proper *cleanliness*. The plentiful and regular use of *cold water* would prevent more of this trouble than any kind of medication can ever cure. In many persons the secretions of the parts are naturally very acrid, and if not speedily removed they are sure to irritate every spot they touch.

Old persons are most subject to this complaint, though it occasionally attacks others, and it is usually confined to the genitals exclusively, but will sometimes extend down the inside of the thighs and round the anus.

The treatment must be chiefly external, unless there be habitual indigestion, or constipation, in which case a few simple alteratives may be of service. If constipation exists a little Epsom Salts may be taken, and if the stomach be disordered *five grains of Plummer's Pill* may be given every other night, for five or six nights. The patient must be particularly cautioned not to rub the parts, and his dress should by no means be allowed to chafe them, nor should it be too warm and close. Even at night the bed-clothes must be light, and the bed

itself hard and cool. But little exercise should be taken, and that very gentle, and the parts should be thoroughly washed twice a day with warm soap and water. A cooling lotion may also be used during the day, of *Vinegar and Water*, with a little *Laudanum*, or what is often better, *two grains of Bichloride of Mercury to two ounces of water*. Equal parts of *Citrine Ointment* and *fresh lard* also forms an excellent application to be rubbed well over the parts at night. *Sulphur Ointment* benefits in some cases, and a *Sulphur Vapor Bath* still more so in others. It is especially important that the diet should be simple, light, and unstimulating, and that no alcoholic or fermented liquors should be taken.

Sometimes the itching arises from the presence of certain peculiar little *parasitic animals*, in which case they may be readily destroyed by rubbing on a little of the *white precipitate powder* occasionally. In fact this may also be used with a prospect of benefit whenever the skin is not much broken.

ELEPHANTIASIS SCROTI.

This terrible disease is fortunately extremely rare in this part of the world, and it is only necessary to describe it in order to complete our treatise. It appears in the form of a peculiar swelling of the Scrotum, caused by the infiltration into its integuments of a jelly-like albuminous fluid, which accumulates in some cases to a most enormous extent. The outer surface of the skin appears rough and chopped, or covered with large brown scales, so that it has somewhat the appearance of an elephant's foot. Sometimes, but not very frequently, a number of ulcers are formed, and the

chapped places discharge an offensive sanious secretion.

This disease is chiefly confined to Barbadoes, though found in others of the West India Islands, and also in Egypt, Africa, Greece, and the East Indies.

The size of the Scrotum is sometimes almost past belief, and yet in some of the very worst cases the patients enjoy excellent health, without any disturbance of the functions of other parts of the system, which shows that the disease is purely local. Mr. Liston removed one of these Tumors which weighed *forty pounds*, which had been nineteen years growing! M. Delpech removed one that weighed *sixty pounds*; and Baron Larrey saw one in Egypt that weighed over a *hundred pounds*. Instances have even been known of their weighing over *two hundred pounds*, and sometimes even the patients have been able to sit upon them, like a seat. Very often they hang down to the ankles, and are four or five feet in circumference. There is no cure for this affection, so far as yet known, and the only remedy is to remove it with the knife, which has frequently been done with perfect success. Dr. Picton of New Orleans, removed one of these Tumors from the Scrotum of a negro, in 1837, which weighed *fifty-three pounds*, and had been growing for ten years. Much larger ones have, however, been removed, and sometimes even without destroying, or in any way injuring the genital organs, so that the patient has been as well and perfect afterwards as ever he was before. It is, however, extremely difficult to preserve the genitals, and generally they have to be removed along with the diseased mass. The great danger is from

loss of blood, and from this many of those operated upon have died. A Chinese named Hoo Loo came over to London to be operated upon for this disease, and Mr. Key removed the tumor, which weighed fifty-six pounds, but the poor man died from loss of blood.

FALLING OF THE SPERMATIC CORD.

From various causes the sheath of the cord is liable to become excessively relaxed, and weakened in its attachments, so that it falls down more or less into the scrotum. This is indicated by a sense of weight and fulness in the scrotum, and by dull pains in the groin, with uneasiness in the testicle. On examination a kind of knotty tumor is felt just over the testicle, or down on one side of it, which may be gradually pushed up into the abdomen, and which draws up itself to a great extent when the person lies down. This tumor is the cord, which has fallen in a heap and presses on the testes. In the morning it is seldom to be seen, except very slightly, but usually re-appears when the patient has been on his feet a short time. It is also worse in hot weather, and after great fatigue, or much nervous agitation. Straining from constipation will also tend to bring it down worse, and so will sexual excesses.

This is simply a local weakness, but it may nevertheless lead to very unpleasant consequences if allowed to continue unchecked. The constant pressure on the testes becomes very painful, and may lead to inflammation, or hydrocele, and ultimately the cord may form false attachments and grow fast in its wrong position, so that no means

can afterwards remove it. The treatment is simple, but requires perseverance. The parts must be regularly bathed with cold astringent washes, such as alum water and solution of sugar of lead. This must be done at least morning and night, and if possible two or three times during the day, the fluid being washed up the groin, and under the perineum as well as on the scrotum. The dress must not be too warm between the limbs, and no lifting or straining must be practised. As little standing as possible is also advisable, and constipation must be particularly avoided.—The most essential requisite, however, is a suspensory bandage, or in very bad cases a truss, made to press on the abdominal ring. Both these instruments should be put on before the patient rises in the morning.

Falling of the cord usually results either from general debility, straining, sexual excesses, or fatigue upon the feet. It may occur only on one side or on both.

RELAXATION OF THE SCROTUM.

This affection is something like Falling of the spermatic cord, being produced by similar causes, and requiring similar treatment. It results from a weakness in the fibres of the dartos and great cremaster muscle, owing to which the weight of the testes pulls down the scrotum and elongates it, sometimes to a great extent. In some men I have known it hang, when they had been long upon their feet, full six inches below the pubes. Besides the inconvenience of the falling itself, it is nearly certain, if it continues too long, to bring on falling of the cord, and probably hydrocele. It always causes

an annoying sensation of weight and dragging, with more or less pain in the groin, and weakness in the limbs.

The only treatment required is the regular use of cold astringent washes, as directed in falling of the spermatic cord, with the constant wearing of a suspensory bandage. The same precaution must also be observed as to regulating the bowels, and avoiding excesses and fatigue.—If cold water and the suspensory bandage were resorted to in time, and perseveringly, neither of these affections would scarcely ever become very bad, unless from sudden straining.—Sometimes however it is caused by unusual weight in the testes, from swelling, tumors or hydrocele, and of course can be removed only with the cause producing it.

DISEASES OF THE VASA DEFERENTIA.

The Vas Deferens is only a small Tube, and is liable to several accidents that will impede the proper performance of its functions.

It is not unfrequent after a recovery from Hydrocele, or Hernia Humoralis, for the Vas Deferens to become partially *obstructed*, or even totally *obliterated*, owing to its having partaken of the inflammation, and its walls having in consequence grown together. When the obliteration is complete the individual is of course sterile, because there is no passage for the semen. The Testicle may be perfect in its action, but the semen cannot leave it, and this not only produces sterility, but sometimes leads to fatal inflammation of the Testicles from their being constantly overcharged with semen, and unable to relieve themselves. When there is only a

partial obstruction the patient experiences a singular difficulty in the evacuation of the semen, which is effected very slowly, and often with great pain. In some of these cases the orgasm will be over and the erection gone down before the semen begins to flow, and then it comes in drops for a considerable time, causing great inconvenience and annoyance.

Unfortunately we know of no remedy for this difficulty when it has long existed, but when it is only a temporary result of acute inflammation it is of course only necessary to subdue that to give relief. The great point is to prevent such an accident, by checking all inflammatory action in the Testes and other parts, which lead to it, before the Vas Deferens becomes affected. It is mostly caused by neglecting Hydrocele and Hernia Humoralis too long, or by improperly treating them, though it may also be brought about by blows over the groin. A temporary obstruction of the Vas Deferens often arises from its being pressed upon by a swelled vein, or by tumors in the Testicle and groin, in which case it is of course relieved only when such cause is removed. It is advisable to let such causes exist as little time as possible, because the retention of the semen may injure the Testicle. I have known an improperly-constructed truss press on the spermatic cord and close the Vas Deferens, so that the person was quite sterile while he wore it.

Sometimes the Vas Deferens becomes *Dilated*, or *Relaxed*, so that its size is much increased and it nearly or quite loses the power of retaining the semen, or become so full of it as to produce inconvenience. The causes of this trouble are unknown, though it most probably results from *retaining the semen* when it is nearly ready to flow as often as

from any other cause. I have known men afflicted in this way who habitually tried to prevent the flow continuing, from a mistaken idea that if they could lessen the discharge they would not be so much weakened by coition. It is scarcely necessary to say that such practices do *not* lessen the discharge, but merely make it finish afterwards in an unseen and dangerous form.

It is not easy to ascertain when the Vas Deferens is enlarged or relaxed, but when there is good reason to suppose it is so the treatment is simple. Cold lotions of Alum-water or Sugar of Lead, as recommended in former articles, must be constantly used, or ice may be frequently applied so as to astringe the parts, and all improper habits must be immediately abandoned.

In addition to these, the Vas Deferens is liable to several other affections, as Scrofula and Tumors for instance, which are, however, very rarely seen, and as their treatment in no way differs from that of the same affection in other parts, they do not require any special notice. In some few cases the Vas Deferens has been totally absent from birth, while the Testes and other organs were perfect. In this state the Semen is formed, erection even occurs, but there is no *emission*, because there is no passage from the Testes. This condition of the parts is nearly sure to lead to Orchitis, or Spermatocoele, from the irritation of the retained Semen, unless the patients desires are weak, or kept much under control. If the Vas Deferens of an animal be cut out, or tied, it is found that the Testicle still secretes the Semen, though it cannot escape, showing that the power of secretion is not lost by the impossibility of emission.

DISEASES OF THE SEMINAL VESICLES.

The precise use of these two organs is yet a matter of dispute among physiologists, some regarding them as real Glands, by which a peculiar liquor is secreted to mix with the Semen, while others look upon them as mere *reservoirs* in which the Semen accumulates previous to its emission. When dried and injected the Vesicles are seen to be two Tubes convoluted and turned upon each other so closely that their parts look like cells. The ends of these Tubes open into the Vas Deferens, just where the ejaculatory duct commences.

It appears certain that the Vesicles have considerable contractile powers, and this has favored the idea of their being intended to contain the Semen and afterwards eject it during coition. When examined after death, however, they do not contain Semen, but are filled with a yellowish fluid apparently peculiar to themselves. Their precise use is therefore as yet unknown.

They appear to be subject to obstruction and obliteration like the Vas Deferens, but we have no means of detecting such derangements, nor can we propose any remedy.

CHAPTER V.

THE STRUCTURE, DISEASES AND MALFORMATIONS OF THE PENIS AND THE PARTS IMMEDIATELY CONNECTED WITH IT

THE Penis is a hollow spongy organ down which runs the passage from the bladder, called the *Urethra*, by which the urine escapes, which also serves for the exit of the semen, as before explained.

The Anatomical structure of this organ is not thoroughly understood by Anatomists, owing to the difficulty which necessarily exists of dissecting it in its several states. Sufficient, however, is known to explain its Physiological action, which is all we now require to know.

The body of the Penis consists of two distinct parts, each of which is very porous, or rather spongy. The upper part, which is the largest, is called the *Corpus Cavernosum*; the under part, which is much the same in its structure, is called the *Corpus Spongiosum*. Both parts extend from the Pelvic Bones to the Glans at the end. The *Corpus Cavernosum* is divided down the middle into two parts, by a septum, or partition, and some physiologists on that account speak of *two* Cavernous bodies, or the *Corpora Cavernosa*; it is, however, strictly but one. These two parts are rounded on the under edge, so that when they come flat together there is a groove formed underneath, and in this groove lies the *Urethra*. They are both firmly attached to the front bones of the Pelvis,

PLATE X.

Fig. 1. The Bladder and Penis laid open.

a. The inside of the Bladder.—*b. b.* The Ureters, or Tubes which convey the Urine from the Kidneys to the Bladder.—*c. c.*—The Vasa Deferentia.—*d. d.* The mouths of the Ureters.—*e.* The Prostate Gland.—*f.* The Veru Montanum.—*g.* Openings of the Seminal Ducts.—*h.* The Ischio Cavernous Muscles, which assist in erection.—*i. i.* The bulb of the Urethra.—*k. k.* Cowpers Glands.—*l.* The wide part of the Urethra.—*m.* The narrow part.—*n.* The second wide part, called the Fossa Navicularis.—*o.* The Glans.—*p.* The Prepuce.—*q.* The Meatus Urinarius, or external opening of the Urethra.

The Cellular, or spongy structure of the body of the Penis is shown on one side, like a honey-comb; and the distribution of its blood-vessels on the other.

Fig. 2. Cross Section of the Penis.

a. a. The Corpus Cavernosum.—*b.* The division or septum between the two parts of the Corpus Cavernosum.—*c.* The Corpus Spongiosum.—*d.* The Urethra.—*e.* The great Vein of the Penis.

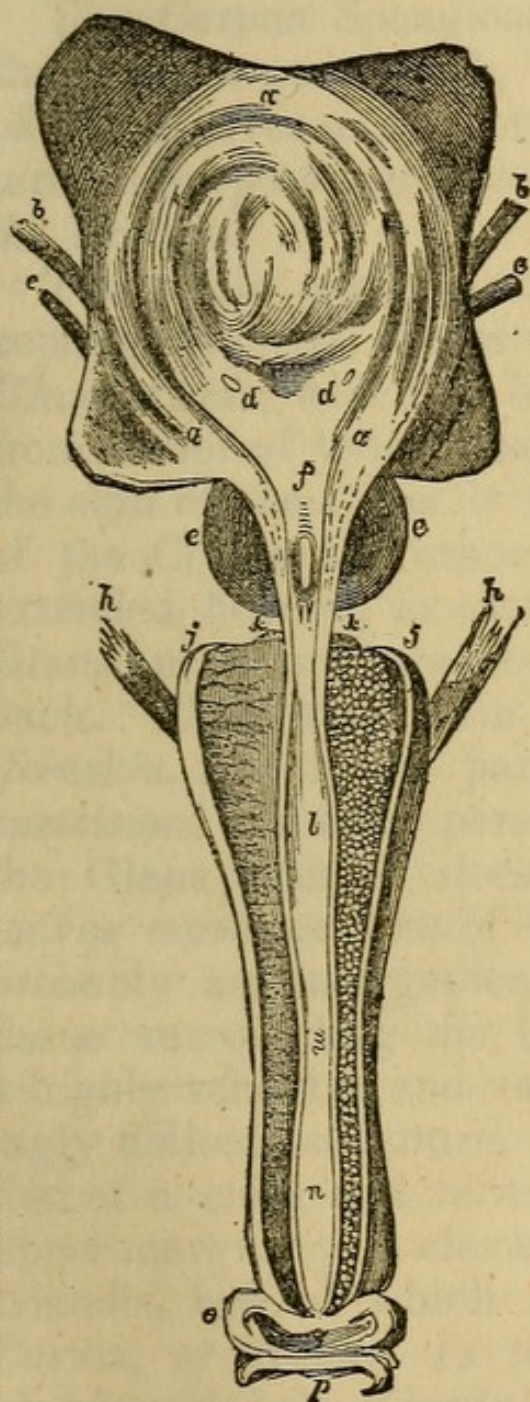


FIG. I.

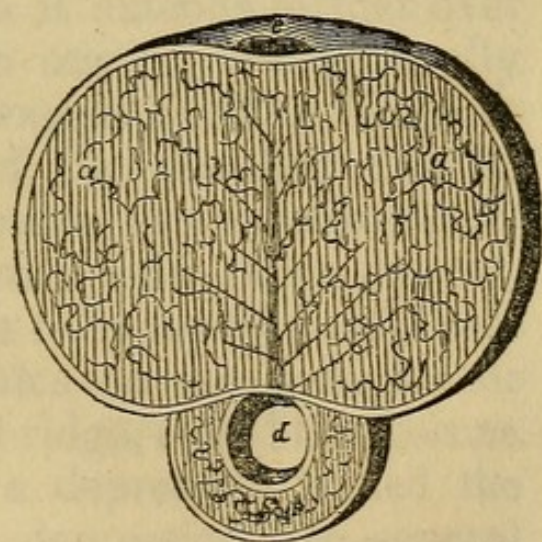


FIG. II.

Plate X.

Section of Penis and Bladder.

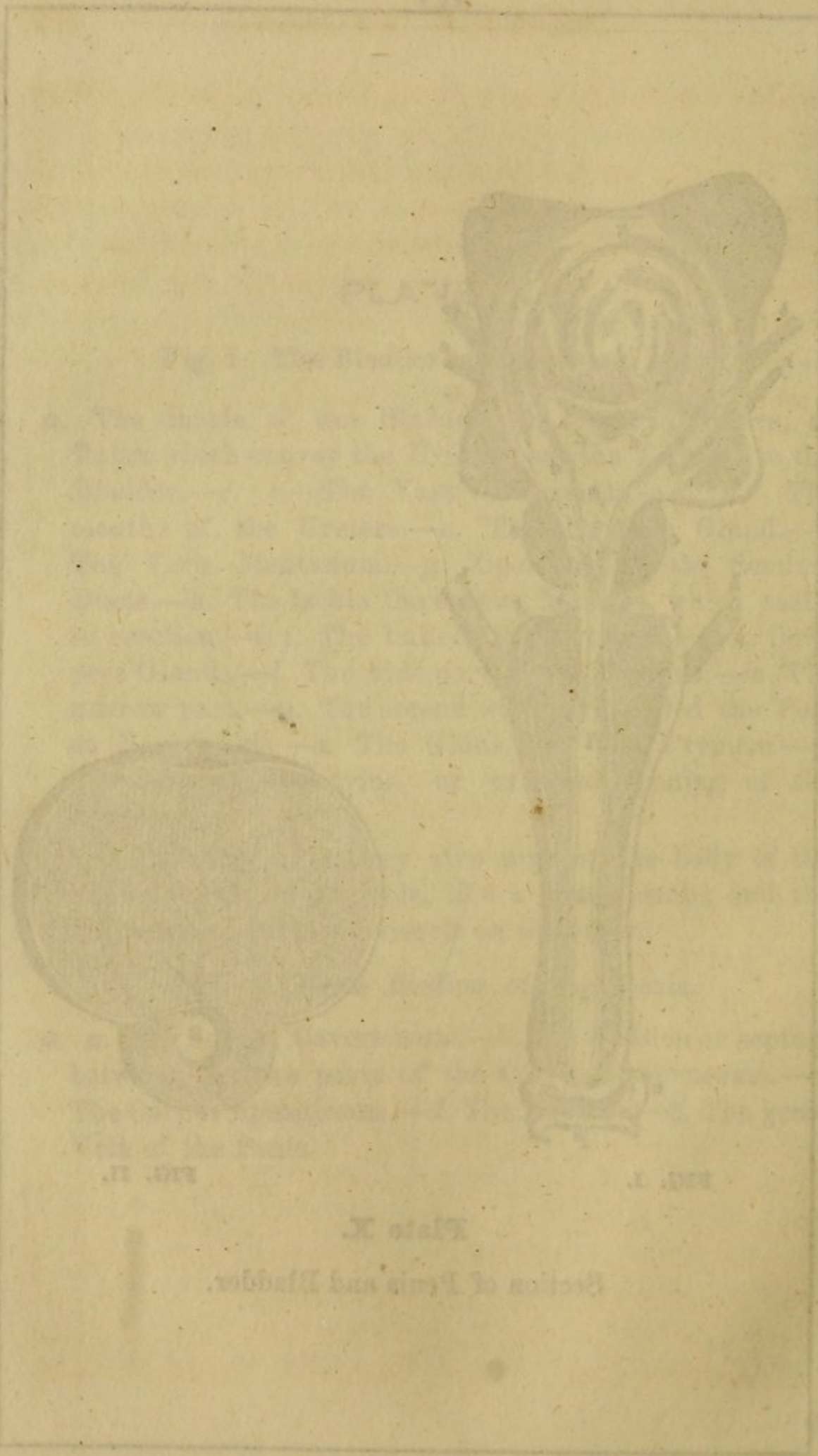


FIG. II.

FIG. I.

Plate X.

Section of Penis and Bladder.

under the Perineum, by two roots called the *Crura Penis*.

The Corpus Spongiosum surrounds the Canal of the Urethra underneath, and fills up the remainder of the groove, so as to round the whole organ. It terminates posteriorly in what is called *the Bulb of the Urethra*.

The whole organ is surrounded by the skin, excepting the end, where we find a body called *the Glans Penis*, which is both different and separate from either of those described. The inner fold of the skin of the Penis is attached to the termination of the Corpus Cavernosum, while the outer fold is extended beyond, so that it only partly covers the Glans but is not attached to it, and may be drawn back. This loose skin is called the *prepuce*, or *foreskin*, and is the part cut off in the rite of *circumcision*. In some persons it extends farther over the Glans than it does in others, but generally leaves more or less of it exposed. The Glans is probably an enlargement of the peculiar erectile tissue surrounding the Urethra, and is covered by a highly sensitive and vascular skin, of an exceedingly delicate structure. It is in the form of a section of a cone, and terminates on the posterior or upper margin by an elevated ridge, called the Corona Glans, behind which is a depression called the Cervia, or Neck. In this depression are several glands called the *Glandula Odorifera*, which produce a whitish secretion, of a peculiar odor, that sometimes accumulates in great quantities in those who neglect proper cleanliness. On the under side of the glans the prepuce is attached nearly at the end, by a fold, or ligament, called the *Frænum*, or *Ligamentum Præputii*. This ligament, or cord, is some.

times too short, and during erection is so pulled upon as to cause great annoyance ; occasionally it even ruptures, or tears, causing severe pain, with loss of blood.

These parts constitute the substance of the Penis, and are therefore most essential to the performance of its proper functions.

The peculiarity of the structure of the Corpus Cavernosum and of the Corpus Spongiosum, consists in their being full of curiously arranged blood vessels and cells, or cavities, like those of *sponge*, all communicating with each other, and being connected with the main branches of an artery and a vein. In ordinary states these vessels, excepting the larger ones, and also the cells, are nearly or quite empty, but under appropriate excitement the blood from the artery is impelled into them and fills them up, in consequence of which the organ enlarges, like a sponge when filled with water. This is called the Phenomenon of *Erection*, and it depends upon a peculiar sensibility proper to the parts, which are therefore sometimes spoken of as being composed of *Erectile Tissue*. There is no other part of the body that in any way resembles the Penis in structure, except the *Clitoris* in the female, which has a similar Tissue, and is usually capable of erection to a certain extent, in precisely the same way.

When the excitement is withdrawn the blood ordinarily flows back by way of the cavernosus vein, and the erection subsides, but sometimes its return is prevented, and the erection then remains, though all excitement has gone.—The Corpus Spongiosum is so distinct from the Corpus Cavernosum that erection will sometimes take place in one and not in the

other, which necessarily curves the organ, or draws it into the form of a bow, producing what is termed a *chordee*. The erection, and emission of semen, is also assisted by a number of different muscles, particularly by one called the *Erector Penis*, or *Ischio Cavernosus* Muscle. Sometimes in erection the rush of blood will be so sudden and violent that the vessels will burst, and the erectile tissue be thus totally destroyed. In some persons the filling up of the blood-vessels always occurs in a very short time, while in others it is the reverse; and in like manner the erection subsides in a short time in some, while in others it will continue for a long period and subside very slowly. This depends upon some peculiarity in the vital action of the blood-vessels, not yet understood. In old age the blood generally flows in slower, and flows out much quicker than it does in youth, so that the erection is longer in taking place and goes down more rapidly.

The uses of the Penis, as before remarked, are two-fold, firstly it serves as a conduit, to convey the urine from the body, and secondly as a conductor to carry the semen into the female organs. For the first use erection is not necessary, but it is for the second, and therefore its proper occurrence is both natural, and essential to the performance of one of the functions of our nature.

The form of this organ varies in different animals, for the purpose of adaptation, and is sometimes very singular. In some it is covered with *spines*, so as to give great pain to the female during connexion, as in the cat, while in others its structure causes that act to be much lengthened, as in the dog. In birds the male organ is merely rudimentary, so that there is no actual union, properly speak-

ing, but merely an *emission* into the female organs. In the human being there are occasional deviations from the ordinary development, and sometimes even peculiarities in structure. Thus instances have been known of the interior of the Corpus Cavernosum being more or less ossified, so that a distinct bone always existed in the middle of the organ. This is often the case in negroes, and in some of the lower animals it is natural. In a few rare instances the penis has been found *double*, or rather divided into two parts, only one of which of course contains a urethra, though both may be capable of erection, as I observed in one case in my own practice. Probably amputation of the imperfect part might have been safely effected, but as little inconvenience was experienced it was not thought necessary.

The various peculiarities of structure and development that interfere with the functions of this part will be treated under appropriate heads as we proceed.

ABSENCE AND MALFORMATION OF THE PENIS.

Besides being liable to be lost by several accidents, and by necessary operations, the Penis may also be deficient from birth. I have seen instances when it was not more than a quarter of an inch in length, and sometimes only a slight swelling, like the top of a small tumor. In such cases of course there can be no *connexion*, but still such men may be *fathers*, providing all the other parts are perfect, because, as before explained, the semen may impregnate if it be only shed *within the external lips*, which may of course be effected in the worst of

these instances. I have known instances of married couples, with families, who never had any association, from similar causes. It is unnecessary to say however that marriage should *never* take place in such cases without the nature of the infirmity being first known, though I believe the law would declare any marriage binding if impregnation was possible. In giving an opinion under such circumstances it is however difficult to decide this point. In general, in healthy females, the placing of the semen artificially in the vagina will induce conception, but not always. Hunter relates an instance where he advised the injection of the semen with a syringe, after its escape from the husband, and impregnation followed. There are some females, however, in whom its absorption will not take place without a certain amount of excitement, dependent upon actual association, so that there will always be more or less uncertainty, and much less probability than when no such deprivation exists. Independent of this, however, there are other considerations that should forbid the marrying of men so situated, unless with a full knowledge of the circumstance and its consequences by *both*. In some of these cases, especially when a portion of the organ is left, as after operations and accidents, the difficulty may be much remedied by an instrument, so constructed as to fit on the part remaining, and resembling that which is lost. I have known instances of conception following the use of such an instrument, when the penis itself was not more than *a quarter of an inch* long. But then the semen was formed in great quantities, and was remarkably healthy.

In some children the Penis is tied down to the Scrotum, or some other of the neighboring parts, by

bands, which never allow it to be extended, and of course prevent the performance of its functions. I saw one child of seven years in whom it grew flat on the Abdomen, causing great trouble and annoyance in urinating from the direction in which the fluid had to flow. Nearly all such cases can be easily corrected by a slight operation at any age, the adhesion being usually only by the skin, but are better attended to early in life. The one referred to was put right very readily, and in two years' time scarcely a trace of the operation could be seen.

Occasionally the Penis will have a wrong *direction*, being turned so much either on one side, under, or upwards, that association is impossible. If this depends upon contraction of the skin, or of the muscular fibres, it may be corrected by simply dividing them, but if it results from a tumor, or swelling, that must be removed before any alteration can be effected. Aneurisms, and swellings of the veins, will sometimes bring about such deviations, and so will too long continued erection, by rupturing some of the cells or vessels, and so causing accumulation of blood. I knew one instance of this kind in which every time erection occurred a large tumor was formed on the left side full of blood, which of course turned the end of the organ to the right side, and thus prevented connexion. This accident had been caused by numerous forcible and long-continued erections in one night, during intoxication. The tumor was as large as an egg, and when full could be distinctly felt to pulsate. It was also very painful, and appeared almost ready to burst. The remedies proposed were cold astringent lotions and wearing a

thin flat plate of smooth horn over the part, bound on so firmly as to prevent any swelling from accumulation of blood. This plan succeeded very well in giving relief, though it is probable there will always be more or less tendency to a recurrence of the trouble.

Besides Scrofulous and other Tumors in the Penis there will sometimes be bony swellings, and accumulations like calculi or stone in the bladder. These may either compress the Urethra, and so prevent the passage of the Urine and Semen, or they may curve the organ so as to prevent its use ; in general, however, they can be removed.

Sometimes the Frænum or cord that binds down the prepuce at the end underneath, will be so short or contracted that during evacuation the point of the Glans will be pulled under. This not only prevents the Semen being thrown straight forward, but even prevents connexion in many instances, either causing severe pain, or by bending the end of the organ so much. This difficulty is easily remedied, by cutting through the cord with a pair of scissors, or a lancet. I advised a gentleman out West how to do this, in a letter, and he wrote afterwards to inform me that he had succeeded perfectly, with his *razor*. It is simply necessary to take care to cut only deep enough to *just sever the cord*, and afterwards to keep the parts stretched asunder, so that they do not grow together again ; a simple dressing of cloths dipt in *cold water* is all that is required after. I have known the cord to be eaten through with caustic, but the plan is not so good as cutting, being more tedious and painful, and leaving a larger scar. In some persons it has been broken suddenly during a violent erection, or on attempting coition,

but such accidents are always painful, and are better avoided by a timely operation.

HYPOSPADIAS.

This term means a case where the end of the Urethra does not come to the end of the Penis, but opens *underneath*, the passage not reaching the whole length of the organ. This state of things sometimes follows severe venereal cases, and other accidents, but its causes when congenital are of course unknown to us, and unfortunately but little success generally attends its treatment.

This malformation is a cause of great trouble and annoyance in urinating, and interferes more or less with the power of impregnating, though it by no means prevents it altogether, as was formerly supposed.

Sometimes the opening is close by the Frænum, and during erection it is firmly closed, owing to the pressure, so that the Semen cannot escape from the Urethra. In such cases there cannot be impregnation, unless the Semen flows after the erection has somewhat subsided, but this it will not always do, because it may run backwards into the bladder, and in such cases the patient is necessarily impotent.

When the Semen escapes freely, providing it be within the female organ, conception may or may not take place, according to circumstances, let the opening be where it may.

At other times the opening is so near the body that the Semen, when it does escape, cannot enter the female organs. In such cases the only resort left is artificial impregnation, as before explained.

The nearer the opening is to the end of the Penis,

generally speaking, the more chance there is of success, and the nearer it is to the body the less. In some situations any kind of treatment is out of the question. When it is close to the body the Urine and Semen run down the Scrotum or Perineum, unless an instrument be worn to prevent it, causing constant irritation and annoyance.

Sometimes there are two openings, but they seldom communicate, and the fluids nearly always escape by one only.

It was formerly considered, even by the most eminent surgeons, that it was impossible to operate with any prospect of success in these cases, from the nature of the parts, and from the constant flow of Urine; they therefore advised to leave them alone, and provide the sufferer with the best remedial instruments, to lessen the inconvenience. In modern times, however, success has attended numerous attempts to correct this malformation, and under favorable circumstances it is always attempted.

The mode of operation is simply to pass a small sharp-pointed instrument straight through the Penis, along where the natural opening should be, and thus make an artificial passage, which is kept open by bougies till the cut edges have healed and there is no danger of it growing up again. When this is fully accomplished a catheter is introduced, and the edges of the old opening underneath are made raw and held together, by needles or other contrivances, till they adhere, and thus the opening is closed. In this way a new passage is formed in the proper direction, and the old unnatural one is permanently obliterated. There are, however, many circumstances that may make the success of

the operation very uncertain, and some that may forbid it being attempted.

In general the proper canal of the urethra exists, but in a small state, and is closed only at the very end, by a thick membrane. This membrane may usually be easily cut through and the canal enlarged by bougies, by which means, if the false opening can be closed, a perfect cure can be obtained. Sometimes however there is no trace of the urethra, and the passage has to be cut through the solid flesh the whole distance, which is apt to excite so much inflammation that no bougie can be worn, and then all grows up again. The false opening is also so large in some cases, or the edges are so thin, that it cannot be closed, and then the new opening may be of little use, though it be formed. In some of these cases, however, a small tube can be worn internally, extending just past the opening underneath, so as to conduct the semen and urine to the proper opening at the end; or a piece of gum elastic, or oiled silk, may be worn firmly over the opening *externally*, to effect the same object. By such means many a sufferer has been enabled to urinate in comfort, in the natural way, and many an impotent man has become a father.

Instances have been known where the false opening was *between the Testicles*, or even in the *Perineum*, and yet it has been perfectly closed and a new one made the whole length of the Penis. Such operations, however, require great skill in the surgeon and much endurance in the patient.

In many instances, when the false opening is near the end of the Penis, it will be found that the proper passage is continued the whole length of the organ and merely closed at the mouth by a skin.

I knew a man who was troubled in this way, the opening being just at the base of the glans, who could close it with his finger and send the urine along the natural passage till it made the skin at the end project. Having heard me explain about this in some of my Lectures he determined to try and operate himself; accordingly he took the sharp end of a penknife and where the skin projected strongly he made a small puncture very readily, through which the urine escaped immediately. The inflammation soon subsided and the new opening remained, so that by always closing the old one with his finger he could urinate as well as if nothing was wrong. I told him that the old opening could be easily closed permanently, by another slight operation, but he felt so well content with what was already done, and suffered so little inconvenience, that he would not consent to anything further.

One of the greatest difficulties is in keeping a catheter in sufficiently long to make the urine flow down the new passage while the old opening grows together. Very often the place will be nearly closed, and then a rush of urine will come and break it open, destroying all that had been done. In old cases also the edges are apt to be very thin and ragged, and the orifice large, so that a perfect junction is next to impossible. If there is any scrofulous tendency also the probability of its ever closing is very small. In many of these cases, as in external abscess of the Prostate Gland, the wound may be perfectly healed for a time, but break out again without any apparent reason.

Many of these deformities can be corrected in infancy, or early youth, and they should therefore be always shown to experienced surgeons *imme-*

diately they are detected, and not concealed, as they are by some parents.—It is difficult to say to what age success is possible in such cases, probably there is no particular limit; some have been operated upon at thirty, and others even at forty, or more, but the earlier the better.—In general the development of the Penis is more or less imperfect above the false opening, and when the full generative power is desirable this must also be corrected, by means which I will explain in another article. Sometimes it is even necessary to effect this development before the operation can be performed.

EPISPADIAS.

This affection is precisely the reverse of the former, the false opening being on the *top* of the Penis instead of underneath. It is much more rare than Hypospadias, and is somewhat more difficult to treat, owing to the opening being farther from the natural passage. The orifice will sometimes be near the end and sometimes close by the Pubic bone, occasionally being a little on one side.

The mode of operation is exactly the same as in Hypospadias, but as before remarked, it is more difficult and the chances of success are less.

PHYMOSIS.

In this malformation the skin of the prepuce comes completely over the Glans, and the opening at the end is so contracted that it can never be drawn back. This condition of the organ, is both unpleasant, annoying, and dangerous, because it prevents proper cleanliness, and thus disposes to various diseases.

The secretion of the Glandulæ Odorifera is apt to accumulate under the skin, and in conjunction with the urine to create serious inflammation. Calculi will also form, like those in the bladder, and the swelling will sometimes be so great that neither semen nor urine can pass. In many cases of Phymosis the swelling is so great as to cause severe pain during erection, and the Glans is so compressed in consequence, that the semen cannot escape, and thus the individual is impotent.

The means of giving relief are very simple. It is only necessary to introduce an instrument carefully under the skin and cut up the Prepuce, so as to let it open. This may be done with but little trouble or pain, and with slight danger from inflammation if a simple dressing of cold water be applied. It is sometimes necessary to cut off the edges of the wound a little with scissors, particularly if they are anyways callous, or ragged. The whole prepuce is at times so hard and unyielding that it becomes necessary to practise complete *circumcision*.

PARAPHYMOSIS.

In this case the prepuce is drawn back, over the Corona Glandis, compressing the organ like a tightly, drawn cord. In some it is permanently in this situation, while in others the patient has drawn it over the Glans and has not been able to slip it back again, owing to the smallness of the opening and the swelling of the parts. When it results from this cause it will often be sufficient to use cold lotions for a time, to reduce the swelling, and lubricate the parts with some Belladonna Ointment, when the prepuce may be drawn over without difficulty.

Sometimes a little bleeding may be necessary, or a few leeches on some of the neighboring parts.

The only certain cure is to cut the Prepuce, in the same way as for Phymosis, which will of course prevent any return of the difficulty. Patients with Phymosis are very apt to change that trouble into Paraphymosis by their attempts to draw the Prepuce back, and to stretch it.

In young children both these states may exist without causing any great annoyance, but as they approach puberty serious trouble may be experienced suddenly. It is, therefore, very necessary for parents to observe such accidents, and watch their progress, particularly near puberty, so that the Surgeon may be applied to in time. Many a man has suffered for life, both *physically* and *morally*, from neglect of this kind while he was a child.

I once knew an instance of a youth who had a permanent Paraphymosis that had never caused him any trouble till he was about twelve years old, when it began to pain him whenever he urinated, and later, when erection occurred, severely. When about fourteen years of age, in consequence of some unusual irritation, the parts swelled very much, and the Prepuce was drawn so tightly around that the Glans was perfectly strangulated. Not being in the habit of speaking about such matters to his parents he concealed it till the agony was so great he could hold out no longer. On a physician being sent for it was found that the parts had begun to gangrene, and the urine had been retained so long that inflammation of the bladder had also supervened. By prompt treatment the most urgent symptoms were alleviated, and after a time the Prepuce was cut through, so as to give permanent

relief. The patient, however, came very near losing the organ itself, if not his life, through want of a proper confidence and habit of communication between him and his parents.

Both Phymosis and Paraphymosis may result from the inflammation attendant upon other diseases, particularly those of a venereal or syphiloid character, and then it is usually only required to remove the primary affection to give relief, though sometimes the operation is needed.

It is necessary to state here that many a child has become addicted to Masturbation, and has perished in consequence, simply from having a neglected Phymosis; the secretion accumulating under the skin, causing constant irritation and leading to manipulations that would not otherwise be thought of.

I have known many men operate upon *themselves*, and successfully too, for both these affections; a penknife, or pair of scissors, being the only instrument used. No cutting should, however, be practised on these parts when there is venereal disease, because the wound may *innoculate*, and thus the disease be spread.

In some persons the Prepuce is absent altogether, and attempts have been made, under such circumstances, to form a new one, by bringing forward the skin below, but no great success has attended the operation, nor is it at all essential. The only reason given for desiring it is that the Glans is apt to lose part of its sensibility when constantly uncovered, which is undoubtedly the case, as may be seen among Jews and others who have been circumscised; but this a slight inconvenience, even if it is not often an advantage, as it certainly makes the person less liable to contract disease.

WANT OF DEVELOPMENT, OR CONGENITAL SMALL
SIZE OF THE PENIS.

It is sometimes difficult to say whether the Penis is *too* short or not, because there is no precise standard of limitation, and in different people the development varies very much. In some persons it never grows from the condition in which we find it in childhood, while in others it will attain a medium size, and in others again it will be nearly rudimentary. This may also be totally independent of any deficiency in the other organs, though most usually they correspond more or less. Thus I have seen a man of forty years of age in whom the Penis was only two inches long, and about as thick as the little finger, but whose Testes were of a full average size, and who had strong sexual feelings, with a full flow of Semen. Sometimes the organ can scarcely be traced at all, being merely like a wart, or small tumor.

When the non-development of the Penis is dependent upon a general torpor of the genital organs, more especially of the Testes, their action must be aroused, and their functions fully established, in the manner pointed out in the chapter on the Testes. If this can be done the Penis may be made to grow even to an advanced period of life, as I have there shown.

In those cases in which the Penis alone is not sufficiently developed a different treatment is required, as it is simply a local effect we wish to produce. In some of these instances the organ, though small, is capable of perfect erection, and both connexion and impregnation may be effected

by its means ; it is not then a matter of such urgent moment for any improvement to be effected, though under certain circumstances it may be desirable. More frequently, however, erection either does not take place at all, or so imperfectly that coition is impossible, and the flow of Semen is so imperfect and irregular that impregnation can seldom be effected, even artificially. Under such circumstances it is a matter of the greatest consequence to produce an increased development, so that both these functions may be performed, and it may be both new and pleasing, to many persons, to learn that there are means by which this desirable end may be often attained, even under the most unpromising circumstances. It is proper to remark, however, that the cases now referred to are those in which the small size is *congenital*, or existing from birth, and not those in which the organ has *decreased*, from disease or excess, after having been of average development, though even in many of them, when the constitutional stamina is not too much impaired, the same means will frequently restore what has been temporarily lost.

The causes that prevent the proper development of this organ, as well as of others, are of course unknown in those cases that are congenital, because they operate before birth, but in those that become arrested during childhood or youth, we generally trace it to early masturbation, blows on the Testicles and other accidents, or to some severe disease which has impaired the vital energy very much. Some diseases are particularly apt to affect young persons in this way, as the *Mumps* for instance, which often make the Testes swell.

Scarlet Fever and Measles, when severe, I have

known to seriously injure the virile power, but not so frequently as rickets or scrofula.

A similar deficiency is sometimes found in females, in some the Uterus or Ovaries being very small, though the Vagina may be large enough to allow of coition, while in others these organs will be of usual size, but the Vagina will be too small, so that marriage is not allowable. In my work on "The Diseases of Woman," I refer to such cases, and explain what can be done to relieve them.

To effect an enlargement of the Penis, in addition to every means proper to improve the general health, and impart stamina, there are certain *mechanical* and *manual* applications, the effects of which, under right direction, are often of the most unexpected and pleasing character. To understand the nature of these, and their mode of action, it is necessary to bear in mind the anatomical structure of the organ, and the requisites for erection. That phenomenon, it will be recollected from our previous description, depends essentially upon the filling up of the vessels and cells of the spongy and cavernous bodies with blood, and of course if there be any fault in their make or mode of connexion, or if the blood does not flow into them, erection cannot take place. Now this is precisely the fault that is found to exist in most of the cases of non-development above referred to, and is what requires to be corrected. On dissecting such cases after death we find that the cells and minute vessels have never been congested or filled with blood, and consequently the organ has never been able to grow nor become erected. In the same way after long continued excess, or debilitating disease, the artery seems to lose its power of transmitting the blood with suffi-

cient vigor, and the cells, from want of being filled, decrease in size, and eventually grow up more or less, causing the organ to shrink. This is the reason also why absolute suppression of sexual excitement, if continued too long, will make the organ waste away, instead of increasing its power, as many uninformed people suppose.

The object to be accomplished it will be seen is to open these cells, and cause the blood to flow into them, so as gradually to increase their size and dispose them to fill spontaneously, from natural excitement.

In some persons, who have always shunned *all* thoughts of sexual matters, from a notion that they are improper, it is sometimes sufficient merely to encourage such thoughts to a proper extent, and the excitement this gives rise to in the parts will act favorably on their growth. In others the daily employment of a warm local bath, with brisk rubbing, and the use of a stimulating ointment, which I shall hereafter describe, will be found still more efficacious ; and if this treatment be regularly persisted in, under judicious direction, combined with proper internal remedies, it will succeed in a large number of the cases ordinarily met with. It is requisite, however, that the external and internal stimulants should be exactly apportioned to the wants and capabilities of the individual's system, and that a strict watch should be kept upon the action and effects of each, so as to know when to increase or decrease their power, and when to suspend their action altogether. Until over forty years of age, if the *form* of the organ is perfect, and its development not too small, a considerable change may be effected in this way, though the younger the patient is the more readily the parts are acted upon.

I once had a patient call upon me from Cuba, the son of a rich planter, who was troubled with this imperfection, and who was intensely desirous that it might be remedied so as to allow of marriage.—He was about twenty-three years of age, and of a strong robust habit of body, with excellent health. On examination the Penis was found about *two inches and a half* in length, and about as thick as the forefinger, properly formed, but with little more sensibility than any other part of the body. The Testicles were fully developed, and the sexual feeling was quite strong. There had been frequent emissions of semen, under strong excitement, but no *erection*, and consequently no connexion could take place.—Upon enquiry I found that he had been brought up to a very rigid code of morals, and had imbibed certain notions about the necessity of not indulging sexual desires, if the mind was wished to become powerful, and as he was very ambitious of distinction he made a perfect anchorite of himself. The bodily effect of such a course has been seen,—its effect on the mind was to make him wayward, irritable and unhappy. A short time before he came on to see me he met with a young lady with whom he fell violently in love, and immediately the desire for marriage arose, but with it came the fear that he was totally incapacitated. The new desire, so strongly awakened, together with the fears he felt, operated so intensely upon him that he became almost furiously insane. On assuring him, however, that there was a reasonable prospect of his attaining a more perfect state he became calmer, and patiently submitted himself to the prescribed treatment.

The first object was to induce as much heat as

possible in the organ, so as to promote the flow of blood to it. This was accomplished by the use of a hot stimulating lotion, two or three times a day, followed by brisk rubbing with flannel and soft brushes. In three weeks the effect of this treatment became obvious, — erections occurred, partial at first, but ultimately quite forcible, and the organ evidently began to increase permanently in size. In addition to this he was directed to use some stimulant drops, and to live generously, to impart as much vigor as possible to the Generative Organs. The flow of semen soon became much larger than before under this treatment, and the procreative instinct much more powerful. There was still one fault, however, and that was a want of power in the *muscles* that assist in erection and coition, more especially in the Erector Penis muscle. This was remedied by frequent *shampooing*, and pressing of their fibres till they acquired volume and firmness, the same as any other muscle would do under similar treatment.

This system was rigidly pursued for six months under my own inspection, at the end of which time the Penis was four inches long, when erect, and quite firm, so that coition was possible. At this period he was desirous to return home, and as he was evidently determined to pursue the same treatment himself, I consented to his doing so, though I would have preferred for him to have staid still longer. I heard from him eleven months after his departure, and he then informed me that the improvement had still continued till he no longer thought it necessary to proceed. He was then intending to marry in about three months. The delight and gratitude of this young man were unbounded, rescued as he was from the very depths of despondency and despair,

and raised, as he expressed it, "to the highest pitch of human happiness."

In the course of my practice I have had numerous similar cases, some of them resulting satisfactorily from the same treatment, and others requiring a different plan, which I will now explain.

When the means above described fail to induce a sufficient flow of blood into the erectile Tissue an instrument is employed, called a *Congester*. It consists of a Tube, the size of which is adapted to the organ, to which is fitted an exhausting Air-Pump. The Penis being introduced into this the air is more or less exhausted, and the blood of course flows into the contained part immediately. So great is the rush of blood, in fact, that if the exhaustion was continued too far, or made too suddenly, the Tissue would burst. In a short time, with care, the part begins to swell and look red, and erection, more or less complete, soon takes place. This *never fails*, unless the vitality of the part be totally gone, or the structure of the Tissues completely disorganized. I have seen some of the most remarkable results follow from the use of this instrument that were perhaps ever witnessed, in a medical way. I have known patients in whom the whole organ was not *half an inch* long, and without the slightest tendency to erection, and yet the Congester has caused it to grow, and has given it power, until perfectly capable for the purposes it was intended for. Sometimes there only appears a simple protuberance, like a Tumor, while at other times the organ is long but surprisingly small, and quite flaccid, but still the Congester will impel the blood into the Tissues and produce the effect desired. Sometimes, it is true, we cannot gain so

much as would be desirable, but nearly always sufficient for Nature's requirements, and very often as perfect in condition as if no imperfection had ever existed.

In conjunction with the Congester it is also requisite, in most cases, to act upon the muscles, by shampooing, as they are usually deficient in power, and without their action the Penis cannot erect, though it may become firmly congested.

This practice of shampooing the Perineal and Genital Muscles, to improve the erectile power, was originated in Asia, but has been known and practised in Europe for many years. The process is both tedious and somewhat painful, and requires both skill and knowledge in the operation. In Turkey men make a regular business of this, and they succeed admirably. In this country it is necessary to direct the patient himself, or hired assistants, and the constant supervision of the medical man is therefore required. To perform this operation to advantage, it is best to have the parts made perfectly bare and smooth, and then lubricated with a proper ointment. The operator then presses the end of the fore-finger firmly into the muscle, passing it along backwards and forwards, in the direction of the fibres, till the muscle becomes hot and swells. This is done with all the muscles whose action is required, and it should be practised every day till the effect is manifest. At first the shampooing causes considerable pain and soreness, but this soon passes away, and then the muscle feels firm to the touch, and is found to be much larger. There are two men in New York whom I have had occasion to employ for this purpose with so many patients that they

have become quite expert, and I can always depend upon success from their efforts when it is possible.

It must be recollected that the various means I have described require a long period to be put fully in operation, and are such as can be commanded only by those who have plenty of both time and money at their disposal.

With those who are fortunately so situated as to have these essential requisites the gain is certainly great and well worth what it costs, and I have never known one who was successfully treated who did not say he thought no price could be dear to pay. Many a man has been saved from insanity or suicide by these means, and many a domestic hearth has been made the scene of happiness and delight that was previously the abode of recrimination and despair.

I have treated patients of all ages, from mere youths up to mature age; the oldest I recollect being about *fifty-two*, and in *most of them* with a success that has been as pleasing to them as it was gratifying to myself. Some of the means I have mentioned are scarcely known in this country, and are certainly not put into general practice; the account I have given of them may, therefore, be the means of giving many sufferers the first intimation that help can be had. In some fictitious works on these subjects, pretending to be written by eminent men, but really made up only for sale, such things are partially referred to, but in such a way as to be of no real utility. In one of these an account is given of many *drugs*, said to be proper to use in cases of debility, some of which are highly dangerous, and many of which *do not exist*

at all. The present book is, I believe, the only one on these subjects that is really scientific, as well as popular.

One of the most remarkable cases I ever treated was that of a young man of nineteen, who was brought to me by his father, himself a physician. In this person there was scarcely any appearance of a Penis, but only a small Tumor, not projecting more than a quarter of an inch, in the centre of which was the opening of the Urethra. It was quite sensitive, however, and seemed rather as if compressed downwards. The Testes were of average size, and the semen secreted in sufficient quantity, occasionally, so that little seemed wanting but the small organ. I at once told his father that I felt assured much improvement could be obtained, but that it would require much time and attention, with great endurance on the part of the patient himself. They were both delighted to hear this, and the young man testified his desire that I should commence the treatment immediately, which I did. A Congester was constructed specially for the case, and applied daily. The lower part was of glass, so that its operation could be seen, and it was observed that immediately the tube was exhausted of air the Penis seemed to be drawn forward, and extended to full two inches. The patient complained of great pain in the part during the operation, from the rush of blood into the cells, and it remained exceedingly tender for several days after. The Congester was not applied again till this soreness had subsided, but in the meantime the stimulating hot lotions were used, and shampooing of the muscles was practised. It was observed that even the first application had evidently caused

some protrusion, and the young man remarked that the *internal* sensations were different from what he had ever before experienced. The internal medication in his case was of a more stimulating character than ordinary because the sexual impulse was not very strong, and only occasionally manifested. His diet was directed to be as nourishing as possible, with wine for drink, and every day he rode out on horseback after a warm bath, followed by brisk rubbing of the whole surface of the body. After the first effect had subsided the Congester was used daily, and followed by the shampooing, for ten weeks, by which time a permanent advance had been made. The Penis measured full two inches in its ordinary state, and in the Congester was extended to three. Partial erections occurred at times during sleep, and the procreative instinct became more active and permanent. I then directed him to return home for three months, and only continue the general treatment, so that I might see if Nature herself could complete the work. At the end of three months he came back to me with a still further improvement, though slight. He was then put under the old treatment again, and this time the effects were still more satisfactory. In two months, under the Congester, the Penis measured four inches, and in the ordinary state remained permanently at three, with firm erections and copious emissions of semen. Finding, therefore, that every requirement of Nature could be fulfilled even as he was, and that further improvement would evidently take place with the growth of the system, I desisted from further treatment and sent him home *cured*. His father was as much astonished as gratified, and another physician who had seen him and pronounced

him a *Hermaphrodite*, would scarcely believe it was the same being.

Another case was that of a man who had married at thirty-two, though imperfect, from a mistaken idea that marriage would effect a cure. The result may be imagined; the misery of two human beings could scarcely be more complete. In his despair a friend brought him to me for my opinion. On examination I found the Penis not very small, nor in any way imperfect, but it had never been *erected*, and seemed incapable of being so. The semen was secreted plentifully enough, and the instinct was as strong as was desirable. I told him without any hesitation that he could be made perfect enough for his marital duties in a short time, providing he would follow strictly my directions, and submit to my treatment, which he was willing enough to do. The Congester was applied, and with the happiest results. At the third application a powerful erection was produced that did not subside for a considerable time, owing to want of perfect action in the cavernous veins. This, however, was soon remedied, and in two weeks, by the use of the Congester alone, natural erections occurred spontaneously, as perfect as could be desired. In a word he was perfectly cured, and is now the father of two children.

I have also had numerous instances of persons who had lost the power of erection from sexual and other excesses, from mental anxiety and from the effect of debilitating disease. In a great portion of these the result has also been favorable, though in many all vitality had left the organs before I saw them, and in others the structure was completely disorganized. Many young men especially, vic-

tims of Masturbation, whose organs had ceased growing, have by these means been rescued from impotency and imperfection. Many a man of mature age also, whose powers were unimpaired, but who could not exercise them, owing to this particular debility, has been restored to his former capability in the same way.

The Congester is not an instrument adapted for self-treatment, and I would not advise any one to attempt its use without proper directions and supervision. I have known it to do great mischief, with inexperienced people, and fail of accomplishing any good. In one man who had it applied too forcibly and suddenly the cells were nearly all ruptured, or broken into one another, so that severe inflammation was produced, and the power of erection was for ever lost by any means.

There are some means, however, that all persons may use, provided they know when they are appropriate to the case. The pressing and shampooing may be partially practised by the patient himself, though very imperfectly, but the general directions as to diet and exercise may be observed of course by all. Perhaps, however, there is no other functional disability so difficult to treat, or that requires so much skill and such unremitting attention.

In addition to the means already described there are some others occasionally useful, but which are not so generally applicable. *Galvanism* is sometimes an excellent agent, when there is *nervous* insensibility combined with the other disabilities. A very good mode to use it is to galvanize the metallic congener, while the organ is engaged within it. The power must not be too great however, nor the

application continued too long, or there will be partial paralysis.

The French have a practice of *Flagellation*, which is sometimes very efficacious, and will induce erection in a short time. It is rather severe, however, and few have courage or endurance sufficient to continue it long enough to derive full benefit. The *Flagellator* is made of six or eight small twisted thongs, about as thick as a violin string, but very flexible, and about eight inches long. To operate with it to the best advantage the parts should be made bare, and perfectly smooth, and the *Flagellator* must then be applied the whole length of the Penis, and on the Pubes, Perineum, and inside of the thighs, till the flesh is quite red and smarts. The flogging must never be so hard, or long continued, as to make any bruises, nor leave any soreness, but merely sufficient to make it red and feel hot, with slight smarting. Usually about a quarter of an hour is sufficient, every day.—After the flagellation the parts should be well bathed in hot water, and the patient should recline.

This treatment may seem singular to those who never heard of it before, but it is undoubtedly more efficacious, in numerous cases, than any one could well believe who had not seen it practised. I have known many patients resort to it with the happiest results, who could not stay with me long enough for the usual treatment.—In some it will produce powerful erections the first time, and lead to an influx of blood to the parts that soon stimulates their growth.

Firing is another practice that may be resorted to, if all others fail, for rousing the dormant energies of these parts in deficient growth.—It consists in

burning the parts with a smooth iron button, made hot by plunging it in boiling water. The parts are first made smooth and then the button is taken out of the water and pressed suddenly on, repeating it as fast as possible, till the whole length of the organ has been operated upon. No part should be touched twice, nor should the iron remain on more than an instant. The pain is very slight, and no blister is raised, the places only turning *white* at first, and afterwards remaining red.—The firings should be repeated only at intervals of three or four days, waiting till the effects of one are gone off before another is practised.

This process is sometimes astonishingly effective, a single application producing such a powerful effect that no further treatment is required.—Care is required, however, not to produce too much inflammation, nor to operate too near the Testes. Sometimes the development will be much less on one side of the Penis than the other, or less in the Corpus Spongiosum than the Cavernosum, so that the organ will not be straight but curved; or it may be straight in the ordinary state but not capable of erecting in all parts alike. This state of permanent chordee is perhaps better treated by the flagellation or firing than by any other means, because they can be applied locally, and only to the affected part.

It may perhaps be as well to remark here that a modification of the congester is sometimes of great service in certain torpid states of the female organs, and that some of the other treatment is also occasionally applied to them, in a modified form, with the happiest results.

PARALYSIS OF THE MUSCLES OF THE PENIS.

I first observed this affection in the person of a patient, aged about fifty-three, having previously seen no account of it whatever. Since then I have met with other cases in persons of different ages, though always past thirty. In the first case it was apparently the forerunner of general Paralysis, an attack of which was experienced some two months later, but partially recovered from. In other cases I have also regarded it as a sign that general Paralysis or Apoplexy was threatened, though it did not always immediately follow.

In this disease the secretion of the semen is not affected, nor is the flow of blood interfered with, the organ becoming as full and as firm as before, but there is no power to raise and direct it. The first case yielded in the course of a week to Galvanism, and some others were alleviated by warm baths and stimulant lotions, but others again remained notwithstanding all that could be done. These were mostly old people, with an obvious predisposition to Paralysis. In some cases I have had reason to think that the attack was brought on by previous sexual excesses.

PRIAPISM, OR INVOLUNTARY ERECTION.

By this term is meant an unnatural and involuntary erection of the Penis. In some persons it occurs only at intervals, but in others it is constant for a long time and constitutes a real state of disease. Priapism is not always accompanied by pleasurable feelings, though it usually is, but on

the contrary it is sometimes painful. In some persons it comes on suddenly, without any premonitory symptoms whatever, but in others it commences gradually, and is frequently indicated by a sense of fulness in the Testes, or of pain and heaviness in the head. The patient is utterly unable to control the erection in the slightest degree, nor in general can he by any means prevent it while the morbid state continues. I have known men who always suffered from this immediately they went to bed, so that their rest was much disturbed. In one young man especially the health suffered seriously. Every night when he had been in bed about an hour the Priapism would commence, and such was the effect on his nervous system that sleep was out of the question, while it continued. Very often for several nights together he did not sleep more than a single hour, and yet there was in general but little sexual feeling, and that only at first, the sensation afterwards being merely one of intense and harrowing excitement. The next day he suffered from headache, pain and weakness in the back, and soreness in the organ itself. In no instance did he have emissions during these attacks, and this is a peculiarity I have frequently observed.

The causes of this troublesome affection may be various, and sometimes can only be surmised. In many cases, especially among young persons in vigorous health and of perfect development, it results from an actual excess of semen, which first causes *Spermatocele*, and then leads to a chronic inflammatory condition, by which the erection is constantly excited. This condition may exist in those who are not at all disposed to lascivious thoughts, and even in those who are constantly striving

against them, though it is of course made much worse by indulging such thoughts. Most commonly in these persons the Priapism continues till an involuntary emission takes place, and then it disappears for a short time, till the semen has again accumulated in too great quantity. There are some, however, in whom these emissions never occur, and in them the Priapism is frequently a *constant state* and becomes eventually a real disease. In the early stage *marriage* is of course the only certain and effectual remedy, though much mitigation may be effected by means that will hereafter be pointed out; but when the organs have become diseased or chronically inflamed, marriage would be highly improper till a healthy condition is restored.

It is not always the case, however, that Priapism results from seminal accumulation, or superabundant energy, for it is sometimes experienced by those that are rather deficient, or at least below the average. I have even observed it in those that were nearly sterile. In these cases it is induced by a diseased condition of the brain, and is usually considered a mere moral affection, though like many other moral affections it is simply an indication and consequence of physical disease. In this state there is constant desire at first, sometimes amounting to furious *erotomania*, but eventually all feeling and desire will vanish, while the Priapism will remain, and sometimes even continue after death. Long-continued debauchery is also sometimes followed by obstinate Priapism, and eventually by absolute impotency. In the Medical Repository for April, 1824, is a case of this kind communicated by Mr. Callaway. The patient, during a fit of in-

toxication associated with a female three times in succession, having emission each time, but no subsidence of the erection, a circumstance which I have often known to occur during intoxication. To his great surprise the erection still continued the next morning, and it remained for sixteen days, in spite of all the means used to reduce it. The surgeon then made an incision with the lancet, just below the Scrotum, and immediately there escaped a large quantity of thick black blood, mixed with clots. On pressing the Penis the blood all flowed out of it, by the opening, and it immediately became flaccid. The man was impotent, however, afterwards, for no erection ever took place again, owing probably to the cells of the Corpus Cavernosum and Corpus Spongiosum having grown up, from inflammation. The continued erection was probably owing, in this case, to inflammation at the lower part of the Penis, or in the Perineal Muscles, owing to which the veins were so pressed upon that the blood could not return by them, or perhaps the veins themselves were swollen and closed up. Some men have brought on a similar condition of the parts by keeping themselves too long excited, without allowing emission to take place, a practice which is very reprehensible, and which not unfrequently causes Spermatocoele, or even Orchitis.

If the erection be too powerful, or too long continued, it will often cause temporary impotence by so compressing the Urethra that the semen cannot traverse along it. When this occurs the semen either escapes afterwards, slowly, or else mixes with the Urine.

Long continued priapism is always hurtful, and is very likely to destroy the power of erection alto-

gether, ultimately; it is, therefore, desirable that we should know its various causes, and the best means of treating it. Persons who are not properly informed respecting its nature are apt to consider it as simply a result of loose thoughts, and that only a proper effort is required to overcome it. This is a great mistake, as we have already shown, and one which leads both to the neglect of proper treatment and also to uncharitable judgments.

In addition to the general causes of this affection, already enumerated, there are also several others that have a tendency more or less to originate or aggravate it. Want of proper cleanliness, hot clothing, particularly if it chafes, and the too frequent use of warm baths may be mentioned, and also several other diseases, such as gonorrhœa and spermatorrhœa. The Gravel and inflammation of the bladder also excite the penis very much in some persons, and the piles will do the same in others. Stimulating and highly-seasoned food, and hot or vinous drinks have the same tendency, and sleeping in a very warm soft bed is apt to assist. The use of bougies and injections will often produce priapism, and certain medicines still more frequently. Cantharides, Phosphorus, and Opium, perhaps act the most energetically in this way, but there are others whose effects are very decided, and they all act very differently at times and upon different persons.—The reading of lascivious books, or listening to loose conversation undoubtedly operates in a similar manner to these physical agents, and the indulgence of lying in bed in a morning, half awake, has the same tendency.

The treatment of priapism must of course be regulated by the cause that produces or aggravates it.

When it is mainly produced by a want of properly regulating the mind, or controlling the desires, the cure must depend entirely upon the individual's own self, or rather upon his strength of mind. When it arises from a too stimulating diet and drink, aided by a deficiency of muscular exercise, which is very often the case in young persons, nothing more is required than to live low, drink cold water, keep the bowels free, and bathe the parts frequently with cold water. If there be a too great secretion of semen, with no sufficient involuntary discharge, marriage is indicated. If there be any other disease that must first be cured, and if there be heat and pain in the head, particularly in the back part, it must be frequently bathed in cold water, and kept cool, precisely the same as for inflammation of the brain, of which in fact the priapism is only a symptom. During the paroxysm the parts may be bathed with warm water or a warm Enema may be given. Sitting in a warm bath is sometimes the best plan, or over hot steam. In obstinate cases Leeches may be applied to the Penis, or a vein may be opened in it, but one of the best remedies is to give sufficient *Tartar Emetic* to cause sickness; this generally relieves the priapism. Two ordinary sized pills of Gum Camphor have been found efficacious in some persons, and simple fasting, till faintness ensued, in others. When the paroxysm is over strict attention must be paid to the diet, clothing and general conduct, as before indicated, to prevent a recurrence.

I have had some patients with whom I have had to use various mechanical contrivances, to prevent the priapism occurring at night, or while the curative means were being employed. A simple band-

age, drawn tightly round the organ when flaccid, will often prevent the erection, but a better plan is to use two grooved pieces of wood, one of which must be placed above the penis and the other below, so that they can be drawn together by a band, or screw. The organ can be compressed so tightly by this machine, while in its ordinary state, that erection cannot possibly take place. Several of my patients were unable to sleep till provided with an instrument of this kind.

The longest period I ever knew an attack of priapism to last was *six weeks*, and that was in a married man. It first began during a short absence from home, and was kept up by the impossibility which he experienced, on his return, of discharging the semen, owing to the swollen and inflamed state of the parts. He suffered from spermatocele, and slightly from orchitis, and was further troubled by violent desire, which he was unable to gratify. Connexion was possible, but without emission, and consequently without gratification. I was much afraid, from the violence of the attack, and from the symptoms, that permanent impotence would follow, but by careful treatment, perseveringly attended to, he completely recovered.

I knew one instance in which priapism followed a blow on the head, from which the person died, and it remained after his death, the parts being so firmly congested, and so rigid, that nothing had any effect upon them.—In several instances I have known priapism follow the application of blisters to the neck and back, even in *young children*, a fact that should not be lost sight of, either by physicians or parents.

DISEASES OF THE URETHRA AND THE PARTS CONTAINED THEREIN.

The Urethra, as before explained, is a long canal passing from the bladder down the penis, for the purpose of conveying the urine out of the body, and also for conducting the semen, it being the common passage for both fluids.

The membranous walls of the Urethra are rather thick, and are elastic, and the interior is lined with a mucous coat similar to that inside the bladder. The size of the urethra is different in different parts, thus a little way in from the external opening, or *meatus urinarius*, it expands considerably, and then contracting again expands still larger at about two-thirds of its length down. The substance of which the walls of the urethra are composed appears not to be the same in its whole length, being membranous in some parts and in others *spongy*, almost like the Corpus Spongiosum. It therefore participates in the act of erection, and its concurrence is very essential to the proper emission of the semen. Where it first opens at the *neck* of the bladder it is wide, but drawn together by certain muscles, excepting when the urine is evacuated, when the muscles relax and allow it to open. It is not by the drawing together of the walls of the urethra alone, however, that the urine is prevented from escaping, but partly by the presence of the *Veru Montanum*. By referring to the plate of the situation of the male organs the position of this part will be readily understood. It is a small fleshy protuberance placed on the lower wall of the urethra, just where it opens from the bladder. In shape it is like a cone, with the small

end pointing towards the end of the Penis. The neck of the bladder closes around this little protuberance while the urine is retained, but during evacuation it relaxes and opens a little and the fluid then passes on each side of the Montanum, which thus acts a similar part to the stopper of a bottle. Many cases of incontinence of urine arise from irritation of the Veru Montanum, which becomes so tender that the neck of the bladder is kept constantly open to prevent pressure upon it. This irritation may arise from various causes, but most usually we can only guess what they are. The mode of subduing it is simply to use general means for subduing inflammation, such as are suitable for all the neighboring parts. An irritating quality of the urine is very apt to give rise to it, particularly when very acid, and then it is readily corrected by taking a little *Carbonate of Soda* every morning before breakfast, and drinking freely of gum arabic water.—I had one patient who suffered terribly from this cause, without knowing, till explained to him, what it was. Immediately the smallest portion of urine was secreted in the bladder it felt as if a piece of red hot iron was placed in the neck, and all command over it was instantly lost, the urine escaping in spite of all his efforts. The smarting, burning, and pricking sensation he described as most horribly torturing, without there being any apparent possibility of relief. He had been told by some practitioner that it was stone in the bladder, but I felt assured, after careful examination, that it was inflammation of the Veru Montanum, and advised him accordingly. I prescribed hot fomentations of Poppy Heads, on the pubes and perineum, with Leeches also on the Perineum, and inside the

Thighs. Internally I directed him to take the following powders with a dose of Castor Oil every evening, and to drink plentifully during the day of Barley Water.

R. Dried Leaves of *Uva Ursi*, or Bearberry, one and a half drachms; Bicarbonate of Soda, one drachm.

To be mixed together well, and divided into *twelve powders*, one of which to be taken three times a day, in the Barley-water.

The effect of this treatment was evident on the second day, the inflammation having subsided considerably, and by the third day he was quite well, with the exception of a little soreness when urinating.

Inflammation of the Veru Montanum is also very apt to be produced by retaining the Urine too long, when the bladder is very full, and particularly by trying to prevent the escape of semen, during coition, which is sometimes done by pressing the Penis at its lower part. The effects of this practice, which is often resorted to under the idea of preventing conception, are most serious; in addition to the inflammation already referred to, it also leads to involuntary seminal losses, as will be explained further on. Such destructive practices would never be attempted if men were not so thoroughly ignorant of everything relating to their physical system, and while that ignorance remains it will always *cause* more disease than medical science will be able to cure.

The Veru Montanum is also very apt to become diseased whenever the Prostate Gland is affected, the two parts sympathizing so intimately together.

The semen enters the Urethra just at the lower

end of the Veru Montanum, by two small openings, which are very liable to be more or less closed when this organ, or the Prostate is inflamed, and thus the flow of semen is partially and sometimes totally prevented.

Sometimes the Montanum will swell till it completely fills up the neck of the bladder, so that neither urine nor semen can possibly escape till it has been reduced. It is also liable to be the seat of Cancer or Scrofula, like the Prostate.

The Urethra is liable to Congenital Malformations as well as to subsequent accidents, and some of these may be of a serious character. In some young persons it is permanently contracted, so that the escape of urine is attended with great difficulty and pain. This fault, however, usually amends with the growth, and with constant use. Children so circumstanced are a very long time in discharging their urine, which flows in a small stream, and with more or less distress. In very severe cases bougies may be used to dilate the passage, but it is better, if the trouble is not too great, to wait till towards puberty, and see if nature herself will not effect an improvement. Still more rarely there are found Congenital Strictures, or they come spontaneously, without any apparent cause. If these are not very bad it is perhaps better to wait till fourteen or fifteen years of age, before operating, as the changes in the system at that time are very great, and an improvement may occur naturally. If they are too severe, however, or endure beyond that time, it will be necessary to use the bougie, which is in reality the only effective remedy in such cases. Many youths cause stricture by compressing the Penis in Masturbation, and bruising the

Urethra. I have known many do this to prevent the semen from escaping at the moment of ejaculation, from the notion that if this was done the practice *would not injure them*. It is of course unnecessary to show the fallacy of such a notion, but it may be advisable to explain what becomes of the seminal fluid in such cases, because very often not a particle is seen. At the moment of ejaculation the semen escapes by jets into the Urethra, from the ejaculatory canal, through certain small openings, called the *ejaculatory ducts*—which are shown in the plates—and then flows down the canal and escapes from the body. If, however, the Urethra is compressed, so as to prevent it from escaping externally, it must flow in some other direction, and the only other way is *into the bladder*, which it enters by forcing open the neck and passing on each side of the Vera Mountanum. It is then expended as much as if it had left the body in the natural manner, as it comes away with the next flow of urine. In the mean time its presence irritates the bladder, and its passage in this reverse way is very apt to cause inflammation in the Veru Montanum and Prostate Gland, and even to produce stricture, as before explained, with a weakness of the ducts disposing to involuntary seminal losses.

The Urethra is also unusually irritable in some persons, without any particular disease, and burns and smarts when they urinate as if there were Gonorrhœa. Some men, and even some children, have more or less of this trouble, either constantly or at times, and suffer from it considerably. It will generally be observed in such persons that the urine is high colored, and deposits a reddish or yellowish sediment, on being allowed to stand,

indicating either gravel or chronic inflammation of the bladder. The best treatment is that given for inflammation of the Veru Montanum, further back, and the best preventive is to pay strict attention to the diet and drink. Nothing should be eaten or drunk that is heating or stimulating, or that is likely to produce constipation, which always aggravates these troubles. Spirituous and fermented liquors are very bad, and coffee is usually injurious. The best drink is Soda-water, Barley-tea, Gum Arabic-water, and Mucilage of Sassafras pith, or Bene Plant. A little Carbonate of Soda taken every morning is a perfect preventive in some, and a little Magnesia in others. *All* excesses must be carefully avoided, and the bowels kept constantly free. A frequent warm-bath is nearly always beneficial.

Many of the diseases of the Prostate Gland, and many of the operations upon the Penis, are frequent causes of stricture and inflammation of the Urethra, and they therefore require, on that account, the utmost care and attention. It is not unfrequently the case, in unskilful hands, that after a perfect *cure* of one of these diseases, a stricture is left that is a worse evil than the original one.

THE PROSTATE GLAND.

The uses of this Organ, like those of the vesicles, have not yet been satisfactorily determined. It was formerly thought to be a simple Gland, intended to secrete a peculiar Liquor which was necessary to mix with the semen. This view, however, has been lately somewhat modified, and it is now considered to be rather a collection of several glands

or follicles, forming one mass or organ together. These little follicles secrete a peculiar whitish fluid, which is conveyed by a number of small ducts into the Urethra, close by the Veru Montanum where the semen enters. It is probable that this fluid is, in some way or other, essential to the perfection of the semen as it leaves the body.

The Prostate Gland is liable to several forms of disease, some of which are both painful and dangerous, and all of which, unfortunately, are but little capable of treatment. It seems specially liable to engorgement, or swelling, and to scrofulous and cancerous indurations. Sometimes also it becomes cartilaginous, or even almost bony, and at other times calculi or stones form in it, similar to those found in the bladder.—Inflammation and abscess of the Prostate Gland is very apt to follow improper treatment for Gonorrhœa, particularly where bougies or injections have been used, and it is also a frequent consequence of cauterization for curing involuntary seminal losses. Blows on the Perineum may also give rise to it, or too severe and long-continued pressure, from horse-riding, or using a hard seat, or even from *very tight small clothes*. This trouble is both an annoying and a serious one, and frequently excessively painful. When the Prostate is simply swollen it merely causes a sense of fulness and uneasiness in the Perineum, with difficulty in urinating or discharging the semen, and in passing the bowels. The reason for these impediments will be evident when the situation and connections of the Organ are borne in mind. The smallest increase in the size of the Prostate makes it press on the Urethra and partly closes it, so that the flow of urine is necessarily obstructed, and the

orifices of the Seminal Tubes being also compressed, the flow of semen through them is similarly intercepted. In very severe cases a total stoppage of both urine and semen occurs, which if not relieved may lead to inflammation of the Bladder and Testes of the most acute and dangerous character. When this stage has been reached the pain and suffering become most intense, and if the inflammation and swelling is not speedily reduced an Abscess forms which eventually breaks and discharges its contents, when some little relief is obtained, though the disease has then assumed a much more annoying form, and is more difficult to treat. If the abscess breaks internally there is a continual flow of pus or matter from the Urethra, attended by severe smarting and pain when the urine or semen is passed, and by a constant irritation in all the neighboring parts, which acts on the nervous system in the most distressing manner. Occasionally the abscess breaks externally in the Perineum, which is, if possible, still more troublesome. The pus keeps flowing in the same manner, only not from the Urethra, and the same constitutional irritation is experienced, but the pain in urinating is not always so great.

The treatment of this trouble must depend upon the stage at which it has arrived, and the causes that produced it. While there is simply slight swelling and inflammation from bruises or blows, every means must be taken to remove it as speedily as possible. The patient must keep perfectly still, lying on his back most of the time, while fomentations of hot water, with laudanum, are freely applied to the Perineum, or flannels dipped in the hot fluid may be placed between the limbs and pressed up

against the Perineum, changing them frequently, and using them as hot as they can be borne. The bowels must be freely moved with Castor Oil and the diet must be light and unstimulating. A very good practice is for the patient to *sit* in hot water, for half an hour at a time, or over the steam of it.—These means persevered in, when the uneasiness and difficulty is first felt, will often subdue the inflammation and prevent any further evil consequences. A general warm bath, during which hot Teas are taken, to promote perspiration and the flow of urine, are also of great service, and when the bruise is very bad, as shown by blackness of the skin, Leeches must be applied, either on the Perineum or inside of the thighs.

If the inflammation be of a chronic form, not produced by any external violence, the best application is the *Mercurial Ointment* rubbed on the Perineum till it produces a decided effect on the system. Along with this may also be taken the solution of Iodide of Potassium, prescribed in Hydrocele, the bowels being kept regularly open with Salts or Castor Oil. Cold Lotions must be frequently applied of Alum or Sugar of Lead, and no spices or alcoholic liquors must be taken on any account. Sexual excesses are particularly hurtful in this complaint.

Very many incipient attacks of inflammation of the Prostate might be cured in this way, and the swelling dispersed, if proper attention were paid to the diet and strict temperance practised in all things.

Most frequently, however, this trouble continues, and either forms an abscess or an indolent Tumor, which every now and then enlarges so much that

the flow of semen and urine is entirely stopped, causing intense suffering, and a palliative operation has to be performed to give relief. Many patients suffer from regular periodical attacks of this kind, and in others they come on always after any little extra bodily exertion or mental anxiety. In these cases the use of purgatives internally, with cold lotions and Belladonna or Hellebore Plasters externally, will frequently mitigate the severity of the pain and cut short the attack. A grain of Opium may also be taken, when the suffering is most intense, or thirty drops of Laudanum, in some Gum Arabic-water. The Ointment of Belladonna and Camphor, prescribed in inflammation of the Testicle, will also frequently be found of great benefit, and many experience decided relief from leeches to the Perineum and thighs. The nature of the operation to be performed, in any extreme case, depends upon the peculiar circumstances attending it, and must be left to the judgment of the physician. The internal application of caustic is practised by some, and others use the lancet freely, but there is both risk and difficulty in both. At the very commencement of the difficulty it is sometimes possible to introduce a catheter without much trouble, and this may serve to keep the Urethra open while the other means are employed to reduce the inflammation. The catheter, however, is not admissable when much force is needed to introduce it, nor when it increases the inflammation. One of the most reliable proofs of swelling of the Prostate Gland, when the Tumor cannot be felt externally or in the rectum, is the impossibility of passing a catheter, owing to the enlarged Prostate having blocked up the Urethra.

Inflammation of the Prostate Gland may terminate in *induration* or permanent hardness, and also in *mortification*, as well as in abscess or dispersion. When mortification ensues it is of course exceedingly dangerous, if not necessarily fatal, and we have no known remedy to cure it. The induration will sometimes exhibit a decided Scrofulous tendency, and pursue the same course as Scrofulous Testicle, and at other times it will become perfectly cartilaginous or bony.

When calculi or stones form in the Prostate it is sometimes possible to cut them out, when their presence is so evident that there can be no mistake, but this is very seldom the case. Like most other diseases of the Prostate the indications of this are so obscure that its precise seat and nature in most cases can only be obscurely guessed at.

Sometimes the stones will be discharged, by way of the Urethra, and relief immediately follow. Warm bathing and fomentations probably tend to facilitate this mode of escape, by releasing the parts. I have known persons who had long suffered from all the usual symptoms of enlarged Prostate be perfectly relieved after voiding a few calculi, seldom larger than a pea.

Among other means of obtaining relief occasionally successful, in Prostatic enlargement, I may mention injections in the Rectum of cold thin starch and laudanum, frequently repeated. Galvanism I have also tried, and in some cases with marked success.

Chronic enlargement of the Prostate Gland is rather common amongst old men, particularly those who have led a sedentary life or been addicted to sexual excesses.

CHAPTER VI.

FUNCTIONAL AND SYMPATHETIC DISEASES OF
THE GENITAL ORGANS.

THIS is a part of our subject of the very first importance, and yet beset with such numerous and peculiar difficulties that precise knowledge about it is extremely difficult to obtain. In regard to many things of the greatest moment, connected with man's virile powers, but little or nothing is known, even by medical men, who are, generally speaking, taught nothing about them in their early studies, and have but few opportunities of learning afterwards. Dr. Curling remarks, when speaking of the Testes, "Their functions are so involved in those of other parts, are influenced by such peculiar causes, and are so dependent on and modified by particular events and circumstances, that the investigation of them, when disordered, necessarily becomes of a complex and difficult character. The product too, of these glands, is one, the qualities of which it is almost impossible to appreciate, and which during life is never afforded in a pure and unmixed state; and further, taking into account the repugnance felt to such inquiries, it is scarcely surprising that the subject has been but imperfectly investigated, and rarely treated of by the pathologist and practitioner. Indeed the little information we possess respecting it is chiefly to be found under the head Impotency, in works on medical jurisprudence, in which it is cursorily considered, principally in relation to points

of medico-legal interest, and scarcely at all in reference to practice."

This is strictly true, and it will, I dare say, surprise many persons to learn that physicians, generally speaking, know little or nothing about such matters. Such, however, is the case, as is well known to those who have occasion to apply to them, either for advice or information. I have found it absolutely necessary to set out in my investigations, on many important points, as if *nothing* were known, and hunt out the requisite information by the tedious but sure process of actual experiment and extended observation. Very many of the statements made in this work will probably surprise those who see them for the first time, owing to their novelty, and to their variance with old notions. None of these statements have been made, however, without good and sufficient evidence having been obtained of their correctness, while the old notions with which they conflict are merely suppositions and assumptions utterly destitute of any foundation whatever. This is especially the case in regard to the functional and sympathetic causes of *Impotence*, and also its medical and moral *treatment*, which may be truly said to be, nearly invariably, of the most *quackish* character, even when practised by the most eminent medical men. The notions of non-professional persons, respecting such things, are frequently as correct as those of their medical advisers, and their own empirical treatment is often the most successful. It is but very recently that the true action of many powerful medical agents on the Generative Organs has been ascertained, and I assert, without hesitation, that very many practitioners, some even of considerable celebrity, are as truly

ignorant in regard to it as the patients they undertake to treat.

In pursuing my own investigations into these important and interesting subjects, I have left no means of acquiring information untouched. Besides studying and experimenting, as far as was proper, in thousands of cases that came under my notice professionally, I have fully experimented upon hundreds of animals, to the utmost extent that humanity would allow. By these means I have ascertained many important facts, and studied the action of many powerful medical agents which could not with propriety and safety have been tried upon human beings first.

Functional or sympathetic disability of the Reproductive Organs appears in two forms, *Impotence and Sterility*, which are frequently, but erroneously, confounded together. Sterility means a total absence of the Reproductive principle, and must always be accompanied by impotence or inability to associate with the other sex, except temporarily in certain peculiar cases; but a man may be impotent without being sterile. Absolute sterility is generally incurable, because it arises from destruction or disorganization of the Testes, and it is therefore only in the way of preventing the evil, by removing its causes, that we can do any good, but impotence can very frequently be *cured*, as well as prevented. Besides impotence is the more frequent affection, and is often merely the forerunner or first stage of sterility, and it becomes therefore the most important subject to consider.

The various kinds of deformity, deficiency, and acute disease that cause destruction of the generative power have already been fully treated upon,

and we have now only to explain those mysterious sympathetic and functional agencies, which, though they are often more powerful, are yet so different in their operation, and hitherto so little studied, that but little is generally known respecting either their nature or mode of action. This will be fully apparent in our very next article.

INFLUENCE OF THE BRAIN ON THE GENERATIVE POWERS.

In a former part of this work a number of instances were narrated in which impotency followed injuries of the head, and we will now narrate a few others, because this is a most important fact, in many respects.

About five years ago I was consulted by a married man who had totally lost his sexual powers from striking his head against a beam. The blow had stunned him for a time, but did not lead to any serious symptoms afterwards. He found, however, in two or three days after that he was perfectly impotent, and had so remained for eighteen months when I saw him. There was but little loss of desire, with no wasting of the Genital Organs, nor any other indication whatever of his deprivation. He had previously been a man of temperate habits, and at the time of the accident was as vigorous as most men. The blow, it may be as well to remark, was received on the *top* of the head, and was not followed by any swelling or pain in the Cerebellum or neck. When I saw him he was in perfect health, and in good spirits, in fact nothing was complained of but this unfortunate impotency, which he was very desirous of having removed.

The great point was to ascertain, if possible, in what way the concussion of the brain had suspended the transmission of nervous power to the genitals, and how it could be restored. I recollected that in several cases where injuries to the head had paralyzed particular muscles, or limbs, their power had been restored by *Galvanism*, applied so as to pass along the course of their Nerves from the spine. It seemed to me as if the blow had impaired the proper connexion between the spinal marrow and these nerves, at their roots, and that the passage of the electric current in some way or other restored that connection. It was similar in fact to starting the Electric Telegraph again by mending the wires, or making the connections perfect, after they had been destroyed by violence. I therefore applied the Galvanism, passing the current from that part of the spine where the Spermatic Nerves originate to the pubes, perineum, and neighboring parts, applying also a stimulating liniment, and occasionally using the congester. The result was highly satisfactory, and speedily obtained. At the third application he experienced a decided *tingling* about the perineum, and along the penis, and the next time a partial erection occurred. After persevering for five weeks, using the Galvanism daily at first, and then every other day, and finally but twice a week, he was fully restored, without any apparent tendency to a relapse. In this case it will be observed that the injury was not received at the *back* of the head, on what the Phrenologists call the Organ of *Activeness*, but at the top, nor did it in any way whatever affect the cerebellum.

In another similar instance Impotency, with complete loss of desire also, followed a fracture of the

skull over the *left Temple* and no means that were used had the slightest effect in restoring it. In a few months the Testes began to waste, and eventually almost totally disappeared, but the general health was only slightly affected.

In the American Journal of the Medical Sciences, for February, 1839, Dr. Fisher relates a curious instance of a gentleman injured in a railway car. He was looking out at the moment when a collision occurred, and the shock threw the back of his head against the edge of the window with such force as to stun him; he however recovered his senses and was taken home, but suffered great pain in the back part of the head and top of the neck. His right arm was numbed a little and some difficulty was experienced in passing the urine, but in two weeks he was able to walk out with no other inconvenience than a slight dimness of sight. About the fifth week he discovered that he was impotent, and had lost all sexual desire. The means used to restore his genital powers were only partially successful, nor was his memory so perfect as before, but all the other difficulties disappeared under proper treatment.

In the Lancet for August, 1841, is an account of a medical student who received a blow on the face, in a quarrel, which knocked him down so that he fell on the back of his head. He was totally unconscious for eight or ten hours, but gradually recovered, and on the following day even resumed his studies which he continued unremittingly for the next six weeks. He, however, became exceedingly irritable, with a feeling of general uneasiness, and after the first week he observed the genital organs begin to waste, and desire to weaken, till he finally

became nearly impotent, but afterwards recovered under proper treatment.

Many instances have been observed of soldiers being wounded in the head and suffering afterwards under the same disability, some of which were given in a former article. It is perhaps proper to remark, however, that this is not the only nor even the most frequent result of such injuries, as many patients so hurt suffer no deprivation of their genital powers but have some other function impaired. Thus some lose their sight, some their hearing, and others become paralytic in their limbs.

The prospect of recovering the sexual powers when lost from injuries of this kind is very small, especially if the parts have really begun to waste. The treatment at first must be that best calculated to subdue the irritation which is probably existing in some part of the nervous system, and afterwards, if requisite, to rouse the spermatic nerves to more energetic action. Every case, however, will require something peculiar to itself, which can only be discovered by a patient and careful attention to all its symptoms and indications.

A further corroboration of the facts above stated may also be found in certain physiological indications observed in those who have died from strangulation. It is well known that in very many men who have been hung, erections and even seminal emissions have occurred, and experiments upon animals have often led to the same result. This is attributed to the pressure of the rope on the back of the head, which in some way or other excites the spermatic nerves. I have even known pressure made on that region purposely, in a particular manner, in order to excite erections, and *frequently with*

perfect success. Some of the females in the Turkish Harems understand this, and they habitually chafe, or *shampoo*, the back of the neck of their companions of the other sex, for this very purpose. I have frequently made an application of this important fact in my practice, in cases where there was merely a suspension of that sympathetic influence which the brain ordinarily exerts upon the sexual organs.

The particular mode of doing this, though well understood to eminent medical men in the old world, is I believe totally unknown here. An explanation of the process, and the apparatus employed, would require to be extended beyond the limits of the present work, to make it practically understood, and as after all it would not be available for the patient's own use it is not necessary to enter into it. I have often astonished persons both by its singularity and its unexpected effects.

A full consideration of all the facts and arguments bearing upon this influence of the brain over the sexual functions, have left the subject, so far as I am concerned, in great obscurity. That a singular influence is *often* exerted by the brain in this way, sometimes beneficially, and at others the reverse, is undoubted, but whether *such influence* emanates from a *particular part* of the brain, or from the whole organ is uncertain. The Phrenologists affirm that only a particular part of the Encephalon is concerned in this phenomenon, namely, the lower part or Cerebellum, which rests upon the spinal marrow.

But after a careful consideration of all the reasons brought forward in support of this affirmation I am not yet convinced of its correctness. That many

facts favor such a theory I am willing to admit, but it is also certain that many others militate against it, and as a searcher after truth I must consider everything that bears upon the question, even though opposed to my previous opinion. I set out with firmly believing that the Cerebellum *was* the organ of the sexual propensity, and my investigations have made me doubt it. It is not true, I am convinced, that the strength of a man's sexual propensity can be estimated by the development of his Cerebellum, nor is it true in regard to animals either. If it were so we ought to find that organ largest in those who exhibit the propensity most, and in numerous cases it is not so, though in others it is. A celebrated German physiologist made some investigations bearing on this point of a very interesting character; he had numerous opportunities of dissecting horses, and curiosity induced him to weigh the Cerebellums of these animals, some of whom had been castrated when young and others left entire. Now if the Cerebellum be truly the organ of Amativeness it ought of course to be largest in the entire horses, who have always exhibited that propensity, and we should expect to find it almost disappeared in the others, seeing that they could *never* have felt anything of the kind. The result of the experiment was, however, on taking the average of an equal number of each, that there was scarcely any difference, or if any at all the castrated ones had the *largest* Cerebellums. In observing idiots also, some of whom were notoriously licentious, and others directly the reverse, I have not found that the development of the Cerebellum corresponded to the phrenological system. Neither can it be contended that the size of the Cerebellum in the

castrated animals was only the result of disease, for no difference could be detected in it between them and the others. All that can be said therefore is that certain agencies acting on the Cerebellum *sometimes* cause sexual manifestations, and at other check them. The same agencies also acting on *other parts* of the brain will sometimes produce the same results, and sometimes when the Cerebellum is acted upon it is not the Generative Organs that are affected, but the sight, hearing, or speech, which might therefore just as properly be considered under its exclusive influence.

It should also be stated, as bearing on this subject, that certain influences operating on various parts of the body will often affect the Generative Organs in a decided manner. I have known a blister *on the leg* cause the most uncontrollable sexual desires in one man, and the application of caustic *to the throat* do the same in another. In applying blisters to the top of the neck also, though it is followed by erections in some, yet in others no such effect takes place, and occasionally it will produce a nervous twitching, like St. Vitus' Dance, in the arms. Flogging the back, it is well known, will frequently cause erections and emissions, even when very severe, as has often been observed in soldiers when undergoing that brutal punishment. Rousseau also tells us, in his confessions, that flogging boys at school, in the disgraceful manner formerly practised, is sometimes followed by similar results, and he remarks that the pain of the punishment may be forgotten under the powerful excitement it leads to, a fact of deep moral importance. In short there seems every reason to believe that the strength of the sexual propensity is dependent upon some pecu-

larity of the sexual organs themselves, though it may be often modified by various mysterious sympathies emanating from other parts. If the semen be never formed, there will never be any sexual desire, and if that fluid be abundant the propensity to discharge it will be proportionally great, independent of all other influences. In those who feel desire without having any semen, as is sometimes the case in impotency, or even after castration, it is only *the remembrance of a lost pleasure*.

In treating disabilities of the Generative Organs, however, the possible influence of injuries to the head, even at former periods, and long ago, should always be borne in mind.

INFLUENCE OF THE MIND OVER THE GENERATIVE ORGANS.

It is a fact not generally known that the mind can exert an influence over the Generative Organs of a most decided character. Not only can desire be engendered or annihilated by mental impressions, in despite of all other conditions, but the actual growth, or development of the organs themselves can be retarded or accelerated by the same means. I have known men who never felt sexual desire, and whose organs were very imperfectly developed, until a late period of life, and then quite suddenly the long-suppressed feelings were experienced, and the parts began to grow, simply from the stimulus of seeing some person of the opposite sex who was adapted to make the proper impression upon their minds. Such instances are, indeed, by no means rare, as every person of experience must know, and they prove that, in many cases at least, a certain

impression must be made upon the *mind* before the mere animal feeling can be experienced, or the physical development take place; or, in other words, they prove that with some persons there are only certain *individuals* of the opposite sex who can call forth those feelings in them, and that if they never meet with these individuals it is probable that such feelings will never be experienced, or at least only to a slight extent.

A knowledge of this fact will often explain to us many of those distressing cases of indifference and dislike to be met with between parties, and will also be a valuable guide in giving advice, particularly in those instances where there is only apparent impotence without any real deficiency.

There seems to be good reason to suppose that the sexual instinct is materially dependent upon a particular part of the brain, though we cannot tell what part it is, nor whether it is a mere development of it that is needed or some peculiarity of structure or organization. It is not at all uncommon to find men perfectly organized, in every respect, with vigorous minds, and with every other faculty in full play, but yet almost wholly destitute of desire for sexual enjoyment. In some of these cases it is true the Generative Organs are small, or evidently inactive, but in others they are of full average development, healthy, and active. In such cases we can only account for the singular indifference exhibited by supposing that the part of the Brain which regulates the reproductive instinct has not had sufficient power, or else that the *proper object* has not yet been presented to the senses, as before explained.

Besides this particular influence the Generative

Organs can also be much affected by the general action of the Brain and nervous system, the same as all the other organs. Thus if a man exhaust most of his nervous energy in thinking or in muscular energy, the other functions, including the generative, must be proportionally weakened. I have met with many instances of this among men of business, many of whom would become quite impotent when more than usually absorbed in their pursuits, and regain their powers in a short time after their care and anxiety were lessened. The following case of this kind I select from my note-book as being more than usually instructive. The patient, a young man of twenty-eight, had been married three years, and had one child; he was very fond of his wife, and she in return reciprocated his affection. He had never been addicted to excesses or abuses of any kind, and until about six months before I saw him was in the full enjoyment of his generative powers. About that time, however, he experienced a sudden and severe loss in his business, which had previously been very prosperous, and the care, anxiety and incessant exertion he underwent, in endeavoring to extricate himself from his embarrassments, brought on various physical and mental troubles that he had never before experienced. Among the rest he found himself perfectly *impotent*, having completely lost both power and will. This distressed him very much, both for the loss itself and also from apprehension that it was the beginning of general decay. In this dilemma he came to consult me, and was exceedingly anxious to know my opinion as to the prospect of his ultimate recovery. After a careful examination I felt convinced that there was no actual loss of power, but merely a

temporary absence of the requisite nervous stimulus, owing to the excessive mental labor and anxiety he had undergone; I therefore inquired as to his future prospects, and was gratified to learn that he was now quite relieved of his difficulties and was beginning to regain his usual health and spirits. On learning this I unhesitatingly assured him that in a short time his generative powers would return, and more especially if he could abandon all care and thought about them. I gave him a slight stimulus, and some general directions as to diet, external treatment and exercise, and arranged to see him twice a week. In one month afterwards he was as well as ever, though he had been for nearly seven months as impotent as if the organs had been totally destroyed.—I have also frequently had businessmen remark to me that they were liable to experience more or less deprivation of sexual power, and to feel much less desire, at those periods of the year when trade was most active, and their minds in consequence more absorbed. An author also told me that when writing any very particular part of a book, or when anxiously expecting the criticisms of the press after its issue, he was always for a time perfectly impotent. In the lives of several severe students we have further corroboration of this fact, many of them having been remarkable for their coldness and incapacity, particularly those engaged in absorbing abstract studies, like the Mathematics. Sir Isaac Newton is said to have never known sexual ardor, though in every respect a perfectly-formed man, and it is probable that this was in a great measure, if not entirely, owing to his incessant and all-absorbing studies. In short there is no question but that intense mental occupation less-

ens sexual ardor in most persons, and that it may sometimes even extinguish it altogether. This is a fact of considerable importance, both medical and moral, and one that should be more fully considered than it has hitherto been. There is no doubt but that a great part of the licentiousness which exists, particularly in youth, is in a great measure brought about, or at least made much worse, by mental and bodily *idleness*. If the mind is not occupied by some proper and congenial study, that will pleasingly engage it at every leisure moment, a habit will soon be formed of indulging lascivious thoughts during such vacant periods, and if at the same time a due proportion of the vital energy is not absorbed in physical exertion, the sexual organs will soon become so constantly and intensely excited that such thoughts will become paramount over all others. I once pointed out the philosophy of this to a gentleman who came to consult me both for himself and for his son, aged seventeen. The father was nearly impotent from intense occupation in business, and the son was nearly dead from constant licentiousness and intemperance. I found on inquiry that the young man had been brought up as a *gentleman*, and was not even expected to employ himself with anything useful, in consequence of which, from mere idleness, he resorted to licentiousness and drinking as a regular occupation, till he was scarcely capable of anything else. *Moral suasion* was utterly useless to effect a change, and habit was too strong for the fear of consequences to break through, so that it seemed as if nothing could be done but abandon him to his fate. His father bitterly deplored the condition of his son, and earnestly entreated me to give him any information I thought

likely to be of service in preventing similar misfortunes to his younger brother.

On explaining to him how the sexual power and propensity is influenced by a proper exercise of the rest of the system, the philosophy of his own and his son's condition was immediately apparent. "Yes," exclaimed he, "I have exhausted myself by over-exertion, and at the same time, I have left my son a prey to his licentious desires merely from idleness. I now see plainly enough that had part of my burden been laid on his shoulders it might have saved *both*, but from mistaken kindness, and false pride, I condemned *him* to a life of inactivity, and consequent depravity, and myself to a drudgery that has left me a mere ruin of what I was." Now this is a case instructive to all, and there are many others in society precisely similar.

Certain feelings are also very influential over the generative functions, but only temporarily, or with particular persons. Thus some men have found themselves suddenly impotent, with certain females, merely from disgust at something that was unexpectedly displeasing in them, and others have experienced the same difficulty from the fear of discovery or infection. Some men will experience a total loss of power on finding their companions too cold, or too ardent, or meeting with some unusual difficulty, but perhaps the most frequent cause is *Timidity*, or self-distrust. I have known several men, every way competent, who were so possessed with this idea of their own incapacity that they invariably became impotent whenever they attempted an approach to the other sex. This timidity is sometimes exhibited in the most striking manner, the patient being intensely agitated, and so nervous

that his whole frame trembles, and his bodily powers sink so much that often fainting ensues. This peculiarity appears to be constitutional, and is often seen in those who are by no means *nervous*, in the ordinary acceptation of the term, and who are collected enough in regard to other matters. The only remedy for such an infirmity is constant association with *one object*, in marriage, by which means a proper familiarity is induced, and in time the individual loses his distrust and becomes convinced of his perfect capability. In most of these cases there is a real *excess* of power, rather than a deficiency, and the very intensity of the feeling tends to prevent its gratification, by completely absorbing all the vital energies. I have frequently been consulted by persons so circumstanced as to the propriety of marriage, they fearing that the failing could not be recovered from, and it has been with the greatest difficulty that I could persuade them to the contrary. In every instance, however, I have found marriage to effect a cure, though it might not be immediate. Some have worn off their distrust very soon, others have experienced it for months, but eventually have been surprised that they ever did so at all. It is the fear of failure that causes it with these people, and when that fear is once found to be groundless the cure is complete. In some few of these cases a little medical assistance is available, but it is of a nature not necessary to point out here. I once saw a man who had been married for three years without being able to associate with his partner, and solely from this cause. In all probability he *never* would have done so, had it not been for the advice he received, and yet there was no real deficiency of any kind. The celebrated John

Hunter gives us a similar instance, which he met with in his practice. The patient was perfectly incompetent, solely from the fear of failure, which so operated upon him as to always make him fail. Mr. Hunter was persuaded there was no other difficulty, and that it was merely necessary to break this spell, he therefore required of him, as one essential requisite of the treatment, that he should remain with his companion, but on no account whatever make any attempt for six nights, let his desire be ever so strong. The result was that before the period fixed had gone by his desires were so strong he found it difficult to obey the injunction, and feared he should have too much power instead of too little. In fact the cure was complete, without any further treatment. The only thing required in such cases is a judicious and honest physician, who will first ascertain that there is no real deficiency, and then explain to the patient the real nature of his case and the means by which it may be relieved. If this be done in a proper and sympathizing manner a cure may always be effected, but by a wrong course of procedure the evil may be confirmed.

A too great intensity of the sexual feeling itself will sometimes cause impotency, by overpowering the patient before the act can be properly consummated. I have known instances of men who always became so intensely excited that they fell into a kind of dreamy stupor, and had involuntary emissions while in that state. This, however, can always be remedied by proper treatment.

Several instances have come to my knowledge of men being impotent, at their marriage, from their first discovering some disagreeable fact respecting

their partners. In one instance the lady had a small abscess on the arm, which she had hitherto concealed, and doubtless thought it a matter of little or no consequence as her health was good, and her appearance remarkable pleasing. Her partner, however, thought different, and such was the effect upon his mind that he could never afterwards experience the slightest desire towards her. In some cases such simple discoveries as false hair, or false teeth, have had a similar effect. It is not so much that the circumstance is excessively disagreeable in itself as that it is *unexpected*, and its discovery destroys the dream of comparative perfection hitherto indulged. With uncultivated and unimaginary people such causes might operate but slightly, or not at all, because they form no such ideal image, but with men of refinement it is different. There is no doubt but that a good deal of the dissatisfaction, and loss of power, which many men experience after marriage is owing to this circumstance. They are ignorant of the real physical and moral nature of the being they take to their bosoms, and have formed a picture of her in the imagination very different from the reality, so that when the truth is known their feelings undergo a complete revulsion. This ignorance sometimes extends to the most ordinary functional phenomena of the female system, and the first knowledge even of that has, to my own knowledge, produced a very disagreeable and lasting effect. In short it is in this as in everything else, ignorance and concealment produce evils that only knowledge and mutual confidence can prevent or remove.

EXCESSIVE SENSIBILITY OF THE GENITAL ORGANS.

Sometimes the sensibility of the Genitals is so much exalted, either naturally or accidentally, that emission occurs upon the slightest excitement, and the individual is thus made impotent from inability to perfect the connexion. This condition is in reality a diseased one, and ought so to be considered, as much as any other we have described.

The seat of this extra sensibility is sometimes in the Testes or Vas Deferens, or in the ejaculatory Ducts, but most frequently in the Glans Penis. When it is very great the organs are thrown into a violent orgasm almost at a touch, and emission occurs at the very first attempt. I have known men married for years who never had perfect association with their partners during the whole time, and simply from this cause. They were in no respect whatever deficient, nor even subject to nervous excitement, but were unfortunately affected by this excessive sensibility. Other men I have known who dare not marry at all from this cause, feeling sure that if they did the marriage could never be consummated.

The causes of this trouble appear to lie in the peculiar structure of the Glans, the skin of which is unusually delicate, while its nerves are ramified into thousands of minute twigs, which are distributed to every point of the surface. The exquisite sensibility thus produced is so great in some that the mere touch of the clothes is sufficient to excite, and the patient is thus kept in a constant state of irritation. Sometimes a similar state is induced by disease, particularly by inflammation, the Penis being

then as tender as the surface of an abscess just before it breaks, and feeling the slightest pressure or friction.

When this excessive sensibility is produced by any disease it will of course disappear when the disease is cured, but when it is natural the removal or modification of it becomes much more difficult, though great relief can nearly always be obtained. The first requisite is to remove all extraneous sources of irritation, and to attend to the diet, clothing, and general regimen, then the great point is *to harden the skin of the Glans*, so that the nerves may be more thickly covered, and their sensibility reduced. This must be effected by the constant use of astringent washes, or caustics, and in certain cases by the use of Galvanism. Every one is familiar with the effect of certain substances on the hands for instance, in making them hard and destroying the delicacy of their touch, and it will be readily seen that the same means will deaden the sensibility of other parts. Lime-water is very good in some cases, and water saturated with iron-rust in others, but the best agents are the astringents, such as alum-water, solutions of tannin or white oak bark, or gum kino or catechu. These must be used every day, as washes, and the Glans kept covered with cotton soaked in them. They will always do good, and frequently effect a perfect cure, but when they are not sufficient caustics must be employed, and this must be done by a physician.—When the premature discharge takes place from irritability of the Urethra or ejaculatory ducts, a soothing external treatment must be adopted, consisting of washes and baths, combined with the use of particular medicines internally, the kind of

which must be determined by the peculiarity and seat of the irritability.—I have had some of the most distressing cases of this extreme sensibility brought under my notice, but I have not had one that was not relieved, except when it arose from some incurable disease.—The connexion between this complaint and certain *moral infirmities* will be obvious, and it will be readily admitted that its proper treatment may frequently be a matter of great consequence.—Children sometimes exhibit this troublesome sensibility of the parts, and it leads in them to constant manipulation, and eventually masturbation, if not corrected. How important that parents should know this, and how necessary that they should see the uselessness of mere *moral preaching* in such cases.

CHAPTER VII.

SPERMATORRHŒA, OR EXCESSIVE LOSS OF SEMEN.

THIS is a subject of more importance, as regards human health and happiness, than perhaps any other that can be mentioned, and yet it is one about which scarcely anything is known, except by a few individuals. I do not hesitate to say that more evil effects, ten times over, are produced by this almost unsuspected cause, than by all the diseases already enumerated, and perhaps even then by nearly all other diseases put together. And not only is it destructive to the *body*, by preventing its proper development in youth, making it a mass of disease in mature life, and causing its premature decay and death, but it is equally baneful to the *mind*. By its influence the vivacity and energy of youth is changed to a listless indifference, the vigor of manhood is destroyed, and the calm peaceful content of mature life is turned into despondency and gloom. Many a young man, with mental powers capable of making him both eminent and happy, and with every requisite of bodily health and strength, has terminated a short-lived miserable existence by suicide, or dragged out his life in a state of idiotic imbecility through this unsuspected disease.

The excessive loss may either be the result of licentious indulgence or it may occur without the individual's cognizance, the effects being much the same in either case, though apt to be ascribed

to other causes in the latter case, and also to be often underrated.

The fact that the semen does frequently escape in an involuntary manner is generally known, there being but few men who have not so suffered more or less, and it is also well known that such involuntary losses are very injurious to health, but the real extent either of the disease or its evil effects are known to but few. The only cases known to occur, by people generally, are those in which the escaped semen is actually *seen*, but for one case of this kind there are probably *ten* where nothing of the kind can be observed except by means hereafter to be pointed out, and where of course it is never suspected. In like manner the only effects of this disease that are usually taken cognizance of are those of plain and obvious character, but there are many others, much more to be dreaded, that can only be detected, and assigned to the right cause, by those practised in observing them. Many men suffer the extreme of wretchedness and disease, become insane, and die prematurely, from this complaint, without ever having dreamed of anything of the kind. In general, too, their medical advisers are equally in the dark, and go on attempting to cure the mere effects while the grand cause of all is left untouched. Spermatorrhœa, as I shall show further on, when excessive, may produce symptoms similar to those of almost every disease the system is subject to, and thus lead to the belief that there is Disease of the Heart, Liver Complaint, Dyspepsia, and a hundred other affections of which there is in reality no trace whatever. It may also materially impair the powers of the mind, or prevent their proper manifestation, and so change the feelings and disposition that

the individual can scarcely be recognised as the same person, by his conduct.

The ravages of this destructive disease are not confined to any particular class, age, or condition, nor is it always a consequence of vicious conduct, as some suppose, but on the contrary, it frequently attacks the most virtuous and exemplary. Some of the causes that lead to it may operate as well upon the healthy and strong as upon the weak and sickly, and attack the middle-aged married man, of temperate habits, as well as the licentious unmarried youth. It is therefore of the utmost importance that this destructive pestilence should be unveiled, so that every one may know how to guard against it and ward off its evils.

To understand why it is that Spermatorrhœa leads to such manifold and diversified evils, it will be necessary to refer to the Organic and Sympathetic connexion between the Generative Organs and the rest of the system. The intimacy and extent of which is but little known, and consequently its importance is not appreciated. In the former part of the present work this connection is partially shown, but it is necessary here to make it still more manifest.

To a considerable extent the Genital Organs are in direct connection with the Urinary, and in some places the same parts are common to both. The lower part of the large Intestine, or the Rectum, is also in close juxtaposition to them, as may be readily seen by referring to the Frontispiece, and the description of the male system. Any disease, therefore, which affects the Genital Organs is very apt to derange them likewise, and it is quite possible that the secondary disease may be more severe

than the primary one. Every one knows that diseases of the Bladder, Kidneys, Urethra, and Rectum, are quite common, and frequently very distressing, while the causes of them are often undiscovered. In many such cases these diseases are only *symptoms*, the primary trouble being spermatorrhœa.

The great cause, however, of the Genital Organs exerting such a general influence over every part is their intimate connection with the nervous system. There is no other process carried on in the body that requires so much nervous power as the formation and evacuation of the semen, and no other is therefore so exhaustive of the vital energy. Even in youth the amount of this power required is very great, to effect the full formation of the Semeniferous Glands; in fact Nature seems to put forth so much effort for this purpose that every other part is stimulated at the same time, and thus the perfecting of the Genital Organs is the means of developing the whole system.

This is the reason why those who are castrated are always imperfect, both in body and mind, and die early. If the Testes are removed there is no other part for which nature will sufficiently exert herself to stimulate the whole, and consequently the development is only partial. Those who have ever seen *Eunuchs* will have had sufficient proof of this, but any one may observe the same thing in mutilated animals. Compare the Ox with the Bull for instance, or the entire Horse with the castrated one, and it will be at once evident that the form of the body, and the disposition, are completely changed. Even in after-life the vital energy required to secrete the semen invigorates the whole

system, and disposes it to a constant activity that would otherwise not be exhibited. Men deficient in this respect are never noted for their enterprize and love of adventure, but are always inclined to be calm, inactive, and retired, even when possessing genius. Nearly all men of strong energetic minds and daring dispositions are of warm temperaments, or in other words have a plentiful secretion of semen. It is therefore an essential and important agent, both for perfecting the system in early life, and also for rousing it to sufficient exertion afterwards, and beyond doubt a deficiency or superabundance of this fluid may exert a decided influence on the character of the individual. In all probability many are dull and inactive from deficiency in this respect, while many others are too impulsive and restless from excess, and yet the truth is seldom suspected. It is too much the custom with Physiologists to regard *only the brain*, as being concerned in the production of mental characteristics, and to consider it as the sole fountain of that mysterious influence which is constantly exerted over every part of the system. A truly philosophical view of the subject will, however, I am confident, show that there are other parts whose action should by no means be overlooked, and among the most important of these are the Genital Organs.

A due consideration of these facts explains the the true philosophy of sexual indulgence, and shows why licentious excess produces so many and such severe evils. In a healthy state Nature goes on supplying the necessary nervous energy, both to the Testes and the rest of the system, till a superabundance of semen is formed, and then there is experienced a desire for its emission, the gratification of

which is, physiologically speaking, under such circumstances, both proper and healthful. It is in fact only the expenditure of the overplus energy, and does not in any way weaken or destroy. If, however, by artificial excitement, or factitious desire, the seminal emission occurs before this superabundance exists it becomes exhaustive, and seriously impairs the vital energy. Indulgence should therefore be allowed *only* when this overplus power excites to it, and any man can easily tell when that is by studying his feelings and experience, and by not giving way to artificial excitement.

When the seminal emission occurs oftener than nature properly provides for, the nervous energy expended is no longer a useless superfluity, but a portion of the common stock, and its abstraction necessarily weakens the power of the whole system. For a time Nature can, by extra effort, supply the deficiency thus produced, but if the excess be too long continued this effort at last fails, and then a general prostration ensues. The career and ultimate end of any licentious debauchee will well illustrate this, and should act as a timely warning to shun the same evil path.

The reason why the victim of excessive seminal discharge suffers from almost every ailing of body and mind, will now be evident. The stomach cannot digest, the heart cannot propel the blood, nor the brain think, unless they are each supplied with a due amount of nervous power, and if most of that be expended in the production and evacuation of the semen, of course they will be deficiently supplied, and will consequently perform their functions imperfectly. Here then we have the cause, in such cases of Dyspepsia, Heart disease, dulness

of the intellect, insanity, and a thousand other evils.

Besides this exhaustion of the nervous energy, however, it is also probable, from observations recently made, that the semen requires for its perfect formation some important and subtile elements of the body, the abstraction of which, in too great quantities, is highly injurious. It has been supposed, and with considerable plausibility, that a part of the seminal fluid is identical with some portion of the *brain and nervous substance*, and that this common material is produced for the use of both respectively. This explains why the mind is nearly always active in those who are of a warm temperament, because the brain is nourished by a part of the same material which is produced to form the semen. It also shows why the mind must suffer when the semen is expended in too great quantity, because the very substance the brain requires is that taken away, and it suffers in fact from want of its proper nutriment. In confirmation of this it has been stated that the brain has actually been found *wasted*, and *softened*, in many persons who have died from licentious excesses, and I have myself observed the fact, after death from Masturbation. In one case especially, the color and consistence of the brain was so remarkably different from those of a healthy person that no one could fail to observe it; it had in fact the very same appearance as in many states of disease, and I have no doubt but that in many of these poor victims the brain is constantly in a state of inflammation, or wasting away. This is probably the true cause of that distress in the head, dimness of sight, and loss of hearing, that many of these patients complain of, and which sometimes

continues till they become deaf, blind, and insane.

This explanation of the way in which Spermatorrhœa produces such various evils, will make our detailed account of its effects easily understood, and will also make clear the philosophy of its proper treatment, and what should be done for its prevention.

CAUSES OF SPERMATORRHŒA.

There are undoubtedly many causes of Spermatorrhœa with which we are but imperfectly acquainted, and probably many that are not yet suspected. Mr. Lallemand remarks that "when it occurs spontaneously, during sleep, in a healthy and *continent* individual, it doubtless exerts a beneficial influence on the economy, by freeing it from a source of excitement, the prolonged accumulation of which might derange the animal functions. In these cases it has an effect analogous to that produced by the bleeding at the nose, during youth." If, however, the discharge becomes excessive, or continues longer than the state that first produced it, great evil may follow, as already shown. Probably the most frequent cause of Spermatorrhœa is too frequent sexual excitement, especially in the form of Masturbation. This leaves the organs in a state of irritation which stimulates them to constant activity, and makes them perfectly independent of the will. At first the emissions are always attended by erections and pleasurable sensations, during sleep, but in time they begin to occur without either erection or sensation, and finally take place in the day-time, whenever the bowels are moved, or the urine passed, and in extreme cases there is a constant running away of the semen without any in-

termission. To understand the reason of this constant and uncontrollable escape of the semen, I must refer to some of the Anatomical details given in the description of the Male Organs. It was there shown that the semen passes, from the Testes, along a pipe or duct, called the *Vas Deferens*, which opens into the Urethra, through the Prostate Gland, by two little mouths called the *Ejaculatory Ducts*. These mouths are always shut in a healthy state, except under the influence of sexual excitement, and then they open to let the semen through, but afterwards firmly close. If, however, they are called upon to do this too often they become irritated or relaxed, and consequently are more disposed to open from slight causes and have less power to close again. They are especially liable, when irritated, to be acted upon by the urine, which passes over them, and as the bladder itself soon partakes of the same irritation the urine is being constantly passed and is nearly always mixed with semen. The pressure of the Rectum on the Prostate Gland, when the bowels are moved, will also cause the ducts to open, and this is the reason why many persons always lose semen when at stool. The ordinary motions of the body even will do the same, in bad cases, and more especially riding, running, leaping, or coughing. Finally, the ducts entirely lose the power of closing, from relaxation and then the semen is constantly dribbling away.

Whenever the semen can be seen there can of course be no mistake as to the nature of the trouble, but very often it flows involuntarily without being visible, as before stated, and thus the individual may suffer without its being suspected what from. The manner in which this occurs will now be un-

derstood,—the ducts become sensitive to the touch of the *urine*, which in a healthy state produces no effect upon them, so that every time that fluid passes they open and allow the semen to escape along with it. The Bladder itself being irritable also, owing to its intimate connection with the diseased parts, the urine cannot be long retained; the smallest quantity causes an irresistible desire to expel it, and thus the individual is constantly urinating, and constantly passing semen at the same time. It is only very recently that this fact has been ascertained, and doubtless numbers have died in this way, as before remarked, without the slightest suspicion being excited as to the cause of their death. The means by which this mode of seminal escape is ascertained are simple and sure, in practised hands, as I can testify from abundant experience. They consist in examining the urine with a properly constructed microscope, which exhibits in it the presence of the *seminal animalculæ*. These minute animals are nearly always to be found in the urine of those afflicted with Spermatorrhœa, and their presence of course proves the escape of semen beyond a doubt.—It is quite common for patients to remark that the urine is thick and ropy, particularly the last drops, and it is usually thought that this arises from inflammation of the Bladder, but in most cases it is only from being mixed with semen. In this way I have been able to ascertain the true nature of a person's disease in numerous instances, and to apply the proper remedy, where previously they had been treated only for some *symptom* of that disease, and of course without any permanent benefit. Many times I have had respectable married men, of temperate habits, come to me with every symp-

tom of Spermatorrhœa, but who assured me that they had never been troubled with anything of the kind. They judged so, simply because they never *saw* anything pass from them, and they did not know that it could occur in any hidden form. On showing these people the semen in their urine they were amazed, and deeply regretted the want of information that had prevented them from knowing the cause of their suffering before. I have no doubt but that this hitherto undetected form of Spermatorrhœa has been the cause of incalculable misery to thousands, and that it has condemned numbers to insanity and untimely death.—It is perhaps necessary to remind the reader here that when the loss occurs in this way it is from the ducts being *irritable*, and not from being relaxed. When really relaxed or open, the semen escapes at all times, from various causes, or perhaps without any accidental cause whatever.

It was remarked above, in speaking of the causes of involuntary seminal emissions, that it probably arose most often from too frequent sexual excitements, especially in the form of masturbation. It may be as well to remark, however, to avoid misapprehension, that too frequent excitement in *any* form may act in the same way. There are undoubtedly many married men who much exceed the bounds of true moderation, and they are apt to think that no harm will follow from such excess, because it is *legitimate*. This is a great and a fatal mistake; such men are just as liable to suffer as if their gratification was sought under any other circumstances, and I very often have such come to me for advice. The Physiological Laws, by which health is maintained, are quite distinct from those moral

enactments demanded by the welfare of society; and the observance of one of these can never give immunity for the infringement of the other.

It is not, however, excessive indulgence only that will cause Spermatorrhœa, for the very opposite of it may do the same. There are few men of warm temperament, if healthy, that can remain long strictly continent without having involuntary emissions during sleep. These, as before remarked, are sanitary efforts of nature to relieve herself, and when not too frequent may be beneficial rather than hurtful. Unfortunately there is always a tendency, if the continence continues, for them to become more frequent, so as eventually to constitute a real disease, and thus many a virtuous young man, who has *never* indulged in any form, is subject to the same misfortunes as the licentious debauchee or the victim of masturbation. This is a truth as important to be stated as any other, though its announcement may seem strange to those who hear it for the first time.—There are fortunately many means that can be used, in such cases, to lessen this tendency to an undue increase of the discharge, and therefore these persons should know of their danger, in order that they may see the necessity for adopting such means. Over-exertion or great agitation of the mind will also cause Spermatorrhœa, owing to the sympathy between the genital organs and the nervous system, and it is frequently produced in this way in merchants, students, professional men and others. I have known many men of business who always had involuntary emissions when they were much troubled about their affairs, and several law students have assured me that after any unusual application they suffered in the same way.—Many other dis-

eases of the generative organs will likewise lead to Spermatorrhœa, and so will certain derangements of the neighboring parts, particularly long-continued constipation of the bowels, piles, and gravel. Certain medicines also, especially Cantharides, Phosphorus, Iron, and Opium, are very apt both to produce and aggravate it, and so will the use of Tobacco, Alcohol, and heating or highly-seasoned food.—Among occasional causes, still less likely to be suspected than any above referred to, may be mentioned *worms in the rectum*, various *skin diseases*, and diseases or injuries of the brain. Venereal and Gonorrhœal affections also leave a tendency to Spermatorrhœa, and often directly produce it.—I have become satisfied also that in many children there is a predisposition to it, *inherited from their parents*, which is likewise accompanied in many cases with a congenital weakness of the parts, which is frequently denoted by incontinence of urine.—All these causes will, however, be illustrated in the “*cases*” which will be given further on.—The most frequent cause, however, is sexual abuse, though it may not assume a very aggravated form till many years after; the follies and vices of youth being thus, in many instances, the originators of disease and misery in mature life.

PARTICULAR EFFECTS OF SPERMATORRHŒA.

The general effects already described may follow from great seminal loss occurring in any way, but when that loss is involuntary their effects are usually more severe, and several others are also experienced that do not always accompany voluntary indulgence, even when excessive. In fact involun-

tary loss is generally indicative of extensive and confirmed disease, and of course its symptoms are most severe.

Some of the first effects are exhibited upon the parts more immediately connected with the Genitals, particularly the Urinary Organs. The irritation speedily extends from the Ducts and Vas Deferens to the Urethra, and finally to the Bladder, which becomes in consequence so sensitive that it cannot retain the smallest quantity of urine without inconvenience. The patient is therefore constantly desirous to urinate, though but little fluid escapes when he does so, and is thus kept in a state of continual annoyance, so that he dislikes to join company, or to go anywhere in public, for fear that he should not find opportunities for relieving himself.

I have known men made completely wretched in this way, and in one case, very recently, the individual was compelled to give up a profitable and pleasant occupation, merely because he could not remain at his post sufficiently long at a time. Ultimately this irritation may become so bad that all voluntary power over the bladder is lost, and the urine then escapes constantly, without the patient being able to control it. This irritation of the bladder is usually one of the first indications that a man has exceeded the bounds of moderation, though it does not always occur, even in the most confirmed cases of involuntary emission.

When the irritation has existed long in the Bladder it is apt to extend along the Ureters to the Kidneys, and produce there all the symptoms of inflammation of the Kidneys, and of Gravel, with great weakness and pain in the back. It is difficult to convince many patients that they have not these

diseases, and still more difficult to show them, when they are uninformed, how their troubles really arise. In fact I have known numerous cases where physicians themselves have been deceived, and where they have prescribed for these mere symptoms, supposing them to be the primary disease, without ever suspecting the truth.

Another part very apt to suffer from *Spermatorrhœa* is the Rectum, or large intestine, which is in direct communication with the Prostate Gland and Seminal Vesicles, as may be seen by the Frontispiece. In some persons there is a constant feeling as if the bowels were about to be moved, with a bearing down sensation, and a partial protrusion of the Intestine. In others there is a general uneasiness around the Anus and Perineum, which causes the patient to be continually shifting about on his seat, and moving as if he were in pain. Occasionally there is considerable irritation, or itching, and very often severe *Piles*, from the circulation of the blood being impeded. In short the Rectum may be affected in many different ways, and so may the rest of the intestines, from their connection with it. Sometimes there will be a partial paralysis of their muscles, from the deprivation of nervous power, which, by arresting the peristaltic motion will cause obstinate constipation. At other times the mucous coat partakes of the general irritation, and then we have *Diarrhœa* exhibited, and no medication whatever can check it so long as the *Spermatorrhœa* continues.

Another symptom of *Spermatorrhœa*, sometimes met with, is a peculiar irritation of the Urethra, and Meatus Urinarius, or external opening from the Penis. This irritation is sometimes very slight, and

only experienced after urinating, but at other times it becomes quite severe, and pretty constant, resembling in fact a real Gonorrhœa, and being even accompanied by a discharge, showing the existence of inflammation. Many men have become much alarmed from this symptom, supposing it to be an infectious disease, and in several instances I have known it the cause of mutual suspicion and much domestic unhappiness.

These local effects are usually the precursors of more general and severe ones, the connection of which with the true cause of all it becomes more difficult to trace. In addition to a universal lassitude and weakness there is experienced a remarkable loss of power in the lower limbs, owing to which the patient finds it impossible to walk far, or to stand long upon his feet, without being overcome with weariness, and feeling numbed in the legs and thighs. The slightest exertion makes him tremble and look pale, his heart flutters, or stops beating altogether, and he experiences a tendency to faint.

This distressing debility is sometimes so excessive that the individual becomes almost unable to move, and yet he may not be much fallen away, nor look very sick, so that uninformed persons are apt to think it is mere idleness, or pretension. In the course of time, however, the stomach begins to suffer, and becomes so weak that digestion is imperfectly performed, and then emaciation follows, which sometimes becomes a complete and rapid wasting away. The loss of nervous power sometimes affects the Diaphragm more especially, and then there is great difficulty in breathing, which, with other sensations, leads to the belief that the Lungs are diseased. And when this occurs along

with palpitation of the heart, which originates much in the same way, the poor patient is in a state of constant worriment and fear, nothing being able to convince him that he has not Consumption and Heart disease all at once.

The head is not exempt from the general influence, and headache, rush of blood, dizziness, and constant drowsiness are commonly complained of. Partial dimness, or loss of sight, is also frequently observed, as if a cobweb had been spread over the eye, which fills with water, and looks red, on the slightest extra use of it. The eyelids, however, are more disposed to inflammation than the eye itself, and it is impossible to do them any good while the Spermatorrhœa exists.

The most marked effects, however, are exhibited in the *mind* and *feelings*. Mental activity becomes as difficult and unpleasant as bodily, and the patient becomes dull, listless, and moping, his memory fails, his judgment weakens, and all power of application seems lost. When he sits down to study anything the powers of the mind appear to wander, so that he cannot bring them to bear on the desired point, and often he wakes up from a kind of dream and finds that he has quite forgotten the subject altogether. This listless abstraction often gets so bad that the individual is unfit for business of any kind, and not unfrequently it degenerates into insanity. I have known several instance of men failing in their business from this cause, and I have no doubt but that it is oftener connected with human mistakes and errors than people suppose. In youth especially this effect is a very serious one, and the bright prospects of many a promising young man have been crushed in this way, without either him-

self or his friends, perhaps, being able to tell the cause. If the records of College and business failures, and of our lunatic asylums, could all be properly written, the number of victims in each who have been made so by this disease would astonish every one. And probably we may add also that *moral* failing has not unfrequently had the same origin.

The feelings and dispositions of patients of this class, in most cases, undergo as decided changes as their mental powers, and equally to their disadvantage. Sometimes they become melancholy, and sensitive, to such a degree that they burst into tears from the slightest cause, and constantly think they are purposely subjected to trials and insults that no one around them dreams of. At other times they become irritable and peevish, keeping all around them in as great a state of irritation as themselves, and firmly believing they are the most ill-used people in the world. Occasionally there is some peculiar form of Monomania exhibited, one person believing that he is constantly pursued by some enemy, who wishes to deprive him of his life or fortune, while another as firmly believes that some terrible misfortune is about to overtake him, from which he can by no effort whatever escape. It is but seldom there is any tendency to violence exhibited, at least towards others, the powers being too much depressed, but sometimes the patient will injure himself. Many instances are on record of monomaniacs, of this class, *castrating themselves*, under the idea that they could never be better while the Genital Organs remained. In general there is a decided aversion to the opposite sex, and a shyness and embarrassment in approaching them.

Many reputed *hermits* and *woman-haters* have been men of this kind.

In short there is no end to the aberrations and vagaries of mind and feeling induced by continued Spermatorrhœa, as will be evident on reading the following cases, which will better exhibit the peculiar features of these cases than any mere general description.

There is one melancholy effect of this disease occasionally seen which I would willingly pass over, if it were not necessary to disclose the whole truth, so that the real extent of the evil may be seen.

The effect I refer to is a tendency to *unnatural habits and vices*, which in such cases Charity bids us look upon as resulting from a diseased brain, sympathizing with the derangements of other parts.

The following cases are selected partly from My own Note-book, and partly from M. Lallemand's celebrated work, "*Des Pertes Seminales.*"

Case 1. (Communicated by Dr. McDougall, in the preface to his Translation of Lallemand.)

"R. H——, æt. thirty-nine, passed the early part of his life in the country, and was in the habit of taking much and violent exercise. About the age of sixteen, he entered a banking establishment in London, in which by great diligence and steadiness of conduct he rose before he was twenty-five, to the post of cashier. The affairs of the house fell into disorder, and ultimately a bankruptcy occurred; Mr. H——, from the amount of confidence reposed in him by the partners of the firm, was much harassed during these unfortunate proceedings. Soon afterwards he became manager of

a large mercantile establishment in the city, and about this time commenced some speculations in foreign bonds. From fluctuations in the share market he was a loser to a considerable extent; his mind was much harassed and he began to suspect those about him of dishonesty towards their employers. On investigation these suspicions were proved to be totally unfounded; Mr. H—— gave way to great violence of conduct, and resigned his situation. About this time his father died; and Mr. H—— was much disappointed at finding that property, which he had incorrectly believed entailed and consequently his, as eldest son, was left by will to be equally divided between himself and the rest of his family. His conduct at this period was of the strangest description. He dreaded to go out into the streets of the town where his family resided, refused to join in their meals, and ultimately abruptly left their house to return to London. In 1837, his state had become such that in consequence of his repeated letters, members of his family visited London, and on their return took him with them into Devonshire. About this time his mental disorder put on a decided aspect; and I had then, as well as later, ample opportunities of observing his conduct; and frequently heard his complaints. Emissaries were constantly on the search for him to arrest him for *unnatural* crimes committed in London; every one who met him in the street, read in his countenance the crimes he had committed; tailors made his coats with the sleeves the wrong way of the cloth, in order to brand him with infamy; the sight of a policeman in the street alarmed him beyond measure; and often, if a stranger happened to be walking for some little time in the same

direction as himself, he would exclaim that he was one of the emissaries sent to seize him. At other times he would lock himself in his room and weep by the hour. He never took his meals with the family, and never tasted food or drink, without first preserving a portion for chemical analysis, as he was convinced his friends were in a conspiracy to poison him slowly, in order to wipe out the memory of his crimes. These ideas haunted him night and day. His digestion was much disordered; his sleep broken and restless, and his bowels excessively constipated. His face was flushed, and periodical attacks of cerebral excitement occurred, during which he complained of vertigo, noise in the head, loss of sight, &c. He complained also of loss of memory, and frequently of bodily weakness, and lassitude. The best medical advice the neighborhood afforded was obtained, unavailingly; the opinions of the gentlemen consulted, were that Mr. H——— was laboring under aggravated hypochondriasis, complicated with monomania. Various causes were suggested as giving rise to the disorder, but no previous case of insanity was recollected in any branch of the family. Mr. H——— now began to talk of leaving England for America, in order to avoid his persecutors; and to prevent this he was placed under the care of a private keeper. While with this person he frequently and bitterly complained of constant pollutions while at stool, with darting pain, and a sense of weight between the rectum and bladder. He had also urethral irritation attended with discharge, pains in his loins, and in one groin, weakness of his legs, thick urine, piles, and obstinate costiveness. He kept a diary at this time, which is at present in my hands. Not a day is passed in this

diary without mention of the distressing seminal discharges from which he suffered. These were treated as of no importance by his medical attendants, although he never ceased to complain of them, and solicited aid so long as he continued in confinement in England. When led away from his disorder into any discussion on public matters, he was, however, a most amusing and instructive companion; as a man of business he was equally acute, and to a stranger as long as nothing was done to offend him he was, to all appearance, a man of observation and experience in life. For about two years and a half he was under the care of various gentlemen, devoted to the insane, and at length he was discharged from an establishment near Bath, by the visiting magistrates, as a person confined without due cause. His first act was to commence legal proceedings against his friends for his detention, and having gained his action, he immediately proceeded to London, and waylaid and violently assaulted a gentleman of high commercial standing in the city. After this offence he was confined for a considerable period in default of bail, and immediately on his liberation it is believed that he proceeded to America. From this time nothing was heard of him until September, 1843, when a letter was received by a gentleman who formerly attended him, in which he stated that the same course of persecution was pursued towards him in America, as had been followed in England. He complained of not being able to obtain efficient medical treatment, although he had applied to the most eminent practitioners at Cincinnati, and afterwards at Philadelphia and New York. After this, nothing more was heard of Mr. H—— until the year 1845, when

an American newspaper was forwarded to his friends by an unknown hand, containing an account of his death, and of an inquest held on him headed 'Death of a Hermit in West Jersey.' It was stated that he had lived on a small farm, entirely alone, with the exception of a dog, and that he had shunned all intercourse with his neighbors. He was taken suddenly ill, applied to a neighboring farmer for assistance, but died in the course of the following day. From information subsequently obtained by his friends, it is believed that he died of apoplexy, or perhaps, in one of the attacks of congestion of the brain, from which he frequently suffered before he left his native country.

"The symptoms of this unfortunate case strongly resemble those of the thirty-second and fifty-sixth cases related by M. Lallemand. It was more aggravated, however, and presented the somewhat uncommon feature of the patient's discovering the frequent pollutions, and constantly complaining of them; these, unfortunately, were treated as matters of no importance. Mr. H——'s insanity at first, constantly had reference to his having either committed or been accused of committing unnatural crimes, and this idea never entirely left him, although during the latter part of his life, his more prominent hallucinations had reference to imaginary persecutors constantly watching him, and endeavoring to ruin him by spreading false reports, and to poison him by adulterating his food, and infusing noxious gases into the air. There can be little doubt, on taking into consideration his complaints of weight between the rectum and bladder, with darting pains, &c., in the same region, that the pollutions arose from irritation in the neighborhood of

the prostate ; and I think, that if at an early period of his disease this had been relieved, there would have been considerable hope of his recovery from the hallucinations he manifested."

This case I have selected as one that gives a great number of the symptoms usually observed, and as being well calculated to give a correct idea of the immense series of evils that often follow from this disease. The next case is also one of Dr. McDougall's, and is equally instructive. It is a perfect copy of numbers that have come under my notice.

"The other case to which I have alluded as particularly attracting my attention, and which came under my notice about the same time, was that of a young man of high intellectual power and general talents, studying medicine. This gentleman was one of my most constant companions, when almost suddenly, a serious change came over him—he shunned society, especially that of females, was morose, taciturn, and frequently shed tears ; he sat sometimes for hours in a kind of abstraction, and on being aroused from it he could give no explanation of his thoughts and feelings ; he constantly expressed to me his conviction that he should never succeed in his profession, and frequently exclaimed, that he was ruined both here and hereafter—body and soul—and by his own folly. About twelve months previous to this depression of spirits, he had a very severe attack of blennorrhagia, with orchitis and phymosis. This left a degree of irritability in the bladder, which required him to pass urine frequently. His digestion became so disordered that the simplest food would not remain on his stomach,

and he had frequent eructations of fluid, which blazed like oil if spit into the fire. This gentleman's father was a physician, and being naturally anxious for his son, obtained for him the advice of many of the most eminent of the faculty. No improvement took place however. After he had been six months in this state, I had an opportunity of spending three weeks by the sea-side, and my friend accompanied me. We slept in the same room, and he was scarcely ever out of my sight. Before our return, his health was almost re-established, and his spirits had returned to their natural condition. Twelve months later, however, he again fell into the same state of despondency, and this time his condition was much worse than on the former occasion. He frequently remained in bed three parts of the day, and no threats or entreaties on the part of his father, could induce him to get up. His intellectual faculties were totally prostrated, and a vacant stare, which took the place of his natural lively expression, induced considerable fears of his ultimately becoming idiotic. I was the only person who possessed any influence over him, which may perhaps be attributed to his feeling that I was aware of the cause of his disorder. This state continued between three and four months, during which time I was with him as much as my other duties would permit, and frequently showed him the folly of the course he pursued. At the expiration of this time he gradually recovered. He has since had a slight relapse once only; he has pursued his professional studies with success, and is at present a medical officer in her Majesty's service.

On this case, I need not only remark, that the symptoms did not arise from involuntary seminal

discharges, but from excessive discharges caused by abuse. The various treatment recommended by the distinguished practitioners consulted, proved unsuccessful, because the origin of the disorder was unrecognised, and the remedies consequently useless, while the habits of abuse were continued."

The following case is one of M. Lallemand's, and is chosen here as an illustration of the fact, already stated, that this disease may exist and become very serious, in married persons. It also shows how physicians may easily mistake the symptoms for those of other affections.

"In the month of January, 1824, I was requested to see M. De S——, affected with symptoms of cerebral congestion, from which he had suffered for some time. During several consultations I gathered the following facts.

"M. de S—— was born in Switzerland of healthy parents, and his father died suddenly of affection of the brain. M. de S——, possessing a strong constitution and an active mind, received an excellent education, and at an early age turned his attention to the study of philosophy and metaphysics; he afterwards studied moral philosophy and politics.

"After having spent some years in Paris, pursuing his favorite subjects, he was obliged to undertake the management of a manufactory, and to attend to details which wounded his pride. He became, by degrees, peevish and capricious—passed, without apparent cause, from an extravagant gaiety to a profound melancholy—was irritated by the slightest contradiction—showed no pleasure at fortunate events—and gave way to anger on improper

occasions ; at length he appeared to feel disgust and fatigue at correspondence or mental exertion.

“ At this period he married, and Dr. Butini of Geneva, his medical attendant and friend, wrote respecting him as follows :—

“ With this marriage the most happy period of his existence seemed to commence ; but soon the germs of the disease, which so many causes had contributed to produce, became rapidly developed. It was perceived that M. de S—— wrote slowly and with difficulty, and his style presented signs of the decay of his faculties ; he stammered and expressed his ideas very imperfectly ; he experienced, also, at times, attacks of vertigo, so severe as to make him fall, without, however, losing sensibility, or being attacked by convulsions.’

“ One day an attack which frightened the patient seriously, and left a deep impression on his family, came on whilst writing an ordinary letter. His medical attendants attributed this attack, which left a weakness of the right side of the body, to apoplexy. Twenty leeches were applied to the anus, and the danger seemed at an end.

“ Similar attacks, however, occurred at Geneva, Montpellier, and several distinguished practitioners were consulted : some of these, struck by the misanthropic irritability of the patient, and his solitary habits, regarded the affection as purely hypochondriacal or nervous ; others, taking into consideration his digestive disorder, considered it an affection of the liver ; but the great number were of opinion that there existed a chronic affection of the brain, such as encephalitis, or chronic meningitis, arising from hereditary predisposition. This last opinion was held by Dr. Bailly, (of Blois).

“At all these consultations, the necessity of abstaining from serious occupation, the utility of travelling—of various amusements, and of a strict regimen—and the importance of free evacuations from the bowels by means of purgatives and injections—were agreed on. Many of the practitioners recommend the frequent application of leeches to the anus, with milk diet, &c. ; others thought that assafœtida, baths, and camphor, were indicated.

“None of these modes of treatment produced any considerable amendment ; the leeches weakened the patient, and the milk diet disordered his stomach. His constipation continued. Cold plunge baths, and cold effusion to the head, relieved the insupportable spasms M. de S—— experienced in his legs and face ; the waters of Aix, in Savoy, and the use of douches also appeared to produce some improvement.

“Still M. de S—— became more irritable, and at the same time more apathetic. His attacks were more frequent and more violent, and he manifested greater indifference towards the persons and things he had before been partial to. The weakness of his limbs increased to such an extent that he frequently fell, even on the most level ground. His nights were restless, his sleep very light and often interrupted by nervous tremors, or acute pains accompanied with cramp. The cerebral congestion increased, and the imminent fear of apoplexy rendered leeches to the anus, venesection in the foot, tartar-emetic ointment, blisters, mustard pediluvia, and the application of ice to the head, necessary.

“Notwithstanding the employment of these energetic measures, another violent attack of congestion occurred. I was summoned on this occasion, and I found the patient restless, agitated, and incapable of

remaining two minutes in the same place ; his face was red, his eyes projecting, injected, and fixed, his physiognomy expressed extreme dread ; his walk was uncertain, his legs bending under the weight of his body ; his skin cold, and his pulse small and slow.

“The last circumstance attracted my attention, and I also recommended the application of leeches to the anus. M. de S—— immediately threw himself into a violent passion and asserted that leeches had *always weakened him without giving him any relief*. I was too much afraid of the occurrence of apoplexy to pay attention to this assertion, and I succeeded in obtaining the application of six leeches.

“The next day I found the patient very pale, and so weak that he was unable to walk—a source of much annoyance to him, as he manifested a constant desire for motion. An œdematous swelling of the parotid gland and of the right cheek followed, which was succeeded, a few days after, by a similar state of the left leg and foot.

“Sleep had become indispensable, and the patient was much reduced from the want of it ; he told me with tears in his eyes, that he had lost his appetite, and could no longer relieve his bowels. I also learned that he was habitually costive and flatulent ; that he often had recourse to injections and purgatives in order to relieve his obstinate constipation ; and, lastly, that his walks, and the evacuation of his bowels had lately become the sole objects of his thoughts and conversation.

“Having observed analogous symptoms in almost every person affected by diurnal pollutions, I made further inquiries respecting the attack, in which it was supposed that the right side had been paralyzed, and I was soon convinced that the intellectual pow-

ers had been wanting, and not the power in the hand which held the pen: both sides of the body had, in fact, retained an equal degree of strength.

“Struck by a remark of Dr. Butini’s respecting the progress of the disease soon after marriage, I made inquiries of Mme. de S——, and learned that the character of her husband had become so uncertain, irritable, and tormenting, that his friends thought he must be unhappy in his marriage. I then suspected that the origin of the patient’s disease had been mistaken, and I requested that his urine might be kept for my inspection. The appearance of the urine was sufficient to convince me that my suspicions were well founded; it was opaque, thick, of a fetid and nauseous odor, resembling that of water in which anatomical specimens have been macerated. By pouring it off slowly, I obtained a flocculent cloud, like a very thick decoction of barley; a glairy, ropy, greenish matter remained, strongly adherent to the bottom of the vessel, and thick globules of a yellowish white color, non-adherent, like drops of pus, were mixed with this deposit. I was therefore convinced that spermatorrhœa existed, together with chronic inflammation of the prostate and suppuration in the kidneys.

“Notwithstanding the state of M. de S——’s intellect, I was able at a favorable moment to obtain further information. At the age of sixteen, he had contracted blennorrhagia; this he carefully concealed, and succeeded in curing by the use of refrigerant drinks. The following year the blennorrhagia returned and was removed by astringents. Two years afterwards, from drinking freely of beer when heated, the discharge again appeared, and after some time it again returned, from the effects of horse ex-

ercise. Since that time M. de S—— had felt little sexual desire, and had abstained from intercourse without regret. Ejaculation during coitus had always been very rapid. Fully convinced by combining all these circumstances, I explained to M. de S—— the nature of his disease, and he promised me to observe carefully.

“The next day he called me aside, and told me that the last drops of urine were viscid, and that during an evacuation of the bowels, he had passed a sufficient quantity of a similar matter to fill the palm of his hand.

“Eight days after, another attack of cerebral congestion occurred, followed by stertorous breathing, cold skin, and an inappreciable pulse; the patient fell into a kind of syncope, of which he died on the 1st of March, 1824.”

Not long since I had under my care the Editor of a Newspaper whose case was almost identical with the one above, and who was first made sick, as he informed me, by excessive agitation during an Election Campaign.

Constipation has been spoken of as a cause of Spermatorrhœa, but few persons would suppose it *could* have the effect that sometimes follow from it. The next case, however, will convince the most skeptical, and though it is not often that we have such a severe case, there are yet plenty that are bad enough.

“M. De B—— consulted me in the month of May, 1834, respecting a cerebral affection, on whose nature distinguished physicians could not agree, but which all regarded as very serious.

“He was of a middle height, with a large chest,

and a well-developed muscular system; his hair brown and curly, his beard thick, his face full and deeply colored. Notwithstanding these signs of apparent strength and health, I noticed that his knees were slightly bent, and that he was unable to remain long standing without shifting the weight of his body from one leg to the other; his voice was weak and husky; the motions of his tongue seemed embarrassed, and he articulated his words in a confused manner; his attitude was timid, and his manner had something of incertitude and fear; he had been married fifteen days.

“His mother-in-law and his young wife, who accompanied him, informed me that within this period he had several attacks of congestion of the brain, during which his face was highly injected. At the first of these attacks the surgeon, called in the night, had bled him to the extent of three pounds, *in order to prevent apoplexy*; repeated venesection, and the frequent application of leeches, had relieved such attacks of congestion, but had not prevented their recurrence. The patient had become subject to attacks of vertigo, and was unable to look upwards without feeling giddy; his legs had become so weak that he had fallen several times, even when walking on level ground; his ideas had lost their clearness, and his memory failed rapidly.

“These symptoms had spread consternation through both the family of my patient and that of his wife, especially as several practitioners of reputation were agreed as to the existence of some serious disease of the brain, although they could not decide as to its nature. Most of them, however, were inclined to suspect *ramollissement*. (Softening.)

“The countenance of the patient during this re-

cital, the coincidence of the congestion, with the period of his marriage, and the bad effects of blood-letting, made me suspect the nature of the disorder, and induced me to question the patient separately. When we were alone he told me, stammering, that an unexpected occurrence, immediately after his marriage, had at first prevented any conjugal intimacy, and that afterwards he had found himself completely impotent. He attributed this misfortune to the attacks of cerebral congestion, and to the bleedings he had undergone. On further inquiry, however, I discovered that he was affected by diurnal pollutions.

“The following is the history I obtained from this patient by dint of questioning:—at the age of sixteen, he possessed a very strong constitution, and an ardent and passionate character. At school he contracted the habit of masturbation, and at the end of three months he had frequent nocturnal pollutions, with pain in the chest and troublesome palpitations, which warned him of the danger of the vice, and he renounced it forever. When he became free from the restraints of school, he subdued the ardor of his temperament, by the most violent exercises—especially that of the chase—and he attached himself to agricultural pursuits with much energy.

“This new mode of life so completely re-established his health, that he was tormented by energetic, and continual erections, to subdue which, he employed river-baths, even in the coldest seasons. He never committed excesses of any kind, and had never suffered from any blennorrhagic or syphilitic affection.

“In 1831, the erections were slightly mitigated,

but he became very much constipated, which he attributed to the constant use of horse exercise.

“In 1832, he experienced some numbness and creeping sensations in his feet and legs.

“In 1833, frequent dazzling of sight occurred with vertigo, difficulty of vision, and flushes of heat, towards the head and face, the patient attributed all these symptoms to the effects of his still increasing constipation.

At the same time that these symptoms occurred, the patient's erections became rarer, less energetic, and after a time, incomplete; his fitness for intellectual labour diminished; the cerebral congestions became more frequent, and more severe; his face became habitually very red; his head burning; an almost constant fixed pain came on in the orbits, and his character became fickle and contradictory.

“His family physician, attributing all these disorders to a state of plethora, caused blood to be drawn several times, without benefit.

“In March, 1834, M. De B—— engaged himself to a young lady, who lived about two leagues from his estate; and in order to visit her without neglecting the care of his property, he was obliged to make long and frequent journeys on horseback; shortly before his marriage, these journeys became so frequent, that he might be said to pass the greater part of his time on horseback. His constipation now increased to such a degree, that he passed forty days without fæcal evacuation; during his efforts at stool he passed semen in large quantities, and in jets, although the penis remained flaccid. He had previously, several times, noticed the same occurrence, but as he attributed it to his long-continued continence, he paid little attention to the circum-

stance. His urine was constantly muddy ; it was passed slowly, and with difficulty, and threw down a large quantity of thick and flocculent deposit.

“ M. De B—— awaited the period of his marriage with a vague uneasiness, of which he could not imagine the cause ; he was much attached to his betrothed, but, nevertheless, he experienced more embarrassment than pleasure in her society.

“ I have already stated what occurred after his marriage, I should add, that having examined his genital organs, I found them, contrary to my expectations, of unusual development, the Testicles were large and firm, but the scrotum was slightly relaxed. The patient experienced a strange tingling in the organs, and at times felt as if they were compressed by a hand of iron. These sensations increased when near his wife, and the penis diminished in size, and became retracted towards the pubes, in proportion as he endeavored to excite erection.

“ The union of all these circumstances could not permit any doubt to remain on my mind as to the nature of his disease ; it became evident that all idea of cerebral affection must be abandoned, and that the diurnal pollutions, with all the symptoms of which they were the cause, must be referred to the patient's constipation.

“ The first indication to be fulfilled, therefore, was to relieve the constipation ; indeed I hoped this was all that would be necessary : the youth of the patient, the development of his genital organs, and the strength of his constitution induced me to suppose that his cure would be prompt and easy. Things did not, however, follow so simple a course.

“ The next day the patient began to use ascend.

ing douches ; and was put on a vegetable diet, with iced-milk.

“ The first douches caused the evacuation of an immense quantity of fæcal matter in lumps, as hard as bullets, and it was not until after the sixth douche that the fæces were of normal consistence ; I then caused the temperature of the water to be lowered to 25° of Reaumur’s* scale, and afterwards to 20° Reaumur.† The last few douches were given at 16° Reaumur.‡ After the twelfth douche had been administered, they were omitted, the bowels having acted regularly every day, without the necessity for the slightest straining.

“ By this time the patient’s countenance had lost its purple tint, and presented a more natural appearance : the stunning sensations of which he had complained diminished by degrees, and at length disappeared entirely ; his legs regained their strength, and he was able to continue in a standing posture for a long time without fatigue, and to take long walks without inconvenience ; his voice resumed its natural tone, his eye regained its expression, and all his motions acquired firmness.

“ At the expiration of a fortnight the spermatic discharges during defecation had ceased entirely ; but his urine still continued thick. His erections had already acquired sufficient energy to make him believe himself cured, but ejaculation took place almost instantaneously. The use of ice and cold lotions did not ameliorate his condition.

“ Such was M. De B———’s state at the end of a month ; when, in order to act directly on the orifices

* About 88° of Fahrenheit.

† About 81° of Fahrenheit.

‡ About 68° of Fahrenheit.

of the ejaculatory ducts, I determined to cauterize the prostatic portion of the urethra. As soon as the inflammation had subsided, his erections became more perfect and energetic; yet ejaculation still took place too rapidly. The period for using the mineral waters having arrived, I sent M. De B—— to Aix, in Savoy, where I visited him shortly after. He had experienced very little benefit from the use of the waters, either externally or internally.

“I now prescribed douches, alternately very warm and very cold, on the perineum and loins, the spout being changed when the sensation, either of cold or heat, became very intense. The bath was ended after about twenty or twenty-five minutes, by the cold douche, and the patient's skin remained highly injected for some hours afterwards.

“The effects of these douches were conclusive; after the first, the patient's erections acquired a degree of vigor and duration which reminded him of his early torments. He continued the use of the douches for some days after his re-establishment; and when he left Aix the functions of his genital organs were perfect. Ejaculation was a good deal protracted by the use of the douches.

“I have entered into a somewhat lengthy detail of this case, because the subject affects gravely the most serious interests of society, as well as the happiness and peace of families. Besides, I confess that I was much interested by the unhappy position of a young man whose misfortune was undeserved, and could not have been foreseen, as well as by that of his wife—a young woman scarcely of age, who was obliged to enter into the most unpleasant details.

“It is evident that in the case of M. De B——,

the constipation was the cause of the involuntary seminal discharges. The patient had practised masturbation it is true, and nocturnal emissions followed; but he had continued the vice only three months, and his health, though disordered for a short time, was soon re-established by the use of violent exercise. M. De B—— was even tormented during several years by erections, which must have been very energetic, if we may judge by the means he took to subdue them. From this time he had never committed any kind of excess, and he had never suffered from either blennorrhagia or syphilis. There is then no circumstance in the history of his life, except his constipation, which would account for the involuntary discharges.

“But to what is this constipation to be referred? After all I could learn from the patient concerning his mode of life, I could only refer it to his constant horse exercise. In fact, M. De B—— sometimes passed whole days on horseback, either for the purpose of hunting, or of superintending the management of his property. Shortly before his marriage his rides became more frequent and longer, and his bowels at this time did not act during forty days. The weakness of his legs, the stunning sensations, &c., increased in proportion as his costiveness became more confirmed.

“This case recalls to my mind the well-known observation of Hippocrates on the impotence of the Scythians, and I have no doubt that his opinion was founded on analogous facts. I shall treat this subject more fully in another place; but since at present I am considering the causes of Spermatorrhœa which act on the seminal vesicles through the influence of the rectum, I report this striking case,

showing the effects of long-continued horse exercise.

“ M. De B——— was accustomed to nutritious food, and of a well-marked sanguineous temperament ; he had a large chest, powerful muscles, and a highly injected countenance ; it is therefore by no means extraordinary that he should have been bled frequently for the relief of the cerebral congestions to which he was subject. On the night of his marriage the blood rushed to his head with greater force than ever, so that an attack of apoplexy was much feared ; the weakness of the legs, the frequent falls, and the attacks of vertigo, were therefore afterward attributed to an advanced stage of disease of the brain. This was a very natural opinion, but it was an incorrect one ; I doubted it from the commencement, although the patient was brought to me in consequence of a supposed cerebral affection. I formed a different impression, because I had previously seen many analogous cases. There exists in all these patients something peculiar in the expression of the eyes, in the position, in the voice, and in the general appearance ; something of timidity and bashfulness which I am unable to express, but which is instantly recognised by the experienced, although perhaps it is incapable of explanation. However this may be, the relation of the above case should draw attention to the subject.

“ I admit that venesections *seemed* to be clearly indicated in the case of M. De B———, but the loss of blood never produced good effects either immediate or remote ; and by analyzing the case carefully, his attendants would have seen that under this treatment the attacks increased in frequency. But pre-convictions throw a thick veil over the most acute perceptions.

“The ascending douches put an end to the constipation; but freedom of fæcal evacuation did not suffice to cure the disease. The seminal discharges, during the passage of fæces, diminished, indeed, or perhaps entirely ceased, but the patient’s urine remained thick and muddy, and his erections were incomplete. The application of ice and of the nitrate of silver, and the use of sulphurous waters, were not sufficient to effect this cure; yet there could not have existed any organic change in his genital organs. We can therefore only attribute the continuance of the seminal discharge, during the emptying of the bladder, to relaxation of the ejaculatory canals, produced by their long habit of allowing the semen to escape in a passive manner—showing how necessary it is to put an end to the habit as early as possible.”

The next case shows the effects of *worms* in the Rectum, both in producing and keeping up the Spermatorrhœa, and also in first leading to *Masturbation*, in childhood.

“M. R——, a student of medicine, enjoyed good health in his childhood, but about the age of fifteen was tormented by frequent and prolonged erections. One evening, for the relief of the itching, of which the extremity of the penis was the seat, he rubbed the organ violently between his hands. This led to the establishment of masturbation as a habit or rather as a passion, the patient practising it sometimes as often as eight or ten times a day. His health by degrees became so altered that one of his friends suspected his practices, and told him the dangers of his situation. By degrees he corrected

himself, though not entirely before he had attained his twentieth year. On his renouncing masturbation, nocturnal emissions supervened, and often occurred two or three times a night. They diminished after a time, but without ceasing entirely, and seminal emissions during defecation and the emission of urine were added to them. Thus his health became daily more and more disordered for nine years, notwithstanding absolute continence, a severe regimen, and the use of sedatives, tonics, and anti-spasmodics. At length he grew incapable of any mental exertion. In 1837, he came to Montpellier, at the age of twenty-nine, in the following condition:—Extreme emaciation; face pale; appearance stupid and confused; intellect dull; reasoning powers much affected, the patient being incapable of connecting two ideas on the most simple topic of conversation; loss of memory; constant headache referred to the forehead and temples, and increased by any mental excitement, being then accompanied by nervous tremors, and an almost idiotic state; sleep broken and unrefreshing; constant sighing; frequent attacks of congestion of the head, especially at night; violent noise in the ears resembling the sound of a waterfall; vertigo; stunning sensations giving rise to a constant fear of apoplexy; timidity carried to a ridiculous extent; panics of fear even during the day; character gloomy, taciturn, restless, and irritable; horror of the least noise, and of all society; irresistible restlessness; great weakness; abundant sweats after very slight exertion; almost constant coryza; frequent, dry and hard cough; pains in the base of the chest, the region of the heart, and along the spinal column; appetite voracious; dragging at the pit of the stomach; difficult

digestion, accompanied with the development of flatus; grinding of the teeth during sleep; burning at the point of the tongue; darting pains in the bowels, especially in the rectum; obstinate constipation alternating with violent attacks of diarrhœa; stools containing much mucus, and sometimes streaked with blood; periodical pains at the margin of the anus, in the perineum, penis, and testicles; urine passed in large quantities, and very frequently, always throwing down a whitish, thick, and very abundant deposit, involuntary emissions during defecation, both when constipated and relaxed; frequent and prolonged erections by day as well as by night; with constant presence of erotic ideas.

“On sounding this patient, I found the urethra very sensitive, especially towards the neck of the bladder, and I consequently thought that the nocturnal and diurnal pollutions were kept up by a state of irritation arising from masturbation. I therefore proposed cauterization. This was performed on the following day, and produced the usual *immediate* effects, but its *curative* effects did not take place as I had anticipated. I then directed the patient to notice his fæces, and a few days afterwards he told me that he had observed numerous little worms passed in his stools. I now ordered enemata of cold water, and salt and water, which, however, produced only a momentary effect—probably because the ascarides inhabited the upper part of the intestine. A few doses of calomel however, caused them to disappear without returning; and from this moment the involuntary diurnal emissions ceased entirely, the nocturnal emissions became more and more rare, and the patient's re-establishment progressed very rapidly. M. R—— returned to his

studies with ardor, and long afterwards all functions were perfectly well performed.

“It appears evident that the irritation caused by the ascarides, in the rectum first led this patient to practise masturbation, and afterwards kept up involuntary seminal discharges. I did not discover this at first, because the history of his case, sent me by the patient, was so long, and was characterized by such disorder and want of clearness, that I was unable to arrive at any satisfactory conclusions from such a chaos; his answers were still more vague and unconnected, so that my attention had been chiefly attracted to the state of his intellect, and the abuses he had committed. But after seeing the little success of cauterization, and again reading his notes, I paid more attention to the circumstances attending the commencement of his practising masturbation, and I noticed several symptoms to which I had not before attached importance, such as grinding of the teeth during sleep; burning pain in the point of the tongue; pain in the rectum, and at the margin of the anus; the stools always containing mucus, and sometimes being streaked with blood; and especially the frequency and duration of the erections, and the constant presence of erotic ideas.”

I have met with many instances in which great irritation of the Genitals was produced by worms, and I have no doubt but that the tendency to Masturbation is often caused by them, *in both sexes*, a fact that parents should bear in mind.

That the tendency to Spermatorrhœa is often *hereditary*, I have no doubt, and I have met with some remarkable proofs of it in the course of my practice, but as they are not of a nature to be

readily understood by those not accustomed to observe them it is not necessary to give the details. I have known many instances of brothers, in one case of *five*, all of whom suffered from excessive involuntary emissions, *at the same age*, and without being addicted to abuses of any kind.

Peculiar congenital predispositions often exist, particularly in those of a nervous character, though few practitioners are aware of their real extent. M. Lallemand gives some excellent illustrations of these kind of cases, and I can select many such from my own note-book. The following will, however, be sufficient.

“In general such patients were of sickly constitution and more or less marked nervous temperament, they had been delicate from childhood, and subject to various spasmodic disorders. Some of them presented involuntary twitching of the muscles of the face, hesitation of the speech, &c. ; their imagination was active, and their moral and physical sensibility very acute. They were very restless and bore contradiction, or mental excitement, badly.

“In childhood they presented local symptoms, which indicated peculiar susceptibility of the urinary organs, every impression of fear or anxiety showing itself in this direction. What would have produced shuddering or palpitation in other children, in them caused a secretion of clear watery urine, which they were obliged to discharge frequently ; a sense of constriction of the hypogastrium, and a sense of titillation generally accompanied its discharge. This condition of the urinary organs, continued more or less severe in all the

cases until after puberty, when it became joined with other symptoms. One of these patients one day experienced at the age of sixteen a fit of irritability and impatience, which, however, he succeeded in repressing; and he then felt sudden and impetuous desire of micturition: whilst emptying his bladder he perceived a large quantity of pure semen discharged with the last drops of urine. This occurrence was the forerunner of nocturnal and diurnal pollutions, which at the age of twenty-seven, had entirely ruined his health. Another, at the moment of competition for a college prize, was unable to find an expression he wanted: at the same time he felt a want to make water, which he resisted by firmly crossing his legs; but his impatience increased and he shortly experienced an abundant emission without either erection or pleasure. A third patient suffered in the same way under similar circumstances; he saw the moment approach for sending in his thesis, the more he endeavored to hurry the less freely his expressions flowed; at length, on hearing the clock strike, he suffered from so great mental disorder that he nearly fainted; at this moment emission took place. A fourth having mounted on a high gutter of a house to take some sparrows' nests, looked down into the court below, and was suddenly seized with such terror that he fainted; on recovering and escaping from his dangerous situation he found that he had had an abundant seminal emission. The same circumstance occurred to a fifth, who, in descending a ladder missed his footing and fell. Another patient told me that if he looked down from a height, or only fancied himself on the brink of a precipice, he felt a sense of contraction in the genital organs,

which passed rapidly to the base of the penis, and ended by causing emission. The motion of a swing produced the same effects in a seventh.

“Almost all these excitable persons were exposed to erection, and even to pollutions whenever they rode on horseback.

“Although all these involuntary discharges were caused by extraordinary circumstances, I should not have paid much attention to them if they had not been followed by nocturnal and diurnal pollutions, which the most trifling circumstance rendered very serious. The disease, however, did not always put on a serious aspect immediately after these singular accidents ; very often, indeed, it only injured the patient's health long afterwards ; but as its gravity could not be explained by any *occasional* cause, I feel myself compelled to admit the existence of a congenital increased nervous susceptibility of the genito-urinary organs. Every thing indicates, in fact, that the organs of these patients were rather excitable than weak and relaxed ; and this condition was congenital because manifested from the earliest infancy. This excessive sensibility of the genital organs is, however, not always preceded by a similar condition of the urinary apparatus.

“In all these cases, tonics and excitants always produced bad effects ; proving that the genital organs were not suffering from atony or weakness.”

SYMPTOMS BY WHICH THE SPERMATORRHŒA MAY BE DETECTED.

In addition to the effects already enumerated, there are several other symptoms of Spermatorrhœa

that are very useful to note, for the use both of the physician and patient. Some of them are such as are observed in various diseases, but others are peculiar to this affection, and enable us to ascertain its existence when positive evidence is not to be obtained.

Many persons suppose that in *all* cases the involuntary discharge of semen is indicative of disease, and it alarms them very much. In many cases, however, the emissions occur in those that are continent, from excess of semen, and may then be beneficial rather than hurtful. This is often the case when they are in great quantity, though this peculiarity is apt to alarm, from the idea that the injury is proportionate to the quantity lost. Mr. Lallemand remarks that :

“The most abundant nocturnal pollutions are far from being always the most hurtful. When they arise from true spermatic plethora, they often relieve erotic excitement, with its accompanying agitation, anxiety, uneasiness, and indefinable trouble in all the functions. They are followed by a general feeling of comfort ; the head becomes clearer, the ideas more rapid, and the motions more nimble ; there is more inclination to amusement, and to every kind of occupation. I admit that nocturnal pollutions do not often produce such good effects, but then they are not often the result of spermatic plethora ; they may too, easily lose their character, so that habit alone tends to make them more and more frequent. In the greater number of cases, however, these evacuations are of very little importance.

“But this state of excitement is too violent to

last long : by degrees the organs become fatigued. Deprived of their natural functions, and consequently, being unstrengthened by regular exercise, they may at last fall into a state of atony, or the seminal vesicles may preserve the habit of contracting, under the influence of slight or indirect excitement. The evacuations now produce effects quite opposite to those experienced in the beginning. There are on waking, feelings of discontent, idleness, weight in the head, disorder in the ideas, &c., but this condition passes off in the course of the day, and the patient is quite well on the following morning, if no further emission take place. After a time, these effects become more serious and lasting, and two or three days are required to remove them completely. There is, however, no disease as yet, because the economy is not as yet permanently disordered, but there is a degree of instability in the patient's health, a valetudinary condition, the progress of which it is necessary to arrest."

Lascivious dreams are usually considered only as causes of nocturnal emissions, but they are in fact produced, in most instances, by the excitement existing primarily in the Genital Organs, and are therefore symptoms of excessive vigor, in the first stages, rather than of weakness, or disease. So long as they only present pleasant images, without any disagreeable sensations, and are not followed by lassitude and weakness in the morning, they are not indicative of anything serious. But when these dreams are filled with filthy and disgusting ideas, horrible sensations, and night-mare, during which the discharge occurs without any pleasurable feeling, and is followed by distress next morning, they

are sure signs of disease. As a general rule the danger commences when the pleasurable accompaniments of the dream begin to fail, and when the discharge occurs without any sensations at all, or with disagreeable ones, it is truly a bad symptom.

Diurnal, or daily, losses of semen are in general worse symptoms than nightly ones, and they are especially bad if they occur spontaneously or from mere exercise. When they occur during the movement of the bowels, or while urinating, though they are usually indicative of a diseased state of the parts, yet they may be made much worse by constipation, gravel, and other affections of the neighboring organs, a fact that should be borne in mind when estimating their value. From not having these circumstances explained to them many persons lose semen in this way, perhaps for years, without knowing anything about it. When their attention is directed to the occurrence, however, it will generally be easy for them to detect the escape, whether it occur with the urine or after defecation. When with the *urine* there is a sensation as if something *heavier* than usual is passing, which creates a slight pricking or tingling sensation, and the urine looks thick and cloudy, with globules floating in it like half-dissolved gum-arabic. If the escape occurs during the movement of the bowels a similar sensation is felt, and the end of the penis will be found covered with a glutinous fluid, which sometimes drops, but rarely runs away. More frequently the flow does not take place till the movement of the bowels is over, and perhaps not till the patient is dressing himself; it then comes suddenly, the whole quantity being discharged at once. This is preceded by a kind of shock, felt in the perineum

and neck of the bladder, and sometimes with slight erections, accompanied by pleasure. In some cases a discharge occurs in this way of simple mucus, mixed with the fluids of the Prostate and Vesicles, and this should be suspected when losses of this kind are complained of, till a proper examination is made. These mucous discharges, however, never consist of more than a single drop, or two at most, and are quite thin and transparent, while the seminal emission is both thicker and more opaque, and in greater quantity. If the patient empties his bladder before going to stool the appearance will be more obvious, and if he observes a thick gummy discharge, during or after the passage of the bowels, there can be no mistake as to its being real semen.

It is more difficult to ascertain the presence of the semen when it escapes in the urine, because it is so diluted, and undergoes several changes, I shall therefore be particular to give all the indications that can be relied upon in such cases.—In the first place it must be recollected that the semen never escapes during the first flow of the urine, but always with the last few drops, or even after the bladder is fully emptied. There is in general the peculiar sensation already described, with slight pleasurable feeling, and a few spasmodic jerks of the neck of the bladder, by which the expulsion of the last drops is effected.—This is quite sufficient to distinguish spermatorrhœa from gleet, or a discharge from urethral inflammation, as in such cases the mucus always escapes with the first flow of urine, and is not accompanied by any of the sensations above described. The appearance of the urine also, if carefully noted, will nearly always be sufficient to indicate the nature of the affection. The presence of the semen

is nearly always indicated by the gum-like globules mentioned above, and also by numerous little irregularly-formed granules, somewhat like bran, which settle to the bottom of the vessel. These granules are soft, and fall down to the bottom of the vessel before the urine cools, without ever adhering to the sides, which distinguishes them from gravel. In short no other discharge furnishes anything like these granules, so that their presence is a sure proof of involuntary emission.

Sometimes patients have peculiar sensations in other parts of the body whenever a pollution occurs, thus some experience a pain in the nipple or back of the neck, some a cold chill and shivering, while others feel a burning heat round the anus, and after these sensations they always observe the flocculent deposit in the urine.

As the disease progresses the bran-like granules become fewer in number, and smaller, and at last almost totally disappear, so that the existence of the spermatorrhœa has to be ascertained by other symptoms. The urine is still clouded with the gum-like deposit, and there settles to the bottom a number of little brilliant *points*, something similar to what is seen in newly-boiled *mush*. Like the granules they are soft, and do not adhere to the vessel.—These different appearances result from the altered condition of the semen, which, as the disease progresses gradually loses its usual character, and eventually becomes totally changed.

I have known patients much engaged in study in whom involuntary emissions occurred in a very singular manner. They would experience, while sitting perfectly still, a sensation in the perineum or at the root of the penis, as if the parts were sud-

denly drawn together and pinched. So distinct and strong is this felt sometimes that the person immediately starts and compresses the part in his hands. The sensation lasts but a short time, however, and nothing further takes place, if he remains still, but immediately he begins to exercise, or the next time he urinates, a quantity of semen escapes. This shows that the emission really occurs when the sensation is felt, but there is no action of the muscles to expel it till the parts are in some way made to act for other purposes.

IMPOTENCE FROM INVOLUNTARY EMISSION.

Whenever impotence is not obviously owing to any of the causes enumerated in the previous part of this work, it is nearly always the result of pollution, and perhaps as a general rule it arises from this cause oftener than from any other. There are two modes in which it may be brought about by this cause, first by the destruction of the powers of the Genital Organs, from general weakness, and secondly from a peculiar change which it leads to in the semen. For erection to take place there is always needed the presence of healthy semen in the seminal vesicles, and if this does not exist of course no erection can occur, and impotence necessarily follows. Any cause, therefore, which impairs the vitality and health of the semen must lead to impotence, and no cause does so more surely than long-continued involuntary emissions.

The mode in which involuntary emission, or Spermatorrhœa, from any cause, affects the semen, appears to be this. It has already been explained how the Seminal Animalcules are produced from

certain little grains or vesicles, found first in the semen of the Testicles, which break open and allow the Animalcules to escape.

Now these little beings are the most essential parts of the seminal fluid, and without them it can neither act properly on the male organs nor impregnate the female ovum. If, therefore, their development is prevented Impotence and Sterility must result, and this is what really follows from Spermatorrhœa. It is necessary for the semen to remain a certain time in the Vas Deferens and Vesicles, after it leaves the Testicles, so that the granules may burst and the Zoospermes become perfect, and if it be expelled from the body too soon this has not time to occur. The precise time requisite for the semen to remain in the body, after being formed by the Testes, is not known, and it probably varies, both with different individuals and also under different circumstances in the same person. For a time the organs can, if healthy, perfect the semen rapidly, so that a man can expel it very frequently, and yet have it healthy, but if this excess is continued too long the power of the parts gradually weakens and the semen is at length discharged imperfect. This is precisely what follows eventually, both from licentious excess and from involuntary emissions; the semen has not been allowed to remain in the organs sufficiently long, and when it is expelled no animalcules are found in it, but only the granules from which they would have been developed had it remained. These are what are seen in the urine, in cases of long-continued involuntary emission, like little shining points, and probably also the bran-like grains, observed at an earlier period, are the granules in an undeveloped state. In many cases of

long-continued Spermatorrhœa, both from excess and involuntary, the change is still more decided, so that the semen is merely like thin gum-water, and utterly incapable either of stimulating erection or of impregnating.—This is the true explanation why those who are exhausted by excesses, and those who have long suffered from involuntary emissions, become impotent and sterile, and it shows us what is really needed to effect a cure. If we can arrest the discharge, and restore a certain degree of tone and vigor to the organs, the semen may be again retained sufficiently long, and may become perfect, so that the power of erection and impregnating may be again enjoyed. The chances of this are lessened, however, in proportion to the time the flow has continued, and at a certain stage all our efforts are fruitless. I have, however, known some remarkable instances of restoration, even under the most unpromising circumstances. In one instance a man aged forty-seven came to consult me, who had been perfectly impotent for *nine years*, during which he had not experienced the slightest manifestation of sexual power, nor scarcely ever been free from a discharge, which, however, was almost like water. According to his own statement this unfortunate condition was owing to former licentiousness, his indulgence having been excessive till the wretched state of his general health, and finally his complete loss of power, compelled him to abstain. I was obliged to say to him that the chances of restoration were so small as scarcely to be worth calculating upon, and that I should not be justified in giving him any hopes at all. He was so exceedingly anxious, however, and pressed me so earnestly to take him under my charge that I did so, though with

considerable reluctance, and with great misgiving. Fortunately he was a man of wealth, and leisure, and disposed to follow out implicitly all the directions given him.—The particular plan of treatment that was followed is not necessary to be described here, as I shall speak upon it generally further on, but the result is stated as an instance of what can be sometimes accomplished even under very unpromising circumstances. I had this patient under my constant care for fifteen months, at the end of which time his sexual powers were sufficiently restored to allow of his *marrying*, which he did and became a father. It took three months to stop the constant emission, and after that six months more elapsed before animalcules began to appear in the semen, after which his improvement was very decided, though in all probability his powers will never be equal to what they were before, nor will they endure so long as they otherwise would have done.

In cases where impotence is only partial or has existed only for a short time, proper treatment can nearly always effect a decided improvement. Every moment, however, is precious in such cases, and no man should feel indifferent even to a slight falling off in his sexual vigor, *if it continues*, and if he desires to preserve his powers. A short delay may lose all chance of restoration; and it should be recollected also that, in most instances, the derangements which cause impotence have often serious effects, and generally so impair the health as to endanger life.

I am almost daily seeing instances of weakened power from Spermatorrhœa, and though I am compelled to admit that in some of them relief is hopeless, yet in many the result of the treatment is most

satisfactory, and highly encouraging to those similarly affected. There is occasionally one result of Spermatorrhœa different from any of these above described, and which is sometimes of considerable importance, both socially and as a point in medical jurisprudence. Some patients, of vigorous habits of body will continue to secrete the semen, and retain their powers of association, even after the disease has existed for a considerable time. They may, however, be *sterile*, though not altogether impotent, and the fault of barrenness is ascribed to the female, because no defect exists, so far as can be seen, in the husband. These men are able to associate, as before remarked, and to emit semen, but on examining that fluid none of the animalcules are formed perfect, being either all dead or half formed. The semen in short is perfect enough to stimulate the male organs, to a certain extent, but not perfect enough to impregnate the female ovum, and I have no doubt but that many cases of supposed barrenness in females are owing merely to a defect of this kind in their husbands. I have known men affected in this way who were remarkably active and vigorous, and in whom no imperfection whatever could be suspected till pointed out by the microscope.—M. Lallemand was the first author who alluded to this important subject, and his remarks are well worth reading:—

“*Infecundity*.—Impotence is an absolute cause of infecundity because it prevents the conditions necessary to fecundation from taking place; but although the act of coitus may be accomplished, it does not follow that the person should always be able to perpetuate his species. Stricture of the urethra may

prove an obstacle to the discharge of seminal fluid ; or the fluid may be directed towards the bladder or the parietes of the urethra, by deviation of the orifices of the ejaculatory ducts. The secretion may be altered in its nature, it may only contain imperfect spermatozoa, &c. A man may, therefore, be unfruitful without being impotent. On the other hand, I have met with many patients suffering from diurnal pollutions who had children exactly resembling them, even during the duration of their disease. Indeed, I have seen several cases in which the disposition to involuntary discharges was hereditary, and they affected both father and son. The disease is, however, essentially irregular in its progress ; it may continue long without doing serious injury to the health, long remissions may be experienced, or even a perfect cessation of the complaint for a longer or shorter time ; we may easily conceive, therefore, that in the first degree, or during one of the periods of remission, fecundation may take place. When the disease is further advanced, however, many causes concur to render coitus unfruitful. Ejaculation is weak and precipitate, so that the seminal fluid cannot be thrown into the cavity of the uterus ; it is not sufficient in order to fecundate, simply to spread the fluid over the vagina ; it must be projected with sufficient force to pass through the orifice of the uterine neck. Besides, in these cases the erections, even when they permit sexual intercourse, are incomplete and of very short duration, emission takes place without energy and very soon ; so that during such rapid acts the uterus and Fallopian tubes have not sufficient time to experience the excitement necessary to carry the semen to its destination, even when it

passes the neck of the uterus. The semen itself also undergoes great changes, to which perhaps the loss of the fecundating power is chiefly attributable. Microscopic researches have elucidated this formerly obscure subject; I have discovered, for instance, that the spermatozoa undergo changes similar to those of the fluid which serves as their vehicle; these changes are exceedingly important, and are owing to defective formation. Spermatozoa may be met with in a less thick and less opaque fluid than natural, for they are not produced by the same parts, or in the same manner; but when the secretion is perfectly thin and watery, the functions are so seriously affected that the animalcules are altered; they are less developed, less opaque, and less active than natural; indeed, they are so transparent that peculiar precautions are necessary in order to make sure of seeing them; their motions are weak, slow, and cease very soon; and they rapidly undergo decomposition. All these characteristics show how much their texture is relaxed, and how imperfectly they are organized.

“It is evident that the least arrest of development in the spermatozoa must prove an insurmountable obstacle to fecundation, even if the only function of the animalcules be to carry the *liquor seminis* to the ovum. When, however, their imperfect development only arises from a too rapid formation it may soon be obviated. It suffices that the involuntary discharges should cease for a few days only, in consequence of some accidental cause, or of one of the spontaneous changes of this extraordinary disease, in order for the desires to become more lively, the erections more energetic and prolonged, and for the function to be accomplished in a natural manner.

Fecundation is, therefore, possible, as I have previously stated, during the whole duration of one of these intermissions.

“This is not the case when the spermatozoa are malformed, rudimentary, more or less deprived of tail, &c., for these changes only take place when there is a serious alteration in the structure of the testicles. I have taken every opportunity of dissecting the testicles altered in these cases, and I have always found the secreting structures paler, drier, and denser than natural, and the cellular tissue more resisting, and with difficulty allowing the secreting ducts to be separated one from another. Sometimes half or two-thirds of the testicle were transformed into a fibrous or fibro-cartilaginous tissue mixed in a few cases with tuberculous matter. It is the same also in the epididymis, where I have even seen traces of ossific deposit in the midst of cartilaginous indurations. These changes, caused by previous inflammation, perfectly explain why the development of the spermatozoa can no longer proceed normally.

“Although in such cases the secretion of semen may be more or less diminished, pollutions may still be present if the seminal vesicles have shared the inflammation by which the testicles have been affected, as happens in most cases of orchitis arising from blennorrhagia. I have at present a patient who presents a remarkable example of both these effects arising from this cause: he is now forty-one years of age, and had blennorrhagia followed by inflammation of both testicles at twenty-five. Soon after his recovery, he married but has never had children, although the act has been performed regularly if not frequently. He became subject to noc-

turnal, and sometimes diurnal pollutions, which increased by degrees. His health became disordered, but coitus was still possible. The semen passed, although it presented its characteristic odor but never showed under the microscope other than very small and brilliant globules, without any appearance of tail, but easily distinguishable from globules of mucus, the dimensions of which are five or six times larger. The epididymis of both sides is voluminous and irregular. One testicle is adherent to the skin of the scrotum, and the other appears smaller than natural.

“Malformation of the spermatozoa, therefore, arises from deep-seated changes in the tissues of the testicles, changes which do not permit the animalcules to assume their normal form, and, therefore, render infecundity permanent.

“To sum up then. Involuntary seminal discharges may oppose fecundation previously to actually producing impotence, by diminishing the energy of all the phenomena that concur to the accomplishment of the act, and by preventing the complete development of the spermatozoa, as well as the elaboration of the fluid which acts as the vehicle for them.

“These conditions may be rapidly altered by the simple diminution of the involuntary discharges, and fecundation may again become possible.

“This cannot be the case when infecundity depends on malformation of the spermatozoa—such malformation arising from permanent alteration in the organs that supply them.”

Microscopic Examination of the Semen.—This is a subject of great interest to every one, and of im-

mense importance to the physican and patient. The proper mode of pursuing such examinations has been so well explained by M. Lallemand that I cannot do better than copy his remarks, to which I will add here that with good instruments there is no difficulty whatever in the process.

“*Microscopic Examination.*—Since the discovery of the spermatozoa, their presence in the seminal fluid has attracted the attention of all who have sought means of distinguishing it from other fluids. Microscopic examination of the spermatozoa, however, not only requires an excellent instrument, but certain precautions which may be dispensed with in the investigation of coarser objects. As the spermatic animalcules can be only seen by means of transmitted light, it is necessary that the glass on which the fluid to be examined is placed should be of uniform thickness, and without bubbles or striæ. The fluid to be examined should be covered by another layer of extremely thin glass made on purpose, and not by portions of mica, which are seldom free from cracks, and never perfectly transparent. This thin layer of glass is indispensable in order as much as possible to diminish the thickness of the fluid, to render it perfectly uniform, to hinder evaporation and prevent the object glass from being soiled by it. A single drop of fluid suffices for a complete observation, a larger quantity always proving inconvenient. The little glass that covers the liquid must be firmly pressed down so as to spread it out, arrest the currents that take place in it, and drive out the air bubbles. Although the glasses should seem to touch each other the spermatozoa move with perfect freedom in the space between them, so long as they

preserve their energy and evaporation has not proceeded too far: should such be the case, however, a drop of tepid water favors and much prolongs their motions. However thin the layer of fluid may be, it is impossible to comprehend its whole thickness at once with a very high power, and it is, therefore, necessary to alter the focus frequently in order to be sure that nothing escapes observation. And this is especially important in examining a drop of fluid obtained from diurnal pollutions, because there are frequently only two or three spermatozoa contained in it. It is also necessary to change the position of the reflector frequently, in order to vary the direction and intensity of the light. The spermatozoa are often exceedingly transparent in cases of disease, and a very bright perpendicular light is by no means the best for showing them. Varying the density of the fluid under examination, either by adding water or by permitting evaporation, is also often useful. The semen contains matters furnished by the seminal vesicles, the prostate and the urethra, and when the fluid is too thick these matters hide the animalcules. A drop of water applied to the edge of the covering-glass penetrates underneath it, and the spermatozoa are more isolated, at the same time that their contour is rendered more defined by the diminution in density of the fluid. On the other hand the refractive power of the spermatozoa differs little from that of the fluid in which they are contained, and their thinnest portions are traversed by the light without affording any distinct images to the eye. In this case there are only seen very small ovoid brilliant globules terminated by a little point. As soon as the water begins to penetrate between the glasses, the rapid motion set up

prevents the objects from being clearly distinguished ; but as soon as rest has been re-established the tails of the animalcules appear, and their dimensions seem to have increased in consequence of the diminished density of the surrounding fluid : water suffices to produce this result. It is more sensible, however, when a small quantity of alcohol is added : but the forms of the animalcules are, after a time, altered by this agent ; and it is, therefore, advisable to use water only when it is intended to keep the preparation.

“Evaporation sometimes produces not less remarkable changes in the seminal fluid. I have frequently in cases of spermatorrhœa failed to perceive any thing in the fluid under examination for half an hour, an hour or more ; then suddenly an animalcule has made its appearance ; then a dozen, and then perhaps a hundred in the space of a few minutes. The following morning, when desiccation has become complete, there are no longer any traces of these animalcules, or, at all events, I have been only able to distinguish their tails, the other parts of them being fixed in the dried up mucus. The absorption of a drop of water has restored the phenomena observed the night before.

“These phenomena are easily explained ; when the refractive power of the spermatozoa is the same as that of the circumambient liquid, the light traverses the whole in the same manner, and the mass appears homogeneous. But evaporation acts more rapidly on the liquid than on the organized bodies contained in it ; and when the difference of density alters the refractive power the forms of the spermatozoa are momentarily defined because they have become more transparent than the remainder of the

fluid. When desiccation is complete, however, the animalcules again disappear, because the refractive powers of mucus and dried animalcules are again equal. The absorption of a small quantity of water re-produces the same phenomena, which may be repeated almost indefinitely, since the matter confined between the two layers of glass undergoes no other appreciable alteration.

“In order to be enabled to discover spermatozoa quickly in cases of disease, it is necessary that they should be well studied in healthy cases. This may be accomplished in the following manner:—After coitus there always remains a sufficient quantity of seminal fluid in the urethra to serve for precise and complete microscopical examination. This may be obtained by pressing the canal shortly after the act, and receiving the drop of fluid from the orifice of the glans on a plate of glass. In this drop of fluid thousands of animalcules may be seen, agitating themselves like so many tadpoles in a pool of stagnant water, only that the tails of the spermatozoa are relatively longer and thinner, and that the head presents a brilliant point near its insertion. Generally the number of these animalcules prevents them from being easily examined, and it becomes necessary to spread them out by introducing a small quantity of water, and pressing firmly down the thin glass that covers them; they are found most separated on the edges of the fluid. If the water added be of the temperature of the body their motions become free and lively, and continue so until cooling and evaporation affect them. By avoiding these two causes of disturbance the motions of the spermatozoa may be kept up during several hours.

“However long a time may have elapsed after coitus there are always spermatozoa in the urethra, provided they have not been washed away by the passage of urine. Although the point of the glans may be quite dry, and pressure along the whole length of the canal may not produce the least dampness, still on passing urine living animalcules may be obtained from the first drop which escapes. This may be received on the glass, and is perhaps the easiest and most natural mode of obtaining spermatozoa for microscopic examination.

“It is evident that the same experiments may be applied in the case of nocturnal pollutions as well as in all other seminal discharges in whatever manner they may occur. But many errors may arise from commencing with cases of disease, for it is during perfect health that the spermatozoa are most active, and their development most complete, and they live longer after coitus than after any other kind of seminal discharge.

“Having thus described the means by which my microscopic observations may be verified, I proceed to show their results.

“*Spermatozoa*.—Out of thirty-three bodies which I have examined for spermatozoa, I only twice found these animalcules in the testicles. In one of these cases the patient died from the effects of a fall on the day following it; in the other acute gastro-enteritis was the cause of death. The seminal fluid was most abundant, and contained the greatest number of animalcules in the former case. The other patients died of chronic diseases after protracted sufferings. One only among them died on the second day of acute peritonitis, but he was seventy-three years of age. In thirty-one of these

patients the testicles were soft, pale, and as though withered. On section they presented a grayish aspect, and did not furnish any liquid; the structure was almost dry, and contained a few blood-vessels; the secreting canals were easily separated from one another and could be spread out under the microscope without breaking. They presented very brilliant granules, all of exactly the same appearance, about the size of the head of a spermatozoon, ten times smaller than corpuscles of blood or mucus, and differing from the latter by the constancy and regularity of their form. These brilliant bodies, which occupied the place of the spermatozoa, are worthy of notice, because they offer considerable analogy to the appearances presented by the semen under certain circumstances.

“In order to observe what is present in the secreting canals of the testicle it is necessary to spread out a portion of one of them under the microscope, after having examined it dry to allow a drop of water to penetrate between the two glasses, and to follow the changes which take place; then to press down the glass so as to flatten the parietes of the canal, rupture it, and press out a portion of its contents; lastly, these must be examined again when desiccation is complete, for the spermatozoa found in the canals are then best seen.

“In the epididymis I have never found spermatozoa, except in the two cases in which they were also found in the testicles. In all the others I met with these animalcules only in the vas deferens or seminal vesicles. There were no animalcules at all to be found in the patient who died at the age of seventy-three. It has always seemed to me that the animalcules were less numerous in proportion as

the patients had suffered long ; and in extreme cases I have generally found them only in the seminal vesicles. The fewer the spermatozoa the more difficult were they of detection on account of their extreme transparency. In some cases I have only suddenly discovered them after examining for an hour or two, the liquid having previously appeared quite homogeneous. The dimensions were the same as those of the best developed animalcules, but they were pale throughout their whole extent, and more transparent than the surrounding fluid. Complete desiccation often caused them to disappear altogether ; but the same phenomena could be reproduced by the absorption of a small quantity of water.

“In cases of phthisis, caries of the vertebræ, white swelling, &c., I have had great difficulty in distinguishing the animalcules, probably because these diseases do not cause death for a long time.

“I have almost always found in the seminal vesicles, especially at the bottom of any depression, a thick, grumous brilliant matter, varying in its aspect and color, but considerably resembling thick paste, and more or less transparent ; with a high power the granules of this matter appear large, irregular, more or less opaque, and without any constant shape. They are evidently the products of the internal membrane of the vesicles, for they are found with similar characters in the accessory vesicles of the hedgehog, rat, &c., which never contain seminal animalcules, and do not communicate directly with the vasa deferentia, which, again, never contain any similar substance. This matter is, therefore, analogous to that secreted by the prostatic follicles, Cowper's glands, &c. Its functions are

the same, and for many reasons it merits special attention.

“The secretion of semen diminishes in all serious diseases; and seminal evacuations become very rare, especially towards the last. It is not, therefore, astonishing that the products of the mucous membrane predominate in such patients over those of the testicles, and that such mucus should become more consistent during its long residence in the depressions of the vesicles. Hence, the difference observable between the semen obtained from the vesicles after death, and that which is passed by a healthy person. Nevertheless, after long-continued continence more or less large granules are often seen in the semen of a healthy person, and these are perfectly distinct from the fluid part. When the emissions are more frequent granules of the same kind may be observed, but much smaller. These facts are important when applied to explain several symptoms of diurnal pollutions.

“I have already stated that on causing the patients to make water in a bath, the semen passed may be easily recognised by means of its globules which whirl about in the middle of the cloud formed towards the close of micturition. From what we have just seen it is evident, that these globules come from the internal membrane of the seminal vesicles. They may be wanting in very severe cases where the semen has no time to acquire consistence; but their presence leaves no doubt as to the existence of diurnal pollutions, because they can only be furnished by the seminal vesicles. On the other hand, I have invariably found spermatozoa in the urine of patients who observed this phenomenon in the bath. The same remarks hold good

when applied to the globules which the urine deposits in certain cases of diurnal pollutions, and which have been compared by some to grains of bran, by others to millet seed, pearl barley, &c., according to their size. These globules are perceived as soon as the urine is passed, they are roundish, very soft, and do not give any sensation when squeezed between the finger and thumb; they cannot, therefore, be confounded with urinary salts which are deposited only when the urine has cooled, have a crystalline form, and give the sensation of a hard body to the finger. The vesical mucus also is only deposited on cooling, and does not furnish brilliant granules. As to pus, its appearance is easily determined. I have found animalcules whenever these globules appeared in the urine; and hence it is that I have pointed them out as certain signs of diurnal pollutions.

“I have also noticed that in some cases the urine, when held against the light, presents in the middle of a flocculent cloud multitudes of quite characteristic *brilliant points*. These are smaller, and, consequently, lighter globules than those which in other patients fall to the bottom of the vessel. They are neither observed in the mucus of the bladder nor in the prostatic fluid, which alone present clouds analogous to those of diurnal pollutions. Such brilliant points also arise from the seminal vesicles, and their presence is, therefore, an indication that the urine contains semen. This I have often verified with the microscope. I should, however, warn those who wish to repeat my experiments, that it is not in the midst of the flocculent cloud that the zoosperms are to be sought, but at the bottom of the vessel, to which they soon fall on account of their

greater specific gravity. The results of all my observations on the dead subjects, therefore, convince me of the influence of serious and long-continued diseases on the functions of the spermatic organs. But it is not only in the morbid state that these experience great variations; remarkable differences may exist between healthy individuals not only in the quantity of semen secreted in a given time, but also in the number, appearance and dimensions of the spermatozoa. In this respect I have observed differences amounting to a third, and, in some cases, to half. The comparison is very easily established. When the semen is kept under a thin glass as I have before described, it is not in danger of undergoing any changes, and may be always, by the addition of a drop of water, compared with a recent specimen.

“Notwithstanding the facility with which nocturnal pollutions may be recognised, I have submitted the semen collected after them, by individuals in various conditions of health, to microscopic examination. At first when the evacuations are still rare and the semen preserves its ordinary characteristics, the animalcules do not present any remarkable circumstances in regard to their number, dimensions, &c.; but when the disease has reached a sufficient degree of gravity to affect the rest of the system the semen becomes more liquid, and the spermatic animalcules less developed and less lively. Their number, however, does not as yet sensibly diminish; indeed, in some cases, it seems increased. As the disorder advances the erections diminish, the semen becomes more watery, and the animalcules are often a fourth or a third less than natural, and the tail is often distinguished

with difficulty under a power of three hundred diameters. At a still later period the animalcules become fewer, and in two individuals in the last stage of the affection the semen no longer contained animalcules, although it retained its characteristic smell. Examined with high powers and every proper precaution, I only found, in this semen, brilliant globules, all exactly alike, and about the same size as the head of a spermatozoon.

“The microscopic examination which I have made of semen passed during efforts at stool give analogous results. When such discharges only take place accidentally and at long intervals, the semen is thick, whitish, impregnated with a powerful smell, and abundantly furnished with well-developed animalcules. I have sometimes even found a few alive after an hour or two. But when these discharges become so frequent or habitual as to constitute disease, they become less abundant and the semen loses its normal properties. The spermatozoa are generally smaller than in the healthy condition, and always less lively. I have some preparations in which they are only of half the ordinary size, and I have never been able to find a single living animalcule a few minutes after the fluid had been expelled. When the disease has become much aggravated the spermatozoa become rare, and they are sometimes replaced by ovoid or spherical globules similar to those of which I have already spoken. In three patients in an extreme state of disease I found nothing else, although they passed as much as a dessert spoonful of semen at each stool. Such cases, however, are exceedingly rare.

“In diurnal pollutions happening during the pas-

sage of urine the following means may be employed to show the presence of spermatozoa.

“The urine should first be filtered in a conical filter, when on account of their weight, the greater number of the spermatozoa will remain on the lowest part of the paper. By taking this portion and turning it upside down in a watch-glass containing a few drops of water the animalcules become detached from the paper by degrees, and fall to the bottom of the fluid in the glass. After twenty-four hours maceration in this position, the paper may be taken away and the spermatozoa may be readily obtained by using a drop from the bottom of the fluid in the watch-glass for examination. This mode of proceeding is a sure one, but it requires considerable time and trouble for its performance. I have already stated that the urine does not always contain spermatozoa in cases of diurnal pollutions; therefore, the urine of the same individual would perhaps require examination on many occasions before the certainty of their presence could be established, and few medical men in active practice have time to devote to such experiments. I for one should have long since given up treating these patients had I been obliged to repeat in every case such long and tiresome examinations. Ten days or a fortnight are sometimes passed without the appearance of spermatozoa in the urine, and hence all who are accustomed to microscopic researches will admit the indefinite amount of trouble and time required.

“Fortunately, however, there is a more simple method by which such examinations may be conducted. It will be recollected that the semen always escapes either with the last drops of urine, or immediately, or soon afterwards. By directing

the patient, therefore, to compress the urethra immediately after micturating, and to receive the drop of fluid pressed out on a piece of glass, sufficient animalcules will be obtained from the walls of the urethra for microscopic observation. These being covered with a thin lamella of glass may be either at once placed under the microscope, or may be allowed to dry, and examined at a future time, a drop of water being previously added. This mode of examination is, therefore, easy for all practitioners who possess a good microscope, after they have accustomed themselves to the inspection of the spermatozoa in their natural state. The changes which I have mentioned as occurring in the semen must be borne in mind, however, and the animalcules must not be expected to appear either so large, so well defined, or so numerous as in cases where there is no disease."

TREATMENT OF SPERMATORRHŒA.

In treating Spermatorrhœa there are two things necessary to be ascertained, first the primary exciting cause, and secondly the existing cause, if such there be, that keeps up the disease. Most usually we discover that masturbation has been indulged or that the patient has been addicted to excess, and it is of course necessary that such evil practices be immediately and totally abandoned, before any improvement can be hoped for. Next we must see if there be any skin disease, piles, constipation, worms, gravel or any other cause that may keep up the irritation, and when this has been removed the actual treatment of the parts themselves may begin. This treatment must consist in the

application of those means best calculated to remove the irritability or relaxation existing in the ducts and seminal vesicles, and to give tone to the Testes. So long as the ducts and vesicles retain their irritability or remain open the semen must necessarily escape, and it becomes therefore absolutely requisite to remove such disability, and restore to them that power of contraction which they possess in a healthy state.

In some recent cases very simple treatment will suffice. If the patient leaves off all bad habits, avoids constipation, attends carefully to his diet, takes no simulants either in food or drink, and carefully bathes himself in cold water round the parts, night and morning, a decided improvement will often be experienced. He must, however, avoid all excitement of the mind or feelings, never over-fatigue himself, and not lie in bed after he is awake in the morning.—These directions are more especially applicable to those incipient cases common among young men, when the emission takes place at night, usually in consequence of a dream. It will usually be found in such cases that the loss occurs towards morning, and most frequently when the patient is half asleep and half awake, a state which is very apt to produce sexual excitement. Many young men have told me that they never had an involuntary erection except at such times, and that if they ever remained in that half dreamy condition it was nearly certain to occur. However disagreeable it may be, therefore, the patient must rise immediately he is awake, unless it be too early, and he feels confident he can go sound to sleep again. Many persons whenever they awake and feel any tendency to erection, always rise and bathe themselves and then lie down again, and by these means escape the

emission. It is particularly important also that late suppers should be avoided, and that no coffee should be drunk, and no *tobacco* used. This is very necessary, for many of my patients assure me that a single cigar towards bed-time will ensure an emission, in spite of all the precautions they can take.

If all young men were to observe these precautions habitually they would seldom be troubled with involuntary emissions at all, because the parts would be so strengthened, and all irritation so promptly subdued, that it would scarcely ever arise, unless from excessive abuse or masturbation. The remarks which I formerly made as to the importance of regular *occupation*, both for body and mind, are also particularly applicable here, there being no doubt but that idleness very much predisposes to all these evils.

Internal medication is seldom of much benefit, but unfortunately most persons think the contrary, and this great and fatal error is often the means of perpetuating the disease. Men think, when they are afflicted with involuntary emission, that it is only necessary to take certain drugs to be made well again. They accordingly either allow the evil to go on till it becomes incurable before they do anything at all, or else they rely upon the medicine alone and neglect all other means. The consequence is that they obtain no relief from what they have taken, and find that the time has been uselessly lost during which a cure was possible. I do not hesitate to say that any man, by observing the simple advice already given, will be more benefitted without any medical treatment whatever, than he can be by the best he can receive if that advice be neglected. It is true that a little medication is oc-

casionally beneficial, but it is not of a specific character, or adapted to all alike, but must be varied according to circumstances, and in all cases it should be regarded merely as *assisting*, and not as being capable of curing alone. It is more especially when there is gravel or considerable irritation of the urethra and bladder, that good can be done by medication, and even then it is of a simple character. If there is any heat and burning when the urine is discharged, with a discharge of thin mucus at the beginning of the flow, the following pills will be beneficial.

R. Balsam of Copaiva, two drachms; Magnesia, seven grains. To be made into pills of *four grains* each, of which two may be taken three or four times a day.

If the urine is high colored, and deposits a red sediment upon the sides of the vessel, indicating gravel, the following powders will be better.

R. Dried *Bearberry* leaves, (*Uvæ Ursi*) one drachm and a half; Bicarbonate of Soda, one drachm. Mix them and divide into *twelve* powders, of which one may be taken three times a day in water.

These powders are also excellent when there is simply irritation of the bladder, causing a frequent desire to urinate. For this particular trouble it is also advisable to drink but little, and never to use hot fluids of any kind, nor spices, wines, spirits, or coffee. A little gum is useful, kept in the pocket and swallowed occasionally during the day.

There are few cases in which these means will not at least give some relief, even if they do not cure, but *it may not be immediate*. This is a fact that should be borne in mind, so that discourage-

ment should not be felt because the good is not experienced at once. The disease it should be remembered has nearly always existed a long time, and has assumed a chronic form, so that it can only be successfully attacked in a gradual manner, by slowly producing a change in the action of the parts.

Nevertheless, I have known many benefitted almost immediately, and very often I hear the remark, that in one week from the time of commencing the treatment, the emissions decreased one half in frequency. To ascertain the extent of the improvement, and as a guide to the physician, every one afflicted in this way should keep a diary, or date the times when the emissions occur, so that it can be seen whether they are really decreasing in frequency or not.

One of the best means for applying cold water, both for the purpose of strengthening the genitals and also for relieving constipation, is by means of what is termed the *ascending douche*; that is by a stream or jet directed upwards. This must be made to play forcibly on the Perineum, and against the Anus, by the patient sitting over the jet. The effects of this treatment, after a time, are often strikingly beneficial. I have known patients who had previously never passed a night without emissions, remain for two weeks without experiencing anything of the kind; and I have known the most obstinate constipation, in some instances of near three weeks' duration, completely cured by it in less than a month. It is in fact one of the most valuable remedies we possess in the treatment of Spermatorrhœa, and has cured more than, perhaps, all other means put together. Those who cannot employ a proper apparatus may use a large and

powerful syringe, bent at right angles, so that the jet can be thrown up against the Perineum, Scrotum, and Anus. It should be used morning and night, for about five minutes. The man, mentioned in the last article, who had been impotent for nine years, owed his cure to this cold douche. I have often found nothing else necessary, even *in very bad cases*, except proper attention to the diet and regimen.

In case of worms in the rectum, which often keeps up Spermatorrhœa by their irritation, there are few things that succeed better in dislodging them, and subduing the irritation, than enemata of *cold water*. These seem to paralyze the worms, so that they lose their hold and are expelled with the fluid as it returns. They also cool and give tone to all the neighboring parts in a very marked manner, and are in short valuable remedies in the treatment of Spermatorrhœa. In some instances they will cause erections from the very first, though the person may have previously been almost impotent.

When the loss evidently occurs more from general weakness than from irritation the plan of treatment must be somewhat varied. *Warm bathing* may then be advised, with a generous diet of meat and wines, and the occasional administration of tonics and bitters. *Galvanism* is also of very great service in many of these cases of debility, applied directly to the parts, or to them and the spine. It will frequently impart a feeling of warmth and vigor from the very first, and restore the natural powers sooner than almost anything else. The patient should, however, be particularly cautioned not to use any of the stimulating medicine,

cordials, and tonics, so urgently recommended for this debility. These are mostly composed of *Spanish flies* or *Phosphorus*, and are very hurtful, though they may appear to do good for a time.

Several of the mineral waters are highly useful in Spermatorrhœa, especially those that contain iron. And those that contain sulphur are also of service when used as baths.

When there is any considerable nervous irritability, with restlessness, loss of sleep, or bad dreams, a narcotic may be of service. A few drops of laudanum may be taken at bed-time, or some of the camphor and opium pills, directed in a former article. If the stomach cannot bear opium it may be given as an enema, either by putting a few drops of laudanum in some starch-water, or by using a decoction of poppy-heads. Some patients even introduce an opium pill, containing one grain, into the rectum at bed-time, and leave it there till morning. This will frequently prevent emission, but it is apt to act too strongly on some persons.

Occasionally setons are of service, placed inside the thighs, or acupuncture with needles, but these must always be directed and applied by the physician.

The position in bed is frequently of some consequence in very irritable persons, and should be attended to. There is no doubt but that *lying on the back* is very apt to cause pollution, by the heat it produces in the loins, and sometimes it will continue it notwithstanding everything else that can be done. So well aware are some persons of this that they invent peculiar contrivances to prevent them ever resting on the back, even for a moment. One of my patients used to wear a broad leather belt at

night, with spikes on the inside behind, so that if he turned on his back while asleep, these hurt him and waked him up. Another wore a pointed piece of wood, so adjusted that he could not turn on his back at all, and by these means he avoided the emissions that used to occur almost nightly. Sometimes it is sufficient to merely sleep upon a hard mattress, with a piece of oiled silk, or india rubber cloth under, to keep the parts cool; or what is still better a sheet of lead may be tied over the back and loins when retiring. I have known some patients speak very highly of the effects of this metallic shield.

When there is decided irritation of the genital organs, manifested by redness at the end of the penis, burning when making water, and mucus discharge from the urethra, it becomes of the first moment to prescribe a proper diet, consisting chiefly of *milk*. This should be used freely, both as food and drink, either thickened with rice, isinglass, or sago, or even with gum-arabic. The beneficial effects of this article will soon be evident in the decrease of all the inflammatory symptoms. Very little meat must be used with it, but plenty of *potatoes*, which are not only nutritious, but have also a decidedly good effect on the urine. Some fruits are very excellent, particularly strawberries, and ripe peaches, and so are tomatoes, but any very acid ones are objectionable. If the milk disagrees with the stomach a little, which it will sometimes do, a few grains of magnesia may be added to it, or two or three spoonfuls of lime-water, which will generally correct all such tendency. The copaiva and magnesia pills may also be used, or the powders of bearberry leaves, as formerly directed. Wines, coffee, spices, and spirits must be rigidly

avoided in all such cases, and in fact *every kind* of excitement, as far as possible.

Cauterization.—This is a process which usually is resorted to when all other modes of treatment fail, though some physicians practice it from the first. To understand how it operates the action of caustic, when applied medicinally, must be borne in mind. If we have any diseased surface, such as an open ulcer, or an inflamed mucous membrane, the caustic not only burns off that diseased surface, but by its energetic action so alters the condition of the parts that the disease is frequently removed altogether. This is why it is applied to all virulent sores, and to inflamed sore throats, eyelids, and other parts. Now in confirmed cases of Spermatorrhœa there is always either a relaxed or an inflamed condition of the Ducts, Urethra, or Vas Deferens, and it is evident that if the caustic can be applied to them, in a proper and efficient manner, it will in all probability affect them in the same way that it does other parts when similarly diseased. The great difficulty, however, is to find a means to apply it in the situation required. The ducts being placed at the bottom of the urethra, completely out of sight by any means, and with great difficulty ever reached, it becomes a question as to how they are to be operated upon. This has been decided, however, by M. Lallemand, who has invented an instrument which enables us to apply the caustic to the ejaculatory ducts, with almost as much certainty as to any place on the exterior. This instrument consists of a silver tube, open at the end, and adapted to the size of the passage, down the inside of which passes a kind of piston, furnished at the end with a piece of lunar caustic. When the tube

is introduced into the urethra, the caustic is contained inside of it, but when the open end of the tube has reached the ducts the piston with the caustic on it is pushed out a little way for a moment, and of course burns the surrounding parts; it is then drawn back into the tube and the whole apparatus is immediately abstracted. By these means the ducts, the mouths of the prostatic vessels, and the neck of the bladder are effectually cauterized without any of the other parts being touched. The performance of this operation is certainly a little difficult, and requires great manual skill with an intimate knowledge of the structure of the parts. An unskilful person, who could not properly manage the instrument, or not judge correctly of the proper distance to introduce it, might not only fail of doing good but even do harm. Many practitioners also cause great mischief by letting the caustic remain too long, and burning too much, or by acting only on the healthy parts and leaving the diseased ones untouched. In short, though the operation is frequently of the greatest benefit, when properly performed, and capable of effecting a complete cure in the very worst of cases, it is also exceedingly dangerous when improperly performed, as too many know. Not only may the irritation be made much worse, but the most severe inflammation may follow from it, so as to prevent the discharge of urine, and lead to abscesses and ulcers of the most incurable kind. Even in successful cases, and under the most favorable circumstances, great distress is nearly always experienced, and the pain is not unfrequently very severe. Many persons are much alarmed, and even though greatly benefitted, cannot bring their mind to submit a second time to it.

In general, however, one operation is sufficient, and when a repetition is required, it should seldom be under six weeks or two months after. I have seen patients in a miserable state who had been cauterized too frequently, and with too short intervals, and in all probability much more evil has been done by the process, in this mode, than good by the proper mode. My own opinion is that in proper hands, it is quite safe, and generally beneficial, but that with timely attention, and with a rigid observance of proper simple treatment, it is seldom needed. M. Lallemand, thinks that without the caustic two-thirds of the cases of Spermatorrhœa would be incurable, but I do not agree with him in this.

CHAPTER VIII.

THE INFLUENCE OF MEDICINES IN PRODUCING
AND CURING IMPOTENCE AND SPERMATOR-
RHEA.

THERE are a few medicinal substances that act in a direct manner upon the genital organs, some beneficially and others hurtfully, but the greater number operate upon them indirectly. This is a subject about which there is great ignorance, as I before stated, and an immense deal of imposition and pretension, both among empirics and regular practitioners. It has always been a favorite notion with the public, and one that has been often encouraged by medical men, from interested motives, that there are specific medicines capable of arousing the sexual ardor under almost any circumstances. From this notion has originated all the various cordials, stimulants, and elixirs, that are constantly pressed upon the attention of the impotent and sterile. None of these things are in the slightest degree capable of accomplishing what is promised of them, as well-informed people are aware, but the public generally are deceived and much injured thereby. *Very lately* it has been ascertained that certain drugs can be made to have a remarkably beneficial action, in particular cases of loss of power, but each case requires a peculiar dose and mode of administration, which makes it impossible to prescribe for all alike. These agents, however, are probably not known, even by name,

to the parties who compound the preparations above referred to, and it is fortunate they are not, for if they were, more mischief would be done than by the things now used. There is no doubt but that an immense deal of disease and incurable impotence is caused by the use of these preparations, and much good will result from cautioning the public against them.

It is not only the action of those drugs that may be beneficial that we have to study, however, but also those that may be hurtful, and among them will be found many that few persons have suspected of having any influence on the genital organs at all. *Purgatives*, for instance, are popularly thought to act *only* on the bowels, and not to influence sexual vigor at all, but the fact is, they often exert a very marked influence in that way. It is well known that aloes, gamboge, colocynth, and several other purgatives irritate the bowels very much, and this irritation may be extended to the neighboring parts, particularly near the rectum, and in this way they excite the flow of urine in some persons, by irritating the bladder, as well as operate upon the bowels. Now the spermatic ducts, and prostate gland, lie close to the rectum, and of course are subjected to this irritation as much as the bladder, and are equally liable to become unusually sensitive. I have known many persons in fact who always had involuntary emissions when they took purgatives, and who were obliged to be exceedingly careful in consequence when they did so. When there is any tendency to *Spermatorrhœa*, therefore, the possible effect of purgatives must be borne in mind, both by the physician and patient, and when they are absolutely needed those must be chosen that are

least irritating, particularly to the lower part of the bowels.

Tobacco is an article that exerts a most decided action, in numerous cases, upon the generative organs, though few persons suspect it of doing so. Like opium, and some other narcotics, it often stimulates at first, but afterwards greatly weakens the sexual power, so as to bring on complete impotence in many cases. I am satisfied, from my own observations, that it frequently leads to involuntary emissions, and keeps them up notwithstanding all that can be done for them. Many young men, patients of mine, have remarked that a cigar at bed-time would be certainly followed by emission before morning, and they found it necessary in consequence to abandon its use. It is true that these results are not generally seen except the tobacco is used in great quantity, but there are some persons that are affected by a very small portion, and who therefore never surmise that it has any influence upon them at all. I once saw a young man, a great smoker, who suffered from constant pollution, and who had been perfectly impotent for five years. He had submitted to every kind of treatment, even to cauterization, but only obtained temporary relief, and at last totally despaired of ever being benefitted. On hearing his statement, and learning what had been done for him, I was much surprised, because there were no indications of severe disease, nor were the parts themselves in an unhealthy condition, though relaxed, and the Testes still secreted perfect semen in considerable quantities. During our conversation he accidentally alluded to his smoking habits, and said he frequently used from two to four dozen cigars a day. I was immediately

struck with the similarity of his case to that of a great opium chewer whom I had seen, and I at once concluded that the tobacco was the cause of the mischief. On explaining this to him he could scarcely be brought to think it possible, but eventually he agreed to follow my advice and gradually leave it off. The result even exceeded my expectations, for I was much afraid that some permanent mischief had been done. He began to mend immediately, and though considerable lowness of spirits, weakness, and loss of sleep was experienced at first, yet all these effects ultimately passed off and he felt better, and was stronger than while using the tobacco. The most marked effect, however, was the checking of the Spermatorrhœa. When I first saw him he passed semen constantly in his urine, and frequently in the night. He had little or no erection, and such nervous palpitation of the heart occurred, whenever any slight sexual feeling was experienced, that he became utterly powerless, and would undoubtedly have been impotent from that cause alone. This all passed off, the involuntary discharge ceased, and his sexual powers returned as strongly as ever. Contrary to my advice he commenced using the tobacco again, thinking that it would now cease to affect him, but in three days all the old symptoms returned, and he became as impotent as ever. On leaving off his smoking, however, he gradually recovered again, *though with more difficulty than at first*, which made me caution him not to relapse again, for fear the re-action might eventually fail altogether. I have even known married men seriously injured in this way, by merely using tobacco as a domestic indulgence. In one instance a gentleman, engaged in a somewhat

harassing business, was induced by a friend to smoke a few cigars at night, *to steady his nerves!* He found, however, that though he could readily stupify himself, yet his nerves were no *steadier*, particularly in *the morning*, and what was most singular, to him, he lost all sexual power and desire, and became so weak he could scarcely stand. In this dilemma he consulted me, and gave me a full history of his proceedings and experience. On examining his urine I found, as I expected I should, that the semen escaped with it, and in such quantities that his impotence and weakness were no longer to be wondered at. I at once told him to leave off his tobacco, gave him a slight tonic, cauterized the ducts, and directed him to go and bathe in the salt water for a few weeks. He did so and returned perfectly cured.

I could, in fact, give numerous cases, both among single and married, showing the effects of this poisonous drug, and I do not hesitate to say that I think it has more to do with many of these complaints than has been hitherto supposed.

In the thirteenth Annual Report of the Massachusetts State Lunatic Assylum, are some excellent remarks on the use of tobacco, which, though they are intended to apply chiefly to its influence in predisposing to insanity, are nevertheless of great general interest, and I therefore quote them:

“Alcohol is not the only narcotic which thus affects the brain and nervous system. Opium produces delirium tremens and probably insanity. *Tobacco* is a powerful narcotic agent, and its use is very deleterious to the nervous system, producing tremors, vertigo, faintness, palpitation of the heart, and

other serious diseases. That tobacco certainly produces insanity, I am not able positively to observe ; but that it produces a predisposition to it, I am fully confident. Its influence upon the brain and nervous system generally, is hardly less obvious than that of alcohol, and if used excessively is equally injurious. The young are particularly susceptible to the influence of these narcotics. If a young man becomes intemperate before he is twenty years of age, he rarely lives to thirty. If a young man uses tobacco while the system is greatly susceptible to its influence, he will not be likely to escape injurious effects that will be developed sooner or later, and both diminish the enjoyments of life and shorten its period.

“The very general use of tobacco among young men at the present day, is alarming, and shows the ignorance and devotion of the devotees of this dangerous practice to one of the most virulent poisons of the vegetable world. The testimony of medical men, of the most respectable character, could be quoted to any extent to sustain these views of the deleterious influence of this dangerous narcotic.

“Dr. Rush says of tobacco—‘It impairs appetite, produces dyspepsia, tremors, vertigo, headache, and epilepsy. It injures the voice, destroys the teeth, and imparts to the complexion a disagreeable, dusky brown.’

“Dr. Boerhaave says that ‘since the use of tobacco has been so general in Europe, the number of hypochondriacal and consumptive complaints has increased by its use.’

“Dr. Cullen says, ‘I have known a small quantity snuffed up the nose to produce giddiness, stupor and vomiting. There are many instances of its

more violent effects, even of its proving a mortal poison.'

"Dr. Darwin says, 'It produces disease of the salivary glands and the pancreas, and injures the power of digestion by occasioning the person to spit off the saliva which he ought to swallow.'

"Dr. Tissott once saw the smoking of it prove fatal.

"Dr. Pilcher details the particulars of a case of a medical student whom he had been requested to see. 'This gentleman suffered under all the symptoms of phthisis. There was muco-purulent expectoration, night sweats, &c. The mucous membrane of the throat, epiglottis, and the neighboring parts, was coated with a brown fur. The patient had been an immoderate snuff-taker; he was told to discontinue the snuff; he did so, and recovered.'

"Dr. Chapman says, 'By a member of Congress from the West, in the meridian of life, and of a very stout frame, I was some time since consulted; he told me that, from having been one of the most healthy and fearless of men, he had become 'sick all over, and timid as a girl.' He could not even present a petition to Congress, much less say a word concerning it, though he had long been a practising lawyer, and served much in legislative bodies. By any ordinary noise he was startled or thrown into tremulousness, and afraid to be alone at night. His appetite and digestion were gone, he had painful sensations at the pit of his stomach, and unrelenting constipated bowels. During the narrative of his suffering, his aspect approached the haggard wildness of mental distemperature. On inquiry, I found that his consumption of tobacco was almost incredible, by chewing, snuffing and smoking. Being sat-

isfied that all his misery arose from this poisonous weed, its use was discontinued, and in a few weeks he entirely recovered.

“Distressing as was this case, I have seen others, from the same cause, even more deplorable. Two young men were in succession brought to me for advice, whom I found in a state of insanity, very much resembling delirium tremens. Each had chewed and smoked tobacco to excess, though perfectly temperate as regarded drink. The further account given me was, ‘that in early life, adopting this bad practice, it grew with their growth. Dyspepsia soon occurred, attended by great derangement of the nervous system, and ultimately the mania I have mentioned. But I have also seen the same condition very speedily induced.’

“Dr. Franklin says he never used it, and never met with a man who did use it that advised him to follow his example.

“The venerable John Quincy Adams, in a recent letter on the subject, says that in early life he used tobacco, but for more than thirty years he had discontinued the practice. ‘I have often wished,’ says he, ‘that every individual of the human race, affected with this artificial passion, would prevail upon himself to try, but for three months, the experiment which I have made, and am sure it would turn every acre of tobacco-land into a wheat-field, and add *five years* to the average of human life.’

“Some cases have come under my observation which show the injurious effects of tobacco where no evil was suspected.

“A respectable merchant, who abstained wholly from ardent spirits, applied to me for advice. He complained of great weakness, tremor of the limbs

and joints, with lassitude, general prostration of health, and depression of spirits. Knowing that he used tobacco freely, I advised him to discontinue it entirely; he soon became better, and after a time was wholly relieved from these disagreeable symptoms.

“A distinguished clergyman informed me that he had been an extravagant snuff-taker; that for years he had had a disagreeable affection of the head, and his health was not good. He did not attribute either to his use of snuff, but thinking it a filthy habit and a growing evil, he resolved to leave it off. He was surprised to find the difficulty in his head almost immediately left him, and his general health became quite good.

“A gentleman of athletic frame, and about twenty-four years of age, applied to me for advice. He complained of insufferable faintness and distress of stomach, morning-sickness, vomiting, trembling and prostration of strength. He diminished his tobacco considerably, and was immediately better, but had not resolution to abandon the pernicious practice.

“In our experience in the Hospital, tobacco in all its forms is injurious to the insane. It increases excitement of the nervous system in many cases, deranges the stomach, and produces vertigo, tremors, and stupor in others. It is difficult to control its use with the insane, and though considerable suffering comes from its entire abandonment, it cannot be generally allowed with safety.

“One patient, while at labor, found a quantity of tobacco, and hid it in his bed. He used it freely, became sick, lost his appetite, and confined himself to his bed completely intoxicated. After some days,

diligent search was made, and a store of tobacco was found in his straw-bed ; when this was removed he almost immediately recovered, and in a few days was well as before.

“ A person who came into the Hospital a furious maniac, soon became calm and improved favorably. He labored in the field with propriety, and exhibited every indication of a favorable convalescence. Suddenly, without any apparent cause, he again became very violent and insane. It was soon discovered that he had in some way obtained tobacco. After he ceased to use it, he again became calm and convalescent.

“ An aged lady was brought to us very insane. The practice of her friends for some time had been to give her ardent spirits to intoxicate her at night, and tobacco and snuff, in unlimited quantity, for the day. All these were withdrawn at once ; her sufferings for some days were great ; but after a time she became calm, and got better as soon as the influence of this excitement was over.

“ I have already exceeded my intended limits in the detail of cases.

“ It is very natural to suppose that an article possessing the active properties of this fascinating narcotic, should produce most deleterious effects upon health—particularly upon the brain and nervous system.

“ The uninitiated cannot smoke a cigar, or use tobacco in any form, without unpleasant effects,—how then can it be possible that a poison so active can be used with impunity ? The stomach and brain, subjected to such influences, will become diseased, and show their effects as certainly as if alcohol were used. If asked my medical opinion, which

was safest, four glasses of wine or four quids of tobacco, daily, I should say unhesitatingly the *wine*. Of the two evils, this would, in my opinion, be the least. Tobacco is the strongest, most dangerous narcotic—the habit of its use is the strongest and most difficult to overcome, and the influence felt from it most baneful and destructive to health.”

Opium acts similarly to tobacco, but much more fatally, the exhaustion caused by it being much less readily recovered from. In fact if a man once becomes impotent from using opium it is a great chance if he ever recovers his powers.

Dr. McDougal says that many of his friends, inveterate smokers, have remarked to him that a decrease of their sexual desires was one of the marked effects of their indulgence, and I have frequently been told the same. M. Lallemand also gives several instructive cases in which this fact is forcibly illustrated. The following is a counterpart of many that I see :—

“ I have a young man of very nervous temperament at present under my care, in whom nocturnal and diurnal pollutions have brought on pain in the loins, palpitation, difficulty of breathing, &c., symptoms which were supposed to arise from disease of the spinal cord, cardiac affection, and commencing phthisis. Among the exciting causes of these involuntary discharges, the effects of smoking occupy the chief place. The following is the patient's statement.

“ ‘ At twenty years of age I wished to accustom myself to smoking ; but a day never passed without my experiencing complete intoxication, attended with vomiting, vertigo, and trembling of the limbs.

I continued the habit, however, and I soon began to perceive that my sight became weak, and that I lost my memory ; my hands shook ; and my digestion became much disordered. I noticed also, great debility of the genital organs ; my erections ceased ; and at the age of twenty-two I found myself completely impotent.' This patient had rarely practised masturbation, and had never committed any excess when he first began to smoke ; his health had, previously, been excellent. It is, therefore, evident that the impotence, as well as the other symptoms, arose from the action of tobacco. Impotence at the age of twenty-two can only be produced by involuntary seminal discharges, provided there be no physical disability. In the present case, there was no doubt on the point, the patient himself having discovered diurnal and nocturnal pollutions.

"The action of tobacco on those who smoke for the first time, is too well known to require description ; more or less disorder of all the functions, varying according to the constitution of the individual, invariably arises from it ; and this disorder always presents more or less of the characteristics of poisoning by narcotics. These effects go off by degrees, as the patient becomes habituated to the use of tobacco, and generally after a time cease to be manifested at all. Some nervous and excitable individuals are unable to accustom themselves to the habit, as in the case just mentioned ; in others again, smoking becomes an artificial habit, which in many cases is almost a necessity.

"But this empire of custom has its limits, beyond which, the narcotic influence re-appears. In such as are not easily affected, this acquired habit is generally supported with impunity ; but even then, if

it be indulged in to excess, it must after a time be injurious. Thus it is that the most accomplished smokers often experience vertigo, cephalalgia, anorexia, &c., when they have remained long in an atmosphere densely filled with smoke, which is then drawn into the lungs, and probably produces worse effects than when merely drawn into the mouth, or swallowed, as in smoking.

“In a word then, if the power of habit can prevent the momentary effects of smoking from showing themselves, the frequent repetition of the use of tobacco produces more lasting effects on different organs. Disorder of the digestive organs is well known as occurring in inveterate smokers; that of the genital organs has not hitherto been noticed. [Many inveterate smokers among my professional friends, have mentioned to me the diminution of their venereal desires, as one of the effects of tobacco. I believe, however, that it is by no means rare.” H. J. McD.]

Cantharides, or Spanish Flies. This article is popularly supposed to have an undoubted stimulating effect upon the sexual powers, and many persons will be surprised to learn how little foundation there is for such a belief. In fact upon most persons *Cantharides* have but little or no effect at all in that way; except they are given in such quantity as to be poisonous, and then they only act by causing severe inflammation, not only on the genitals but also in all the neighboring parts. It is quite common for even a small dose to create great irritation of the bladder, with complete inability to discharge the urine, and this may take place without any unusual sexual excitement at all, though most usually the

generative organs are stimulated more or less.—It is a great mistake, therefore, to suppose that Cantharides have a constant and specific action on the sexual organs, for they merely create an intense irritation, which affects these organs along with others, in the same way that many other irritant poisons do.—All the popular notions on this subject are utterly unfounded, and quite opposed to the truth.

It is very seldom that Cantharides are of any service whatever in the treatment of Impotence or Spermatorrhœa, though a combination of these with other articles is useful in certain cases. They form the main ingredient in all the quack stimulants for the generative organs, and the use of them in this way unfortunately causes great mischief. Numbers of young men are permanently ruined, from Spermatorrhœa, through taking these preparations of Cantharides, and I have known many married persons rendered hopelessly sterile from using them as stimulants. I had one distressing case of a young man, who was persuaded by a thoughtless friend to take some Spanish Flies as an experiment, to see if they would not increase his desires and powers. The quantity he took was only a moderate dose, but the effects were most alarming. He completely lost all power of discharging the urine, though the Bladder was full almost to bursting, and experienced such agonizing pain in the prostate and urethra that he was nearly delirious. Priapism took place, but so far from being attended by increased pleasure that it added to his sufferings, and yet he could not prevent it. Fortunately he had timely assistance, and the immediate danger was obviated, but immediately after he began to be troubled with involuntary emissions in the night, and

eventually when urinating, so that he became completely impotent, and so weak he could scarcely stand. I cauterized him, and used every other means the case would allow, but in spite of all, the trouble continued to some extent, and probably always will. He had been suffering, however, over four years when I saw him.

I also had a case of a young person of the other sex, who was seriously injured by Cantharides, given as a trick, and who had involuntary discharge of urine ever afterwards.

Camphor.—The action of Camphor upon the genital organs is sedative rather than stimulant, and when taken improperly or in excess, it may almost entirely destroy the sexual feeling, at least for a time. It is therefore given in cases of priapism, and in excessive excitement, whether from sexual or physical causes. If Cantharides or any other irritating poison be taken, Camphor is usually a valuable palliative, and it is sometimes of great service in certain forms of Spermatorrhœa. If taken in too large doses, however, or for too long a time, it will cause involuntary emission.

Nitrate of Potash or Saltpetre.—It is commonly supposed that this substance acts as a direct sedative to the sexual organs, and that if taken in any considerable quantity, it will destroy all feeling, but this notion is a very erroneous one. Like all other diuretics Nitre stimulates the Genital Organs, and if taken in too large doses it will even produce inflammation, like Cantharides. Instances have been known where a discharge from the urethra has followed its use, like that of Gonorrhœa, and afterwards involuntary emissions have been experienced.

Ergot of Rye, or *Secale Cornutum*. This sub-

stance, as is well known, is used to expedite delivery in females, which it does by increasing the action of the womb. Its use, however, is dangerous, except in proper hands. From recent observations it appears to stimulate the male organs also, and the men of those parts where it grows among the rye are noted for their ardent desires, while the females frequently miscarry. The Ergot cannot be given alone, either with safety or advantage, but its combination with other articles, forms a valuable remedy, both for impotence and for spermatorrhœa. It is one of the ingredients of a stimulating and invigorating medicine which I use extensively in my practice.

Coffee and Tea.—Both these articles, but especially coffee, act as direct stimulants to the generative organs, and if taken in excess may produce all the effects of the most powerful drugs. I have known coffee cause priapism, lascivious dreams, and involuntary emissions, and nearly always its continued use will counteract any treatment that can be followed for relief.

Phosphorus.—This article is similar in its action to cantharides, but much more energetic, and consequently it is much more dangerous in wrong hands, but when properly administered it is frequently of great service. It is one of the ingredients of the invigorating medicine which I formerly spoke of, with which I have often produced the most unexpected restorations to power and health. Phosphorus should, however, never be experimented with by those not familiar with its action, for in some cases it will lead to the most disastrous consequences, and its evil effects are not easily recovered from.

Aromatics and Spices.—These have in general a stimulating effect on the generative organs, the same as on other parts, but their power varies very much in different persons, and under different circumstances. There are various spice mixtures and combinations in popular use for this purpose, but they should not be indiscriminately used. Sometimes they are highly injurious, like all other stimulants, and even when they do cause an increase of power or feeling it is only temporary, and often followed by directly opposite effects.

In short none of these articles operate specifically, in a beneficial manner, on the generative organs, though certain combinations of them may do so under particular circumstances, like the medicine I have referred to as being used in my own practice.

There is one drug brought from the East Indies, the *Cannabis Indica*, which is the most regular in its action, and produces the most constant beneficial effects of anything yet tried. It appears to act as a special nervous stimulant, exciting that part of the brain which influences the sexual organs, so that they feel directly an increase of power. It also causes great mental activity, disposes to cheerfulness, and induces a feeling of warmth and comfort over the whole system. Those who have taken it in a proper manner, are delighted with its effects, and never complain of any after-depression or reaction in any way. If given improperly, however, or in too heavy a dose, it first causes excitement of the wildest character, with an uncontrollable disposition to bodily activity, and afterwards a complete mental and physical prostration. In short it is most powerful, either for good or for evil, according as it is used, and is the only means we possess, in numer-

ous cases, of restoring sexual power and desire. In the East Indies it is commonly used, like opium is in China, for the purpose of producing pleasurable excitement, and also for removing impotence.

A plant producing this drug grows in the United States, and with due care a similar preparation may be made from it to that received from the East Indies. I have experimented with both, and when prepared by myself I have found the native product fully equal to the foreign. The Botanic physicians use this plant for various other purposes, but none of them seem to be aware of its possessing the properties I have described. * Indeed the way in which they prepare and administer it prevent those properties from being exhibited.

Medicines that excite the sexual organs are called *Aphrodisiacs*, and in various parts of the world they are in great demand, though but seldom administered, so as to be of any real service. As I have already remarked some of these medicines, when properly used, have undoubted aphrodisiac powers, but they are by no means applicable in all cases. They may frequently fail of producing any good effect whatever, and sometimes may even cause irretrievable mischief. The successful administration of them therefore requires a perfect knowledge of their properties, and an extensive observation of their effects under all circumstances. It is for this reason I have not given any recipes for these drugs, for no one can tell when they should or should not be used unless they know something about them, and the effects of taking them improperly may be so serious that mere experiment with them is highly hazardous.

In a particular class of cases I have long been

using a combination of the Cannabis, with other articles, which I find to possess the most extraordinary powers, the preparation of which I have been repeatedly importuned to disclose, both by patients and medical men. At present, however, I do not feel called upon to make this disclosure, because I know the great mischief which would result from using such a preparation improperly, and I know also how few persons there are familiar enough with its powers and properties to use it rightly. My own experience has made me acquainted with signs by which I can tell, *in every case*, whether it is proper to be used or not, and I will answer for its never producing evil effects when I advise it. So wonderful and unexpected have been the effects of this preparation, in numerous instances, that if I chose to be unscrupulous and sell it indiscriminately, I have no doubt but it would be used more extensively than any other medicine has ever been, for any purpose whatever. I do not think it proper to give it, however, in any case, till I know whether it be appropriate or not, and this I can always tell on receiving either a verbal or written description of the history, progress, and symptoms of the disease. I do not hesitate to say that I have seen more restorations to sexual power, and more cures of *Sterility*, in both sexes, from the use of this preparation than from any other means, and I do not hesitate to pronounce it, in certain cases, *an infallible remedy*.

Medicines that *decrease* the sexual powers are called *An-aphrodisiacs*, and I believe they have all been mentioned.

CHAPTER IX.

MASTURBATION AND OTHER SEXUAL ABUSES.

A VERY few years ago only it was thought wrong even to allude to such a subject as masturbation, much less to openly speak or write about it. Fortunately, however, people have become more rational, and now begin to see that this and similar practices are of the most hurtful character, and that no successful efforts can be made for their removal till they are more fully and generally understood. Various books have been published, lectures have been delivered, and even sermons have been preached bearing upon this subject, till much general information about it is now disseminated, and a very general desire is expressed for something more complete and scientific than has yet appeared.—The greater part of the books written on the subject of Onanism or Masturbation, are very incomplete, and not accompanied by those physiological and medical details that are requisite to give a clear view of the evil. The effects of this vice may be partly given in such works, though in an incomplete form, but the manner in which they are produced, their connection with other evils, and the philosophy of their treatment, cannot be understood without such a work as the present. I have, therefore, delayed speaking upon this subject till all the other topics have been introduced, so that the unnatural character of the vice, and its terrible consequences, may be clearly obvious.

The mere tolerance of discussion on this subject was a great point gained, and was soon followed by a general conviction that such a discussion was not only desirable, but imperatively demanded by the best interests of society. It is both curious and instructive to see how this tolerance has been gradually gained, and how a perception of the manifold evils of self-abuse has extended, though slowly, from a few philosophers to the great mass of the medical profession, and from thence to non-professional persons, till at last it has even been made the subject of *legislative action*.

I shall now proceed to show, by extracts from ancient medical writers, how this subject was regarded, by eminent minds, in former ages, and then to exhibit the more perfect knowledge, and greater interest of modern times, including the approval, by existing legislators, of investigations bearing intimately upon it.

Several of these extracts are taken from the celebrated works of *Tissot* and others, and being from the writings of the Fathers of Physic, many of whom lived centuries before Christ, allowance must be made, in some few cases, both for unintentional exaggeration, and also for deficiency in scientific accuracy. Generally speaking the statements are fully authorized, and the pictures by no means overdrawn; in fact it is often the case that the *whole* truth is not told, simply because it was not known.

“Hippocrates, the oldest and most correct observer, has already described the diseases produced by abusing the pleasures of venery, under the term, *dorsal consumption*. ‘This disease,’ says he, ‘arises from the dorsal portion of the spinal mar-

row. It principally attacks young married people, or the licentious. They have no fever, and although they eat well, they grow thin and waste away. They have a sensation of ants crawling from the head down along the spine. Whenever they go to stool, or evacuate their urine, a considerable quantity of very thin seminal fluid escapes from the urethra. They lose the power of procreation, yet often dream of venereal pleasures. They become very weak, and walking produces shortness of breath; they have pains in the head and ringing in the ears; and finally an acute *fever* (*Libiria*) supervenes and they die." We shall mention this fever in another place.

"Some physicians have ascribed to the same cause, a disease which he has described, in another place, and have termed it, the *second dorsal consumption of Hippocrates*, and which has some relation to the first. But the preservation of the strength which he mentions particularly, seems to us a conclusive proof, and this disease does not depend on the same cause, but seems rather to be a rheumatic affection.

" 'These pleasures,' says Celsus, in his excellent work on the preservation of health, 'are always injurious to weak persons, and their abuses prostrate the strength.' We can find nothing more frightful, than the description, by Aretæus, of the diseases produced by a too abundant evacuation of semen. 'Young persons assume the air and the diseases of the aged; they become pale, stupid, effeminate, idle, weak, and even void of understanding; their bodies bend forward, their legs are weak, they have a disgust for everything, become fit for nothing, and many are affected with paralysis.' In

another place he mentions the abuse of these pleasures among the six causes which produce paralysis.

“Galen has seen diseases of the brain and nerves from the same cause, and the powers of the body impaired; and he also relates that a man who was convalescent from a violent attack of disease, died the same night after coition with his wife.

“Pliny, the naturalist, informs us that Cornelius Gallus, the old prætor, and Titus Etherius, a Roman knight, died in the act of copulation.

“Aetius says, ‘the stomach is deranged, all the body wastes, becomes pale, dry, and the eyes sunken.’ These remarks of the most respectable ancient writers are confirmed by the moderns. Sanctorious who has examined, with the utmost care, all the causes which act on our bodies, has observed, that this weakens the stomach, destroys digestion, prevents insensible perspiration, the derangements of which produce such evil consequences, disposes to calculus diseases, diminishes the natural warmth, and is usually attended with a loss, or derangement of sight.

“Lomnius, in his fine commentaries on the passages of Celsus, whom we have just cited, supports the remarks of the author by his own observations. ‘Frequent emissions of semen relax, weaken, dry, enervate the body, and produce numerous other evils, as apoplexies, lethargies, epilepsies, loss of sight, trembling, paralysis, and all kinds of painful affections.’

“One cannot read without horror the description left us by Tulpius, the celebrated burgomaster and physician of Amsterdam. ‘Not only,’ says he, “the spinal marrow wastes, but the whole body and mind becomes languid, and the patient perishes in

misery. Samuel Vespertius was attacked first with a humor upon the back of his neck and head ; it then passed to the spine, to the loins, to the lower and lateral region of the abdomen, and to the hips ; this unhappy man was affected with so much pain, that he was entirely disfigured, and was emaciated so gradually by a slow fever, that he more than once asked to be relieved from his misery by death.'

" Nothing says a celebrated physician of Louvain, weakens the system so much.

" Blancard has known simple gonorrhœas, dropsies, and consumptions, to depend on this cause ; and Muys has seen a man of good age attacked with spontaneous gangrene, of the foot, which he attributed to the same kind of excesses.

" In the *Memoires des Curieux de la Nature* is mentioned a case of blindness : it deserves to be given at length. ' We are ignorant,' says the author, ' what sympathy the testicles have with the body, but particularly with the eyes.' Salmuth has known a sensible hypochondriac to become a fool, and in another man the brain to be so collapsed that it was heard to rattle in the cranium, both from excesses in venery. I have known myself a man, fifty-nine years of age, who, three weeks after marrying a young wife, became blind, and in four months died.

" ' The too great loss of the animal spirits weakens the stomach and destroys the appetite ; and nutrition not taking place, the action of the heart becomes more feeble ; all parts languish, and the patient becomes epileptic.' It is true we are ignorant whether the animal spirits and the seminal fluid are the same ; but observations show, as we shall see

hereafter, that these two fluids are very analogous, and that loss of one or the other, produces the same complaints. Hoffman has seen the most frightful symptoms ensue from the loss of semen: 'After long nocturnal pollutions,' says he, 'the patient not only loses strength, becomes emaciated and pale, but the memory is impaired, a continual sensation of coldness affects all the extremities, the sight becomes dim, the voice harsh, and the whole body, gradually wasted; the sleep is disturbed by unpleasant dreams, does not refresh, and pains are felt like those produced by bruises.'

"In a consultation for a young man who, among other diseases produced by masturbation, was affected with weakness in the eyes, he says, 'I have seen several instances of young men who, at mature age, when the body possesses all its strength, were attacked, not only with severe pain and redness of the eyes, but the sight became so feeble that they could neither read nor write.' He adds, 'I have even seen two cases of *gutta serena* from the same cause.' The history of the disorder which gave rise to this consultation will be read with interest. 'A young man commenced masturbation, when fifteen years old, and having indulged in it till he was twenty-three, experienced so great feebleness in his head and eyes, that during the emission of semen there was severe pain in the latter. When he attempted to read anything he had a feeling similar to that of drunkenness; the pupil was extraordinarily dilated; the eyes were exceedingly painful; the eyelids very heavy, and glued together every night; they were often filled with tears, and a whitish matter collected very abundantly in the two corners which were very painful. Although

he ate with a good appetite, still he was extremely emaciated; and after he had taken food, appeared as if drunk.' The same author has mentioned another case of which he was an eye-witness, and which we think proper to mention here. 'A young man, eighteen years old, who had had frequent connections with a servant girl, suddenly fainted and trembled exceedingly in all his extremities; his countenance was red, and his pulse very small. He recovered from this state at the end of an hour, but continued very feeble. The same phenomena occurred very frequently with severe pain, and at the end of eight days there was a contraction and tumor in the right arm with a pain in the elbow, which was always increased during the paroxysm. The disease increased for some time, but was finally cured by Hoffman.'

"Boerhaave portrays these diseases in that masterly manner and with that precision which characterizes all his descriptions. 'Too great loss of semen produces weakness, debility, immobility, convulsions, emaciation, dryness, pains in the membranes of the brain, impairs the senses, particularly that of sight, gives rise to dorsal consumption, indolence, and to the several diseases connected with them.'

"The cases, narrated by this great man to his auditors in explaining to them this aphorism, which related to the different kinds of evacuations, ought not to be omitted. 'I have seen,' says he, 'a sick man where the disease commenced by a lassitude and feebleness in the body, particularly in the loins: it was accompanied by twitching of the tendons, periodical spasms and loss of flesh, so as to destroy the whole body; also pains in the mem-

branes of the cerebrum, pains which the patient terms (*ardeur seche*) a dry burning, which constantly inflames this most noble organ.

"I have also seen one young man affected with dorsal consumption. His figure was good ; and although often cautioned against indulging in these pleasures, he did not regard it, and became so deformed before death, that the layer of flesh which appears above the spinous processes of the lumbar vertebræ, entirely disappeared. The cerebrum in this case seemed to be consumed ; in fact, the patient seemed to be stupid, and became so stiff, that we have never seen the body so immovable from any other cause. The eyes are so dull that the sight is nearly lost."

"De Senac mentions in the first edition of his *Essays*, the dangers attending masturbation, and states that all who indulge in this vice will be affected in the flower of their youth with the infirmities of age. We can see in the following editions why this and other remarks of the same character were suppressed.

"Ludwig, in describing the diseases resulting from too frequent evacuations, does not forget that of the semen. 'Young people of both sexes, who indulge in lasciviousness, ruin their health by wasting strength which was designed to make them vigorous, and finally fall into consumption.'

"De Gotter details the sad accidents arising from this cause ; but they are too long to copy. We refer to the work all those who can read the language in which it is written.

"Van Swieten, after quoting the description of Hippocrates mentioned above, adds, 'I have seen all these symptoms, and several others, in those un-

fortunate people who indulged in self-pollutions. I have employed uselessly, for three years, all the resources of medicine, for a young man who was diseased in consequence of this practice with wandering, frightful and general pains, with a sensation sometimes of heat, and sometimes of cold, in every part of the body, but particularly in the loins. Afterwards these pains having diminished, his thighs and legs were so cold, that although they seemed of the natural temperature when touched, he was constantly warming himself by the fire, even during the warmest days of summer. I noticed particularly, all this time, a continual rotatory motion of the testicles in the scrotum, and the patient felt a similar motion in the loins.' This account does not mention whether this unfortunate creature died in three years or continued to languish sometime longer, which would be more dreadful; he could not have recovered.

"Kloekof, in a very fine work on the diseases of the mind which depend on the body, confirms by his observations what we have already mentioned. 'A too great loss of semen weakens all the solid parts; hence arise weakness, idleness, phthisis, tabes dorsalis, stupidity, affections of the senses, faintings and convulsions.'

"Hoffman had already remarked that those young people who practise the infamous habit of masturbation, lose gradually all the faculties of the mind, particularly the memory, and become entirely unfit for study.

"Lewis describes all these symptoms. We shall translate from his work only what relates to the mind. 'All the symptoms which arise from excesses with females, follow still more promptly, and

in youth the abominable practice of masturbation, and it is difficult to paint them in as frightful colors as they deserve: young persons addict themselves to this practice without knowing the enormity of the crime, and all the consequences which physically result from it. The mind is affected by all the diseases of the body, but particularly by those arising from this cause. The most dismal melancholy, indifference, and aversion to all pleasures, the impossibility to take part in conversation, the sense of their own misery, the consciousness of having brought it upon themselves, the necessity of renouncing the happiness of marriage, all affect them so much that they renounce the world—blessed if they escape suicide.’”

The symptoms here given are precisely such as are ordinarily seen in cases of self-abuse, but there are many others, arising secondarily, which have only been recently ascribed to this cause. Idiocy and insanity for instance, and that general failing of all the physical and mental powers, affecting both the individual and his offspring, which leads eventually to the extinction of his family and name. It is only of late that proper attention has been directed to these terrible evils, and that they have been thought to be at all under our control. Formerly they were looked upon as mysterious dispensations of providence, much to be deplored, but only to be met with patience and resignation. Many eminent writers of the present age have distinctly recognised the influence of self-abuse, in the production of idiocy, insanity, and constitutional degeneracy, and have especially urged the necessity of attending to it when treating those evils. Among other recog-

nitions of this kind I have been particularly struck with one, *a legislative document*, in which there is more wholesome truth told, and more sound reasoning advanced, than in almost all the *medical* treatises on the subject put together. It is a REPORT on the subject of Idiocy, presented to the Massachusetts Senate, by *Dr. S. G. Howe*, in February, 1848, in compliance with a former resolution of that body directing such a Report to be made.—I am only surprised that such a document so valuable should be so little known, and that the Hon. Senators should not have seen that their duty was to give it as wide a circulation as possible. The influence of such a document, *from such a source*, must have been very great, and no doubt would accomplish more good, in the way of *prevention*, than all their asylums and medical treatment could do in the way of *cure*.—In time this and similar Reports will be eagerly sought for, and their great value, to the public at large, will be universally admitted. I shall quote from the Report here for the double purpose of corroborating by it my own statements, and also of making it more generally known.

In speaking upon the necessity that exists for boldly approaching this subject, notwithstanding the prejudice that many persons feel against doing so, Dr. H. makes the following forcible and sensible remarks :—

“There is another vice, a monster so hideous in mien, so disgusting in feature, altogether so beastly and loathsome, that, in very shame and cowardice, it hides its head by day, and vampyre-like, sucks the very life-blood from its victims by night; and it may perhaps commit more direct ravages upon the

strength and reason of those victims than even intemperance ; and that vice is

SELF-ABUSE.

“One would fain be spared the sickening task of dealing with this disgusting subject ; but, as he who would exterminate the wild beasts that ravage his fields, must not fear to enter their dark and noisome dens, and drag them out of their lair ; so he, who would rid humanity of a pest, must not shrink from dragging it from its hiding-places, to perish in the light of day. If men deified him who delivered Lerna from its hydra, and canonized him who rid Ireland of its serpents, what should they do for one who could extirpate this monster-vice ? What is the ravage of fields, the slaughter of flocks, or even the poison of serpents, compared with that pollution of body and soul, that utter extinction of reason, and that degradation of beings, made in God’s image, to a condition which it would be an insult to the animals to call beastly, and which is so often the consequence of excessive indulgence in this vice ?

“It cannot be that such loathsome wrecks of humanity as men and women reduced to drivelling idiocy by this cause, should be permitted to float upon the tide of life, without some useful purpose : and the only one we can conceive, is that of awful beacons to make others avoid,—as they would eschew moral pollution and death,—the course which leads to such ruin.

“This may seem to be extravagant language, but there can be no exaggeration, for there can be no adequate description even, of the horrible condition

to which men and women are reduced by this practice. There are, among those enumerated in this Report, some who not long ago were considered young gentlemen and ladies, but who are now moping idiots, idiots of the lowest kind ; lost to all reason,—to all moral sense,—to all shame ; idiots who have but one thought, one wish, one passion,—and that is, the further indulgence in the habit which has loosed the silver cord even in their early youth, which has already wasted, and, as it were, dissolved the fibrous part of their bodies, and utterly extinguished their minds.

“ In such extreme cases, there is nothing left to appeal to, absolutely less than there is in the dogs and horses,—for they may be acted upon by fear of punishment ; but these poor creatures are beyond all fear and all hope, and they cumber the earth a while, living masses of corruption.

“ If only such lost and helpless wretches existed, it would be a duty to cover them charitably with the veil of concealment, and hide them from the public eye, as things too hideous to be seen : but, alas ! they are only the *most* unfortunate members of a large class. They have sunk down into the abyss towards which thousands are tending. The vice which has shorn these poor creatures of the fairest attributes of humanity is acting upon others, in a less degree indeed, but still most injuriously ; enervating the body, weakening the mind, and polluting the soul.

“ A knowledge of the extent to which this vice prevails, would astonish and shock many. It is indeed a pestilence which walketh in darkness, because, while it saps and weakens all the higher qualities of the mind, it so strengthens low cunning

and deceit, that the victim goes on in his habit unsuspected, until he is arrested by some one whose practised eye reads his sin in the very means which he takes to conceal it—or until all sense of shame is forever lost in the night of idiocy, with which his day so early closes.

“Many a child who confides every thing else to a loving parent, conceals this practice in its innermost heart. The sons or daughters who dutifully, conscientiously, and religiously confess themselves to father, mother, or priest, on every other subject, never allude to this. Nay, they strive to cheat and deceive by false appearances; for, as against this darling sin,—duty, conscience, and religion, are all nothing. They even think to cheat God, or cheat themselves into the belief that He who is of purer eyes than to behold iniquity can still regard their sin with favor.

“Many a fond parent looks with wondering anxiety upon the puny frame, the feeble purpose, the fitful humors of a dear child, and, after trying all other remedies to restore him to vigor of body and vigor of mind, goes journeying about from place to place, hoping to leave the offending cause behind, while the victim hugs the disgusting serpent closely to his bosom, and conceals it carefully in his vestment.

“The evils which this sinful habit works in a direct and positive manner are not so appreciable, perhaps, as that which it effects in an indirect and negative way. *For one victim which it leads down to the depths of idiocy, there are scores and hundreds whom it makes shamefaced, languid, irresolute, and inefficient for any high purpose of life.* In this way, the evil to individuals and to the community is very great.

“It behooves every parent, especially those whose children (of either sex) are obliged to board and sleep with other children, whether in boarding-schools, boarding-houses, or elsewhere, to have a constant and watchful eye over them with a view to this insidious and pernicious habit. The symptoms of it are easily learned, and, if once seen, should be immediately noticed.

“*Nothing is more false than the common doctrine of delicacy and reserve in the treatment of this habit.* All hints, all indirect advice, all attempts to cure it by creating diversions, will generally do nothing but increase the cunning with which it is concealed. The way is, to throw aside all reserve; to charge the offence directly home; to show up its disgusting nature and hideous consequences in glowing colors; to apply the cautery seething hot, and press it in to the very quick, unsparingly and unceasingly.

“Much good has been done, of late years, by the publication of cheap books upon this subject. They should be put into the hands of all youth suspected of the vice. They should be *forced* to attend to the subject. There should be no squeamishness about it.

“There need be no fear of weakening virtue by letting it look upon such hideous deformity as this vice presents. Virtue is not salt or sugar to be softened by such exposure; but the crystal or diamond that repels all foulness from its surface. Acquaintance with such a vice as this,—such acquaintance, that is, as is gained by having it held up before the eyes in all its ugliness, can only serve to make it detested and avoided.

“Were this the place to show the utter fallacy of the notion that harm is done by talking or writing

to the young about this vice, it could probably be done by argument, certainly by the relation of pretty extensive experience. This experience has shown that, in ninety-nine cases in a hundred, the existence of the vice was known to the young, but not known in its true deformity; and that, in the hundredth, the repulsive character in which it was first presented, made it certain that no further acquaintance with it would be sought."

This is speaking to the point, and Dr. Howe never rendered more important service to suffering humanity than when he laid down these momentous truths.

In another part of the Report the effects of ignorance are made terribly apparent, not only upon the unfortunate victim, but also upon society at large, and it is plainly shown what danger every one runs while that ignorance exists.

"In some families which are degraded by drunkenness and vice, there is a degree of combined ignorance and depravity, which disgraces humanity. It is not wonderful that feeble-minded children are born in such families; or, being born, that many of them become idiotic. Out of this class domestics are sometimes taken by those in better circumstances, and they make their employers feel the consequences of suffering ignorance and vice to exist in the community. There are cases recorded in the appendix, where servant-women, who had the charge of little girls, deliberately taught them habits of self-abuse, in order that they might exhaust themselves, and go to sleep quietly! This has happened in private houses as well as in the

almshouses; and such little girls have become idiotic!

“The mind instinctively recoils from giving credit to such atrocious guilt; nevertheless, it is there with all its hideous consequences; and no hiding of our eyes, no wearing of rose-colored spectacles, —nothing but looking at it in its naked deformity, will ever enable men to cure it. There is no *cordon sanitaire* for vice; we cannot put it into quarantine, nor shut it up in a hospital; if we allow its existence in our neighborhood, it poisons the very air which our children breathe.”

These remarks apply also to our public schools, in most of which this vice prevails to an alarming extent, and sometimes in the most *open* manner. I have been myself amazed at the revelations made to me on this subject, both by teachers and pupils, and clearly enough has it been proved, to my satisfaction, how that shunning of the subject, which many so systematically practise, leads directly to the production and continuance of the vice.

In some few cases masturbation is learned accidentally, or a knowledge of it arises spontaneously, but in a vast majority of instances it is *taught*, and hence the great importance of preventing, if possible, those who are addicted to it from contaminating those who are innocent. Dr. Howe remarks:

“There is one remarkable and valuable fact to be learned respecting this vice, from observation of idiots, and that is, that some of them, though they have no idea of right and wrong, no sense of shame, and no moral restraint, are nevertheless entirely free from it. They could never have been in the

practice of it, else they would never have abandoned it.

“From this may be inferred, that it is a pest generally engendered by too intimate association of persons of the same sex ; that it is handed from one to another like contagion ; and that those who are not exposed to the contagion are not likely to contract the dreadful habit of it. Hence we see, that not only propriety and decency, but motives of prudence, require us to train up all children to habits of modesty and reserve. Children, as they approach adolescence, should never be permitted to sleep together. Indeed, the rule should be,—not with a view only to preventing this vice, but in view of many other considerations,—that, after the infant has left its mother’s arms, and become a child, it should ever after sleep in a bed by itself. The older children grow, and the nearer they approach to youth, the more important does this become. Boys even should be taught to shrink sensitively from any unnecessary exposure of person before each other ; they should be trained to habits of delicacy and self-respect ; and the capacity which nature has given to all for becoming truly modest and refined, should be cultivated to the utmost. Habits of self-respect, delicacy, and refinement, with regard to the person, are powerful adjuncts to moral virtues ; they need not be confined to the wealthy and favored classes ; they cost nothing ; on the contrary, they are the seeds which may be had without price, but which ripen into fruits of enjoyment that no money can buy.”

In the present state of society it is almost *impossible*, unfortunately, to prevent children from being

taught this vice, either practically or by verbal instruction, and it is, therefore, necessary to guard them against it by timely information and warning. Even if he be strictly kept from vicious associates the child may learn the habit himself, and may sink and die from it while the parent is glorifying himself on the success of his precautions.

In the article on *Insanity* in Copland's Dictionary of Practical Medicine, the author, in pointing out the various causes of that terrible affliction, speaks in the following terms respecting self-abuse:

“Many, however, of those causes, which thus affect nervous energy, favor congestion on the brain, and occasion disease of other vital organs, tending to disorder the functions of the brain sympathetically. Of these, the most influential are masturbation and libertinism, or sexual excesses, sensuality in all its forms, and inordinate indulgence in the use of intoxicating substances and stimulants. The baneful influence of the *first* of these causes is very much greater, in both sexes, than is usually supposed; and is, I believe, a growing evil, with the diffusion of luxury, of precocious knowledge, and of the vices of civilization. It is even more prevalent in the female than in the male sex; and in the former it usually occasions various disorders connected with the sexual organs—as leucorrhœa, displacement of the uterus; difficult, or disordered, or suppressed, or profuse menstruation; both regular and irregular hysteria, catalepsy, ecstasis, vertigo, various states of disordered sensibility, &c., before it gives rise to mental disorder. In both sexes, epilepsy often precedes insanity from this cause; and either it or general paralysis often com-

plicates the advanced progress of the mental disorder, when thus occasioned. Melancholia, the several grades of dementia, especially imbecility and monomania, are the more frequent forms of derangement proceeding from a vice which not only prostrates the physical powers, but also impairs the intellects, debases the moral affections, and altogether degrades the individual in the scale of social existence, even when manifest insanity does not arise from it."

Some persons think that masturbation produces only the same effects as natural excess, and in no greater degree, but this is a great mistake. There is the same exhaustion of the semen in both cases, but in self-abuse it is not accompanied by those *natural associations* that bring it about in a pleasing manner, and leave afterwards a feeling of satisfaction. On the contrary it is induced almost wholly by a powerful exertion of the imagination alone, aided by manual means that are *felt* to be inappropriate, so that the act itself is but a very imperfect gratification, and the feelings that follow it are rather those of disgust and remorse than of pleasurable recollection. The facility with which the habit can be indulged also leads to its frequent repetition, and as the concurrence of a second party is not necessary there is nothing to prevent its growing and becoming fully confirmed. In fact the individual becomes a slave to a vice that he himself despises, and which he feels is destroying him. The mental tortures of remorse, fear, and self-condemnation are then added to bodily exhaustion, and we need not wonder at the fearful havoc they produce. The licentious debauchee will often

look back with a species of *pride* and vain-glory upon his numerous indulgences, even when he feels they are killing him, and he may even feel over again, by recollection, some of his former pleasures, but for the victim of masturbation there is not even this small solace. His pleasure is but incomplete at best, and clouded by dissatisfaction, while the recollection of it only excites disgust and fearful apprehensions.

In fact the evil effects of excessive natural indulgence, particularly the *mental* ones, bear no comparison, for severity, with those of self-abuse, nor are they nearly so numerous and varied. Natural indulgence, it must also be recollected, *cannot* be practised so frequently as masturbation, and consequently it can never cause such extensive mischief. It is but seldom that natural excesses cause insanity or idiocy, except secondarily in the offspring, but solitary vice *frequently* does so, both in the individual and in his children.

In the Massachusetts Report it is stated that 191 of the idiots examined were known to have practised masturbation, and in 19 of them the habit was even countenanced by the parents or nurses!—116 of this number were males, and 75 females.—In 420 who were born idiots, 102 were addicted to masturbation, and in 10 cases the idiocy of the children was “Manifestly attributable to *self-abuse in the parents!*” These 10 *known* cases it should also be recollected justify the conclusion that there are really *many more*, though not ascertained, and make it clear that much of the idiocy found among children, both mental and *moral*, is owing to sexual vice in the parents! What a fearful fact is this to contemplate, and how important that it should be

duly weighed, both by the moral reformer and legislator.

In the Annual Reports of the Massachusetts State Lunatic Asylum, are also some valuable statistics, showing the connection between masturbation and insanity. In the Twelfth of these Reports, I find that the number of cases existing in the Institute caused by self-abuse is set down at *One Hundred and Thirty-nine*, and yet great pleasure is expressed that the vice has "*fewer victims than formerly.*" The decrease in the number is attributed, and justly, too, I have no doubt, if there be a decrease, to "the *information* that has been diffused on the subject, and the *warnings* that have reached the young through the various channels of intelligence that have been opened on this hitherto obscure subject."

In the Thirteenth Report *One Hundred and Forty-five* cases are set down as caused by masturbation, and some very forcible remarks are made on the subject which I think it will be useful to copy.

"The causes of insanity may be divided into *voluntary* and *involuntary*. Of the former, the principal are *intemperance* and the *secret vice*, other causes may be of this class, such as hazardous speculation, many religious vagaries, imprudent exposures, and irregularities. None are so prominent as the two first named, and none so fully stain the character with guilt, which even the occurrence of hopeless disease can hardly wipe away. Intemperance disorders the senses, and induces apoplexy, epilepsy and palsy. The cases from this cause are about as favorable for recovery as the majority of others, but are most sure to return if the habit of intemperance recurs. The secret vice produces the very worst

form of insanity, because it is so difficult to avoid the continuance of the cause, and because the energies of the system are more prostrated by it than by almost any other cause. Such patients become degraded animals, so entirely abandoned to the habit, that hopeless dementia and drivelling idiocy generally follow. A few can be influenced to abandon the practice, and a few others can be cured in spite of it; but in almost all cases the disease will become worse, and these dreadful consequences will ensue.

“The secret vice, though doubtless a frequent cause of insanity, and of other severe and fatal diseases *far more than is generally supposed*, is most operative in preventing recovery from insanity, arising from this and other causes. *It is extensively and alarmingly the result of an active propensity excited by disease and unrestrained by reason, moral influences or self-respect.* Many cases of a favorable character progress towards recovery till this practice is commenced, then the patient becomes listless, is inclined to lie down or sit in a bent position, walks moderately, looks feeble and feels weak and miserable. His mind loses its energies, its scope is circumscribed, more and more, till this beastly indulgence occupies all his thoughts, and the remnant of all the physical powers are concentrated to this single effort of gross and debased animal nature. Thus the grovelling sensualist lives often a long life a degraded sufferer, without a manly thought or a moral feeling worthy of his nature or his destiny, and finally leaves the world without the regret of his friends, a useless, burthensome, loathsome object of abhorrence and disgust.”

In the two Reports, under the head of "*Relation of Cause to Recovery*," I find *two hundred and seventy-one* males enumerated, and *twenty-one* females, from masturbation and its effects; and of this number *one hundred and ninety-seven* males and *twenty-seven* females were *incurable*!—Only *two* of the females it will be observed being curable.

These Reports also throw much valuable light on the relation between Masturbation, as a cause of Insanity, and different occupations.

Some persons express fear that if this subject be generally discussed, and all are informed about it, that this very publicity will increase the evil, by exciting an amount of attention that would not otherwise have been given to it. The fallacy of this will be evident enough, to all those who are acquainted with the nature and extent of the vice. It is *next to impossible* to prevent its being known, either naturally or from tuition, and, therefore, no harm can possibly result from proper information timely given, while on the other hand, numbers undoubtedly perish for want of it.

If it were true that a knowledge of the nature and consequences of this habit tends to its being practised, we ought to find it most prevalent amongst those who have most of that knowledge, and least so amongst those who have the least of it. The truth is, however, *directly the reverse*, as every sensible person would pre-suppose, and as facts indubitably prove. Those who are educated as physicians of course study everything relating to the sexual system, and are acquainted with all its details, while mechanics, generally speaking, never study anything of the kind, because it is not necessary for them to do so. Now, let us see what pro-

portion of the Insane, from both these classes, are made so by masturbation.

In the Thirteenth Annual Report I find that there are in the asylum *sixty-two* shoemakers, of whom *twenty-four* were made insane by masturbation, which shows that of the insanity existing in this class of the population, who certainly receive but little of this kind of information, nearly fifty per cent., or one-half, arises from self-abuse!—Now what is the proportion when we refer to the medical profession? I can find physicians made insane by other causes, but neither in that Report, nor in the one for the preceding year, do I find *a single case* of one becoming insane from masturbation! These facts, so far from proving what some assert, that an intimate acquaintance with the physiology of the sexual system leads to its abuse, prove directly the reverse, and show conclusively that the best informed go the least astray.

Other facts in the same Report also show that it is precisely this kind of knowledge that is needed, and that no other will either lead the thoughts from it nor fortify against it. Thus among students the proportion of insane from masturbation is nearly *seventy-five* per cent., there being *eighteen* from this cause out of *twenty-five*; the balance of the cases being two from ill health, two from domestic affliction, two from religion, and one from epilepsy. Among merchants the proportion is about *fifty* per cent.; among lawyers, about *thirty-three* per cent.; and among clergymen *fifty-six* per cent.!

The most frequent cause of insanity is set down as *intemperance*, but in numerous cases this has been first produced by masturbation, the patient resorting to alcoholic and other stimulants, merely as

a temporary relief from the exhaustion produced by this practise. *Ill health* is also another frequent cause, and how often this arises from self-abuse is well known. In short there is no doubt on my mind, after duly considering all the facts, that *solitary vice produces more insanity than all other causes put together!*

Another valuable fact also shown in these reports is the influence of occupation in leading to solitary vice. It is proved conclusively that light sedentary employments very much favor the formation of such habits, and that on the contrary active out-of-door occupation has the contrary effect. Thus among "merchants, printers, students, and shoemakers," *fifty per cent* of the insanity arises from masturbation, and only *twelve per cent* from intemperance; while among carpenters, blacksmiths, and others who are actively employed, *thirty-five per cent* of the insanity arises from intemperance and only *thirteen per cent* from masturbation. Among seamen again *fifty-four per cent* of the insanity arises from intemperance, and only *eleven per cent* from solitary vice.—These facts should be duly weighed by parents when choosing employment for their sons. Many a youth of sanguine temperament, urgently requiring muscular and mental occupation of the most varied kind, is condemned to the monotonous inactivity of a counting-house desk, the distasteful plodding of an office or some merely intellectual profession, and in consequence becomes listless, dogged, and self-debased. In such cases the abundant vital energy, that ought to have been expended in active exertion, is retained, and, by stimulating the sexual organs to an unnatural degree, leads to solitary vice both as a gratification and a relief.

The effects of masturbation most frequently met with are weakness of the eyes, swelling and soreness of the eyelids, partial deafness, weakness of the limbs and back, headache, dizziness, flatulence, incontinence of urine, diarrhœa or obstinate costiveness, palpitation of the heart, shortness of breath, loss of memory, and confusion of judgment, with melancholy or irritable peevishness. Another effect also met with in many cases, is *a partial loss of the power of speech* or a tendency to stammer and stutter. This effect I have often observed in persons who had previously spoken as fluently as any one, and who could not imagine themselves what the difficulty arose from. Most frequently it is attributed simply to that loss of self-confidence, and that feeling of shame, which all self-abusers experience, and no doubt this does make it worse, but still the main cause of the impediment is a partial paralysis of the muscles of the throat, brought on by sympathy with the irritated parts below. Not unfrequently there is more or less difficulty in swallowing at the same time, with frequent sighing and gulping, as if there was wind in the throat. In fact this class of symptoms are very similar to those observed in the *hysteria* of females, with which they are, to a great extent identical, both in nature and origin.

Baldness is also a frequent occurrence to those who practise masturbation, and so is premature whitening of the hair.

Palsy and *Epilepsy* are more frequently the results of this practise than is usually thought, and *Paralysis* is quite commonly so. I have known many instances of young men becoming temporarily paralytic from excessive self-abuse, and very recently I was called to see an old man who was

dying from paralysis brought on in this way. These affections, though severe, need not be wondered at when the powerful sympathies of the generative organs are borne in mind, and when it is recollected what an exhaustion of the vital power is caused by their excessive action.

The best way, however, to exhibit the full effects of this baneful vice is to give a few illustrative cases, which will not only portray the prominent symptoms but also indicate the course of treatment usually adopted. Some of them are contributed by M. Lallemand, and others I have selected from my own note-book.

“ M. D——, of Philadelphia, of a very robust constitution, contracted the habit of masturbation while at school, when only eight years old. The first effect produced, was a frequent desire to pass urine, and at twelve years of age this irritability had become so great, that he was sometimes unable to retain his urine a quarter of an hour. Before entering a house he always took care to micturate several times in rapid succession; and, notwithstanding this precaution, he soon experienced renewed uneasiness. He felt as though his bladder was never entirely empty, and the smallest quantity of urine induced spasmodic contractions. The irritability of the urinary organs diminished by degrees after the period of puberty, but never ceased entirely, notwithstanding the various means which were employed on different occasions.

“ At the age of sixteen, M. D—— endeavored to break off his injurious habits by sexual intercourse, but he found himself completely impotent, and shame induced him to return to masturbation.

He afterwards made further attempts to correct himself, but he experienced nocturnal pollutions, which often made him lose courage. At length, after many relapses, he succeeded completely, without observing any further nocturnal emissions. Still his health, instead of improving, became more and more impaired. His erections were less frequent, less prolonged, incomplete, and at length, gradually ceased, together with all venereal desire.

“At the age of twenty-eight, the state of his urine, its frequent discharge, and the wandering pains in the perineum and testicles, induced a fear of calculus; sounding, however, only showed a morbid sensibility of the urethra, especially towards the neck of the bladder.

“In the beginning of May, 1837, M. D—— came to Montpelier, in the following condition:—much debilitated; unsteady in his walk; easily chilled, and taking cold very quickly; wandering pains all over his body; skin dry; memory impaired; digestion difficult; extremities cold; scrotum relaxed, and testicles soft, very sensitive, and often causing a dull pain, as if they were forcibly compressed; the semen (from the account he gave of the last nocturnal pollutions he had experienced,) clear, aqueous, and inodorous; seminal emissions with the last drops of urine, which were clammy, and passed with difficulty, and excited a sensation of tickling in the neighborhood of the anus, which extended to the orifice of the urethra; he often had diarrhœa, but, at other times was very costive, and his stools were passed with difficulty and pain. He did not, however, often pass semen while at stool.

“I discovered, several days following, the presence of semen in M. D——’s urine, and cathe-

terism showed an excessive irritability of the urethra, especially in the neighborhood of the prostate, which, on examination, was found slightly enlarged. Nearly a table-spoonful of blood followed the withdrawal of the catheter. The circumstances did not leave the least doubt on my mind as to the state of the mucous membrane in the vicinity of the ejaculatory ducts; and, consequently, I immediately performed cauterization, from the neck of the bladder, as far as the membranous portion of the urethra. Twenty days afterwards, M. D—— left Montpellier for Italy, and when he returned, three months afterwards, he was completely cured—no involuntary seminal emissions having afterwards appeared. His urine was transparent, and could be retained seven or eight hours without inconvenience; its discharge took place without effort, and was not accompanied by any remarkable sensation. Lastly, the patient's impotence, which had been present nearly twelve years, had given place to a virility previously unknown to him: I need hardly state that his physical and moral energy had shared in this regeneration.

“I have often had occasion to notice the connexion that exists between the spermatic and urinary organs; and I have shown that there is scarcely a cause of spermatorrhœa which does not act more or less on the bladder and kidneys. The cause I am now investigating affords us numerous examples of this connexion—of which the case I have just related, is a remarkable instance—the irritation of the urinary organs having been developed very rapidly, having shown very marked symptoms, and having existed alone during several years. The patient was only eight years of age when he first

became addicted to masturbation ; at this early age the urinary organs alone possessed activity, and therefore they alone were able to suffer disturbance of their functions ; on this account the symptoms were confined for a long time to the urinary organs. The character of the symptoms showed that they arose from a chronic state of inflammation, or from an acute irritation of the urinary organs, and this state must have extended also towards the spermatic organs. Thus the increased secretion of the kidneys, and the extreme irritability of the bladder, would give a very clear idea of what took place in the spermatic organs at the period of puberty. As soon as the testicles began to act, they fell under the same influence as the kidneys ; the seminal vesicles were in the same condition as the bladder ; in other words, the semen was secreted in large quantities, and was retained a very short time in its reservoirs. Being therefore imperfectly formed, the usual effect on the erectile tissues produced by its presence, did not take place, and coitus was impossible at the age of sixteen. The occurrence of impotence at so early an age is sufficient to show that diurnal pollutions had already commenced, although the patient did not discover them for a long time afterwards. He was still, however, able to practise masturbation ; and this is a circumstance which has great effect in preventing persons addicted to the vice, from renouncing their fatal habits. At a later period, nocturnal pollutions, which occurred after a few days' care, shook the patient's resolution. This is a much less serious circumstance than the one just mentioned, but at the same time much more common. At length the patient left off his habits, and his nocturnal pollutions disappeared ; yet the

disorder of his health continued to increase. His prudence, exercised too late, did not arise from the strength of his will, but from the weakness of his genital organs; the disappearance of his nocturnal emissions did not arise from the remedial measures used, but from the increase of his involuntary diurnal discharges, of which he only became aware long afterwards. These common errors are the more dangerous, because medical practitioners are apt to participate in them.

“In the case of M. D—— the irritability of the canal was very great, and the effect of the cauterization was correspondingly prompt and decided.”

The above case is a highly instructive one, because it shows both how early the habit of masturbation may be commenced, and also what a general disturbance of the economy it may lead to. The following case is also a very important one, and shows how very readily the symptoms of Spermatorrhœa may be thought to indicate other diseases, and what mistakes may be made in consequence :

“I am indebted for the following remarkable case to the kindness of Dr. Daniel, of Cette. ‘On the 26th of May, 1836, I was called to F——, a baker, aged twenty-two; I found him in bed, in the following condition:—great moral prostration, carried even to a hatred of existence; prostration of strength; anæmia; lips pale and shrivelled; remarkable pallidity; eyes sunken; expression of countenance dull; great emaciation; skin hot and dry; pulse small; voice hoarse, and so low that it was with difficulty a few words could be heard

by approaching the ear ; constant cough, scarcely permitting an instant's repose ; general wandering pains, most severe in the loins, and the sides of the chest ; great irritability of the stomach—vomiting being excited after taking almost any kind of liquor or solid food.

“ At first I thought that I recognised in this patient the symptoms of phthisis laryngea, complicated with chronic gastritis ; but the examination of his chest and abdomen did not support this opinion. The epigastric region was not painful on pressure ; the respiratory murmur was heard all over the chest, and percussion emitted a healthy sound, except under the left false ribs, where it was slightly dull, and the patient felt pain.

“ His debility did not permit me to practise abstraction of blood ; and indeed, the pleuropneumonia of the left side did not seem either very extensive or very acute ; I therefore ordered a large blister to be applied over the affected spot, and prescribed a solution of tartar emetic, and a strict diet. The pain in the side disappeared, and two days afterwards, the stomach could retain milk and barley-water. Still nothing explained the patient's emaciation ; his almost total loss of voice, hoarseness, and constant cough. His parents attributed these symptoms to hereditary phthisis, and mentioned that several members of the family had died of that disease. Minute and repeated examination of F——'s chest, however, assured me that this was not the case. On the other hand, the symptoms were very severe, and I could not discover any visceral lesion sufficient to account for them. In this state of uncertainty, your views on spermatorrhœa attracted my attention. I immediately questioned the patient

respecting his past life, and learnt that at the age of seventeen, he practised masturbation with such fury that he had frequently passed aqueous semen, mixed with blood : frightened by these accidents, he had corrected himself completely. But, after about a fortnight's abstinence, he noticed that his urine contained a deposit of thick, whitish, flocculent matter. He never attached any importance to this, although during four years, he observed it constantly, and noticed that it was more abundant after he had been much fatigued in his business. He observed also, that the last drops of urine were thick and viscid, and that a small quantity of viscid matter generally remained at the orifice of the urethra. His bad symptoms first commenced at this time ; his erections and desires entirely disappeared ; and, by the time he had attained the age of twenty-one ; he was obliged to give up his employment, and shortly afterwards, his symptoms becoming aggravated he was unable to quit his bed.

“ I examined his urine, and found it in the condition he had described ; the deposit contained in it being about an ounce in quantity. I noticed that his testicles were soft, and his scrotum flaccid. He agreed to my proposition of cauterizing the prostatic portion of the urethra, with eagerness, and I performed it on the following day. The effect of the cauterization was rapid : the second night afterwards, the patient slept soundly ; the third day, a change was observed in his voice ; and erections occurred during the night. On the fourth day, the patient was able to get up and take some light food, which was well digested ; his wandering pains had disappeared ; and, by the ninth day after the cauterization, the patient's strength had returned.

Tonic regimen, and the use of sea-bathing, confirmed his restoration.' ”

M. Lallemand gives one case especially which I think it necessary to copy. It strikingly exhibits that singular tendency, which many of these kind of patients have, to take up some peculiar notion regarding themselves or other people, bearing upon their unfortunate condition. Some suppose that every body despises or seeks to defraud them, and others firmly believe that they are doomed to assassination. In short they are fully persuaded that society generally is in league against them, and that they are very ill-used persons. The following case well illustrates this singular hallucination :

“At the beginning of April, 1836, M. Emile G—— was sent to consult me, by Dr. Cauviere, of Marseilles. He was twenty-five years of age, and had attracted notice from the brilliancy of his intellect. At twenty-one years of age, he had been admitted an advocate in a highly-flattering manner.

“He stooped much, and though his bony system seemed to announce a strong constitution, his limbs were small, and his muscles soft. His hair was black and thin, his skin was pale, and his face without expression. His eyes were dull, and constantly cast down ; his voice weak and husky ; and his general appearance announced great timidity. His legs were constantly in motion.

“I learnt that M. G—— had contracted the habit of masturbation at school, at twelve years of age ; and that whilst studying law in Paris, at the age of nineteen, he found a change in his character commencing ; this I will describe in his own

words :—‘ At first I felt a gradually-increasing disgust of every thing, and a constant sense of *ennui*. From that period I only saw the dark side of life. Thoughts of suicide soon afterwards occurred to me, and this state of mind continued for twelve months, after which, other ideas took the place of those respecting suicide. I considered myself a subject of ridicule, and fancied that the expression of my countenance, or my manner, excited an insulting gaiety in the persons I met. This notion each day acquired new strength, and often, when in the street, or even when at my own house, or in a room surrounded by my relations and friends, I fancied I heard insults which were aimed at me. *I think so still*. At length as my state became worse, I thought that every one insulted me, and *I still think so*. If any one expectorates or blows his nose, coughs, laughs, or puts his hand or his handkerchief before his face, in my presence, I experience the most painful sensation. Sometimes I feel enraged, but more frequently a depression of spirits, ending in involuntary tears. I look at no one, and my eyes are never fixed on any object. Wrapped up in my own thoughts, I am indifferent to all external impressions. These signs are evidently those of imbecility. I admit that I may have had, and that I may even now have *hallucinations*, but I am fully persuaded that these ideas are not without foundation ; I am convinced that the expression of my countenance has something strange in it, that people read in my looks the fears which agitate, and the ideas which torment me, and that they laugh at this unhappy weakness of intellect, which they ought rather to pity.’

“ The patient experienced a sense of heaviness

and oppression in his head, and although fatigued by slight exercise was constantly in motion. Two years before he consulted me he began to correct himself by degrees ; and for nine months he had entirely renounced the practice of masturbation, yet notwithstanding this, his state daily grew worse. His digestion was disordered ; he suffered from obstinate constipation ; and his erections and venereal desires had left him for a long time. Yet he did not mention the last facts in the written statement of his case which he sent me ; they were minor evils ; one idea alone absorbed him—the conviction that he was an object of contempt and ridicule to all who approached him ; this idea was aggravated by the knowledge of his impotence, and by shame for the cause which had produced it.

“ This patient’s urine usually contained an abundant flocculent deposit, resembling a thick decoction of barley, it decomposed very rapidly, and emitted a disagreeable smell. After every stool the point of the glans penis was covered with a clammy viscid matter, resembling a thick solution of gum.

“ These circumstances confirmed me in the idea that involuntary seminal discharges alone opposed the patient’s recovery. The frequent emission of his urine ; the sensibility of the spermatic cords, of the testicles, and especially of the urethral mucous membrane, and the injected state of the orifice of the urethra, made me attribute these evacuations to irritation of the spermatic organs rather than to their relaxation.

“ As, however, the patient refused to submit to cauterization, I ordered him iced-milk, mixed with spa-water, cold lotions, &c. ; but he found himself much worse after the use of these means ; all his

symptoms were aggravated ; and his urine became thicker, and left a glairy deposit adhering to the bottom of the vessel.

“ At length, on the 23d of April, I persuaded M. G—— to submit to cauterization, and I performed it immediately, chiefly on the neck of the bladder and the prostatic portion of the urethra ; nothing particular occurred, except that the inflammation of the urethra, which followed the application, was not entirely removed for three weeks. This, I believe, arose, in a great measure, from the severe weather which prevailed at the time. I ordered two or three warm baths to be taken in the week, a few warm injections and demulcent drinks. At the expiration of a month, the patient took pleasure in going out, and occupied himself with gardening ; he felt stronger, and took longer walks ; he was able to employ himself longer without fatigue ; he also experienced nocturnal emissions, preceded by erotic dreams and lively sensations. At this he was at first alarmed, but he gained courage when he saw that he was not injured by them. I had not seen him for more than a month, when one day he called on me quite dispirited, to say that he should never get well, as he was relapsing into his former habits. I blamed him, but at the same time I explained to him that the fact was a proof of his having regained his former virility, of which he should make more proper use. M. G——’s mother came to me soon after to speak of the propriety of marriage for her son, whom she saw exposed to various dangers. I easily persuaded her, that before deciding on marriage, it would be necessary for him to be firmly assured, during a considerable period, of his perfect and decided recovery. M. G—— had then re-

gained his spirits, his boldness, and his position in society, and eighteen months afterwards, all his functions being performed with energy, he married. Six months after his marriage I heard that his health had not for a moment been disordered.

“ With this patient I received the following consultation from Dr. Esquirol. ‘ The undersigned cannot mistake a case of *hypochondriasis* which has lasted three years. It is evident that the *nervous affection* was produced by the habit of masturbation to which the patient was addicted from the age of puberty, and of which he only succeeded in breaking himself seven months since. The hypochondriasis continues very obstinately as the cause which produced it acted for a long time, and very seriously weakened the nervous system. The undersigned attributes the little success attending medical treatment to the unfavorable weather, to the indocility of the patient, who lives in seclusion and in physical and moral torpor, and to the weakness of his mother, who allows herself to be led away by the sight of false or exaggerated sufferings. The means advised are those usually ordered in cases of hypochondriasis:—Tonics, antispasmodics, leeches to the anus, purging, change of scene, travelling, sulphuretted baths, sea-bathing, &c.’ Dr. Esquirol sums up his opinion in concluding, as follows:—‘ I must repeat what I have said above: weakened innervation is the cause of the disease, and every thing which can strengthen the nervous system, will be useful.’ It was clear that masturbation had been the first cause of the physical and moral derangement, called hypochondriasis; but the patient had renounced this vice during nine months, and his state became worse daily, instead of improving. It

was evident, therefore, that some other cause acted in keeping up the disorder; and it was just as evident that this cause was involuntary diurnal seminal discharges. It is not necessary for me to show that masturbation can, acting alone, induce involuntary discharges, or that the cure was due to cauterization only, although its effects were not manifest for a month after the application of the caustic; but, I must insist on the pathological condition of the genital organs exciting these involuntary evacuations, since they have been too frequently ascribed to a state of debility or relaxation of the tissues. The tonics ordered by Esquirol, had produced no benefit; I have described the symptoms which led me to suspect acute irritation of the prostatic portion of the urethra, and I have shown the injurious effects of cold lotions, iced-milk, spa-water, &c. It was then, not by causing contraction of the orifices of the ejaculatory canals, that the cauterization produced its beneficial effects, but by dispersing the chronic engorgement of the mucous membrane. The advantage derived from warm baths, during convalescence, corroborates this opinion.

“In M. G——’s case a predominating symptom attracted the attention of the practitioners; hence they looked on the disease as being hypochondriasis, monomania, or hallucination, continuing after the cessation of its exciting cause, and becoming, consequently, an idiopathic affection. I have, however, shown that all the functions had been altered more or less; I should add, that the digestion was the last to be re-established perfectly. Such mistakes are very common, and very serious, and I cannot too strongly impress their importance on the attention of the profession. Esquirol justly

stated, the hypochondriasis took its origin from masturbation; that the nervous system was weak and excited: but he mistook the cause which kept up this condition of the brain. *When masturbation has not induced involuntary seminal emissions, recovery soon follows, on leaving off the habit which has destroyed the health; within a week the patients begin to experience a notable improvement, and in a very short time they are hardly recognisable, whatever may have been the degree of weakness to which they were reduced.* But when Dr. Esquirol wrote his opinion, seven months had elapsed during which M. G——'s conduct had been irreproachable, and when I saw him two months later, his state was even worse, although he had never resumed his former habits. The symptoms were, however, kept up by involuntary diurnal discharges.

"The effects of cauterization were very conclusive, and so soon as its curative action was felt, the patient, of his own accord, took various kinds of exercise, and sought out the different amusements which had been, in vain, ordered for him previously; he entered into society, and did, without being pressed, all that he had before refused to do; his ideas, and his necessities, altered in proportion as his functions were re-established.

"It is in vain that we say to the so-called hypochondriac,—amuse yourself, employ your mind, go into society, seek agreeable conversation; so long as we have not removed the cause of his disorder, he is unable to profit by our counsels. How can we expect that when a man is fatigued by the least exercise, he shall occupy himself with walking or gardening? How can we desire him to go into society, when the simple presence of a woman inti-

midates him, and recalls all his former misfortunes? How can we expect him to enjoy conversation, when he loses its thread every moment? When his memory leaves him, and he feels his nullity? We persuade him to seek amusements and pleasures, but are they such to him? Is not the happiness of others his greatest punishment? Because he is unable to follow our advice we accuse him of unwillingness, and we wish to compel him. Let us first remove the cause of our patient's disease, and we shall soon see that his character and conduct will change, and that he will return to his natural tastes and habits.

"It is not long, in such cases, before we are embarrassed by questions about the propriety of marriage being put to us: this is a matter which is serious in all its aspects, and on which the least scrupulous should not pronounce, without having had sufficient assurance of their patient's return to health. The question of our patient's health is now not the only one, nor is even his future happiness alone implicated; the fate of the innocent being who is about to be associated with him is the matter of chief importance, and justice to her demands that we do not counsel matrimony, until sufficiently long proof has been given that our patient's re-establishment is permanent."

In the above case there is an answer to the question, very frequently asked by the victims of self-abuse, "*what chance is there of recovery?*" In nearly every case where involuntary emissions have not occurred a perfect cure and restoration may be effected; and even after they have commenced, providing they have not existed long, nor

been excessive, we may generally say the same, if the involuntary discharge can be readily checked. The chance of cure, therefore, gets less and less in proportion to the duration of the discharge, and to the difficulty experienced in arresting it.—So long as the spermatorrhœa continues, no cure can be expected, but on the contrary the patient must go on from bad to worse, notwithstanding all that can be done for him.—Every victim of masturbation, therefore, should pause, and, before he calculates the chances of escaping, ask himself if he may not be nearer to this incurable stage than he supposes. I *know* that many suffer from involuntary losses, unseen, to an extent that makes death *almost certain*, who nevertheless flatter themselves that they are in no real danger, simply because they *see nothing*.

The origin of this vice, so far as we can trace it is well pointed out by M. Lallemand, whose remarks are quoted below —

“CAUSES OF ABUSE.—These may be divided into two classes:—First, causes inherent in man, or those acting from within; these may be considered as predisposing causes; secondly, external causes, or those arising from accidental circumstances; and these may be considered as exciting causes.

“*Internal or Predisposing Causes.*—Of the first class of causes, the most important is undoubtedly due to the human organization. In the lower animals the male and female live together, as if there were no difference of sex, except during the short rutting season. This period passed, perfect calm is restored. In the human species, the secretion of semen constantly goes on, from the time of maturity until extreme old age; the secretion may indeed be

increased or diminished by excitement or repose of the organs, but, during this period, it is never entirely suspended as long as the secreting tissues are healthy. Still, this universal and important fact has been much neglected: its application is evident.

“The form of the superior extremities in the human race, also possesses considerable influence in predisposing to abuse. Many animals are always fit for fecundation—spermatozoa being found in them at all seasons. They are, however, unable to excite seminal emissions without the aid of the female. Other animals, again, which during the rutting season, show an almost incredible amount of erotic fury, are still unable, by their own actions, to cause spermatic discharge; their form alone prevents this, for they often attempt it, and a few even succeed. It is well known with what fury apes are addicted to masturbation; the ape being, of all the lower animals, the nearest to man in form.

“To this original disposition, more perfect in man than in any other animal, must be added the influence of pathological causes. I have already spoken of the irritation caused by ascarides in the rectum, of the erections they excite, and of the abuses induced by them. We shall see by and by that herpetic eruptions on the penis and prepuce, may produce the same effects, and I shall show also, that an accumulation of sebaceous matter, between the prepuce and glans, may have a similar influence. I must also mention irritation of the cerebellum, as inducing serious abuses, of which I shall give cases in their proper place.

“There is even some connexion between the organs of generation and distant diseases; for Doctor Desportes has mentioned a kind of angina, which is

frequently preceded by a considerable increase in the venereal desires, and, consequently, by a disposition to all kinds of abuses.

“Pulmonary phthisis, also, is often attended by considerable venereal excitement. It may as well then, be at once admitted, that causes predisposing to masturbation exist in the human organization itself.

“*External or Exciting Causes.*—Of these, I shall lay particular stress on such as act before puberty, because they have, hitherto, attracted very little attention. The most anxious parents believe that there is no occasion to watch over the actions of their children with regard to their genital organs, previously to the epoch of puberty; and few, even of our own profession, are led to suspect bad habits before that period. This is a fatal error, against which, it is necessary to be on our guard; numerous causes may give rise to abuses, at a much earlier period—infancy being hardly exempt from them. I saw one unfortunate child, which, while still at the breast, nearly fell a victim to the stupidity of its nurse. She had remarked, that handling the genital organs appeased its cries, and induced sleep more easily than any other means, and she repeated these manœuvres, without noticing that the sleep was preceded by spasmodic movements. These increased and took on a convulsive character, and the child was losing flesh rapidly, and becoming daily more irritable, when I was consulted. At first, I attributed the disorder to worms, teething, &c., but my attention being attracted by certain signs, I examined the genital organs, and found the penis erect. I was soon told all, for the nurse had no idea she was doing wrong. It was necessary to

dismiss her, for her presence alone sufficed to recall to the child's memory sensations which had already become a habit. Time and strict watching were required before these early impressions were entirely effaced. Dr. Deslandes relates two similar cases, and Professor Halle, in his lectures on hygiene, used to mention many such; Chaussier, too, told me of several that came under his notice; and both these observers believed such cases to be less rare than they are usually considered. These manœuvres quiet the children very readily, and nurses always endeavor to obtain quiet at any sacrifice; they have no idea of the consequences of their conduct. At a later period, children are exposed to the same dangers, on the part of the servants having charge of them; and in these cases, it is not of ignorance that the attendants are to be accused. Many patients have consulted me, who owed their disorders to this cause; and in case 61, I have shown the influence which such early abuse exerts on after-life. In some children there is a kind of precocity of sexual instinct, which leads to very serious results. In these, it often happens that the sexual instinct arises long before puberty; such children manifest an instinctive attraction towards the female sex, which they show by constantly spying after their nurses, chambermaids, &c. These freaks of children are usually laughed at, but if they were regarded with more attention, it would become evident that the sexual impulse has been already awakened. Rousseau, in his confessions, has well described the influence which early sexual impulse exercised on his whole life, and I have received numerous confidences of the same nature, which, however, it would be of no service to relate here. One case, however,

is so remarkable, that an abstract of it may be instructive. M. D——, the son of a distinguished physician, between five and six years of age, was one day in summer in the room of a dressmaker, who lived in his family ; this girl, thinking that she might safely put herself at her ease before such a child, threw herself on her bed, almost without clothing. The little D—— had followed all her motions, and regarded her figure with a greedy eye. He approached her on the bed, as if to sleep, but he soon became so bold in his behavior, that after having laughed at him for some time, the girl was obliged to put him out of the room. This girl's simple imprudence procured such an impression on the child, that when he consulted me, forty years afterwards, he had not forgotten a single circumstance connected with it.

“The continual occupation of his mind by lascivious ideas, did not produce any immediate effect, but about the age of eight, the most insignificant occurrence served to turn his recollections to his destruction. Having mounted one day on one of the moveable frames which are used for brushing coats, he slid down the stem which supports the transverse bar, and the friction occasioned caused him to experience an agreeable sensation in his genital organs. He hastened to remount, and to slide down in the same manner, until the repetition of these frictions produced effects which he had been far from anticipating. This discovery, added to the ideas constantly before him, gave rise to the most extraordinary abuses, and, after a time, to excessive masturbation.

“I need not mention all the miseries which followed this fatal passion ; it will be sufficient for me

to relate the means to which he had recourse for its correction. He slept on a very hard bed without a shirt, in order to avoid all friction, and covered by a single coverlet sustained by a cradle: his arms were raised, and crossed above his head; a servant remained by his side during the night, with orders to awake him if he changed his position. When he got up, he put on, next his skin, a shirt of mail weighing twenty-two pounds, resembling those worn by the knights of old, except that it had no sleeves, and that it was attached, at its lower extremity, to a silver basin, fitted to receive the genital organs, and provided with openings for the thighs. This shirt of mail was open in front, in order to be easily put on and taken off; and when on, it was laced up with a steel chain, a padlock being attached to the end, the key of which was kept by the servant, who had orders not to give it up on any pretence whatsoever. Guarded by the silver basin, the genital organs were completely removed from the touch, a little opening only, being left for the discharge of the urine. As a still greater precaution, the patient had caused four sharp points to be fixed in front of this case, in order directly to oppose any erection. This apparatus he continued to wear for nine or ten years, although it frequently caused inflammation of the testicles and spermatic cords, by its pressure. Notwithstanding all these precautions, the patient's moral and physical condition were deplorable, which led me to suspect the presence of diurnal pollutions.

"I should observe, that in all the cases of which I have just spoken, the children were five or six years of age—at most eight—that they did not show signs of puberty for several years afterwards, and that they were not exposed to the influence of bad

example. Their sexual ideas were, therefore, spontaneously developed, several years before the development of the genital organs. The same precocity is often observed in children of the other sex. Of this I shall treat more fully hereafter; at present, I shall merely call attention to the case related by Parent Du Chatelet, of a little girl, who, from the age of four years, gave herself up to the most unbridled abuses.

“From these facts, an important scientific conclusion may be adduced:—viz., that in many children the genital instinct shows itself with much energy, many years before the age of puberty.

“A no less important practical precaution presents itself:—viz., that the age of puberty should not be waited for, in order to surround children with prudent circumspection, and to prevent their curiosity from being gratified.

“Many parents are remarkably careless on the latter point; they permit children of both sexes to play together, promiscuously, for hours, without any surveillance, provided that they are removed from all danger of accident, and that their noise is not annoying. The confidence of many parents, also, in the ignorance of their children, makes them careless of the marks of familiarity which are given to each other in their presence; children's sleep is not always so real or so sound as it seems.

“It is sufficient to point out these facts: every person can deduce the conclusions; and now I hasten to consider a question, the gravity of which has been allowed by all who have written respecting masturbation—I mean the influence of example in educational establishments.

“If I may judge from my own observations, out

of ten persons whose health has been deranged immediately or remotely from the effects of masturbation, nine first contracted the habit at school. All that I have read on the subject has led me to conclude that this proportion is not exaggerated. A child brought up in the bosom of his family, is, it is true, surrounded by many causes sufficient to arouse his curiosity and excite his imagination; but such causes act accidentally, and in an isolated manner—they only produce a serious effect on a few ardent imaginations; a thousand circumstances may remove the attention from them. At school it is admitted that such causes do not exist, but there are others, less numerous and less varied, but which operate in a much more active and continuous manner; the effects of these are direct, and almost inevitable. The child finds, on his first arrival, a focus of contagion, which soon spreads itself around him; the vice is established endemically, and is transmitted from the old pupils to those newly arriving. If a few privileged individuals escape being initiated, they are only such as do not experience any gratification. But their time will come at a later period; when the passions make themselves felt, the same circumstances will be presented to the mind, under a less disgusting aspect. I shall not enter into details on this subject; but from all that has come to my knowledge, from various and direct sources of information, I do not hesitate to affirm, that no where are obscene books circulated more freely and boldly, than in educational establishments; that the origin of the vice is not solely in the scholars, but also in the ushers and servants, that the abuses are not always confined to masturbation; and that they are not always propagated by example or persuasion,

but are sometimes enforced by threats and violence. Let it not be thought that I am now speaking of rare and exceptional cases, or that I exaggerate;* I possess multiplied and convincing proofs of my assertions. I would not either, that I should be misunderstood. I am far from denying the advantages of education in a public school; and I am ready to admit that the competition among a number of children produces emulation, forms the future character, early shows each his own value, and lays the foundation of friendships which endure through life.†

“A too sedentary life is injurious at all ages, especially in childhood, when there exists such constant desire for exercise and change. Gymnastics, therefore, should, on this account alone, occupy an important position in the system of education; but they must be viewed under a much more serious

“* M. Lallemand of course speaks of the colleges and private schools in France. I regret to say that his statements apply with nearly the whole of their force to the schools of England. Vice is common in them, neglect of physical education and the contracted nature of the studies to which pupils are confined in our classical seminaries—the understanding being unappealed to, and the reasoning faculties unexercised—the natural sciences neglected, and the whole of the pupil's life until the age of seventeen employed in the study of the dead languages—are matters of vital importance to which society has only recently begun to direct its attention. [H. J. McD.]

“† M. Lallemand enters very fully on the subject of education as conducted in France, and well exposes the errors of the system. Most of his remarks apply to our own educational system, yet, as the subject is not strictly medical, and as moreover, M. Lallemand has treated it at considerable length, I think it best to refer those of my readers who may wish information on it to the original work. Vol. I., page 425. [H. J. McD.]”

aspect. Nothing can prevent the genital organs, at the time of their development, from reacting on the economy, and giving rise to new sensations and ideas. It is impossible to prevent the attention from being attracted by the impressions caused by these organs ; impossible to restrain the imagination, and to prevent it from frequently dwelling on such impressions. The slightest circumstance may, in such a case, lead to a fatal discovery, even if the information be not transmitted directly, and enforced by example. How are such discoveries to be prevented, or rather, how are their results to be guarded against ? Study gives us no aid here ; indeed, the continued sitting necessary heats the organs already too excited. The eyes may be fixed on the book, the ears may appear to listen to the master, but who can guard against the wandering of the imagination ? At night it is still worse ; no surveillance can prevent this. There exists only one means capable of counteracting it, and that is, *muscular exercise carried so far as to induce fatigue*. This alone is able to deaden the susceptibility of the newly acting organs which excite the economy ; exercise alone, by requiring matter for the repair of the muscular waste it causes, withdraws a stimulus from the genital organs, and induces sound and refreshing sleep.

“ VARIETIES OF ABUSE.—I think it will be useful for me to give a few details, respecting the different kinds of abuse which have come under my notice, and of which I have seen the hurtful influence on the genital organs. I shall omit all such remarks as have not a strictly practical bearing.

“ We have already seen the dangers to which compression of the urethra, to prevent the discharge

of semen during ejaculation, may give rise (case thirty-five.) In the case I have related, it seems likely that a rupture took place in the mucous membrane, because the patient felt, at the instant, an acute pain, and the following day a discharge commenced, which continued until the application of the nitrate of silver. Soon after the commencement of the discharge, involuntary seminal emissions occurred, attended with serious symptoms. It was immediately behind the glans that this patient compressed the urethra, and it is quite conceivable that the sudden and violent distention of the canal might cause a tear in the mucous membrane. But this is not always the case; one of my patients writes as follows:—‘At the age of fourteen, I practised masturbation three or four times a week, and sometimes frequently during the day. In order to prevent the discharge of semen, I compressed the root of the penis firmly. Nothing escaped at the time, but I soon observed that the semen was discharged with my urine, the first time I passed it. I followed this practice for about two years.’

“Diurnal pollutions soon appeared, and grew more and more serious. The remainder of the case presents nothing which is not met with in all cases of spermatorrhœa. What I wish to call attention to here, is, that the compression was made close to the orifice of the ejaculatory ducts, and that the patient thought at first that his manœuvres were not followed by any loss of semen, although he at length discovered the contrary. Fournier and Begin report a similar case. It was that of a young man, who, at the moment of ejaculation, compressed the most remote parts of the urethra, so that not a single drop of semen could escape. Yet the result

was the same as in ordinary cases. Notwithstanding his precautions, his strength diminished, and his disorder made just as rapid progress as if the seminal emission had been perfect.

“The following is even a more remarkable case. I shall allow the patient to speak for himself. ‘I am thirty-two years of age, and I have had nocturnal pollutions from the age of fourteen; I have also suffered from discharges while at stool, for ten years. The cause of these pollutions cannot be referred to masturbation, for I have not practised it twenty times during my whole life. The pollutions are rather owing to reading obscene books, for they commenced soon after. At first, ejaculation was preceded by dreams, and accompanied by active erections and acute sensations, the semen being ejaculated with force. I tried various means to prevent these discharges. I have slept, during whole nights, with my penis dipped in cold water, or compressed between two pieces of wood formed for the purpose. I have tried to keep myself awake in order to prevent an emission, because, when I succeeded, the following day I felt stronger, but after two or three nights, sleep always overpowered me; I often awoke, however, in sufficient time to prevent the catastrophe of my dreams, but frequently it was too late; on such occasions, to delay the discharge or to render it less copious, I compressed the base of the penis firmly; but it seems that these compressions greatly injured the parts, without preventing or diminishing the discharge, which took place inwardly, as I have often been convinced by inspecting my urine. From that period the pollutions have no longer been preceded by dreams; and the sensations have left me, so that I am not now

aroused from sleep. My erections diminished, and have even, latterly, ceased entirely. For three years erections have rarely accompanied the emissions; when they do occur I am always less fatigued.

“There is one thing which I have not been able to understand, and which will, without doubt, appear absurd to you; it is, that I experience pollutions without erection, sensation, or the escape of semen by the urethra. I believe that the discharge passes in a retrograde direction, and becomes mixed with urine, because, the next morning, I find little globules, a cloud and filaments in that fluid, just as when I formerly prevented ejaculation by compressing the root of the penis; whilst my urine contains nothing during the day, or the next morning when I have not experienced these pollutions. On waking, I am perfectly aware of what has occurred, by the sweat that covers my face, the fatigue I feel in all my limbs, the headache and dizziness that affect me, the dark circles that surround my eyes, &c. I have tried cold and iced applications, with slight benefit. For some time the pollutions were rarer, and were accompanied with erection and sensation; but soon they became as before, and emission did not take place outwardly. These internal pollutions have always been the most weakening. Whenever I succeed in passing the night without sleep, my urine is transparent in the morning, and I feel strong. After several nights without sleep, I generally have an energetic emission, which fatigues me little; but soon those without erection and without external discharge return, and then I always feel worn out on waking.”

“This patient’s medical attendant would not be-

lieve in the possibility of pollutions without external discharge ; but it seems clear that the patient really had internal emissions without perceptible discharge ; that is to say, that the semen passed into the bladder, and was discharged with the urine as had occurred before when ejaculation was prevented by pressure on the perineum. This compression was made in front of the ejaculatory canals, and was very often repeated. It seems, therefore, likely that it was the frequent repetition of these manœuvres that, at length, caused the spontaneous passage of the semen into the bladder. But this is a question to which I shall have occasion to return.

“ Yet all these manœuvres scarcely differ from the various means recommended by some surgeons for preventing nocturnal pollutions ; and we may thus perceive how little confidence is to be placed in the instruments invented for that purpose, and the inconveniences to which they may give rise. It seems likely that the dangers would be nearly the same, in whatever part of the penis the compression is made ; except that if there be sufficient space in the urethra, between the point compressed and the ejaculatory ducts, to contain all the semen, it would be discharged directly the compression is removed. When, on the other hand, the compression is made immediately in front of the orifice of the ejaculatory ducts, the semen flows back, at least in a great measure ; so as to induce the patient to believe that the discharge has been stopped, or at all events, in a great measure diminished, and to induce a degree of security which leads to further abuses.

“ But to return to the description of the abuses which have been admitted to me by so many other patients.

“One of these informed me, that about the period of puberty, while hanging one day by his arm, he experienced an energetic erection accompanied with pleasure, and that by his efforts to raise his body, he caused an abundant seminal emission. This was the first. The next day he repeated the same motions, and noticed the same phenomena, and from that time he knew no other pleasure. From the principles which had been early instilled into him, he would have thought himself degraded by connexion with a female, or by the least manual contact with his genital organs; but his conscience was quiet with regard to these practices, because they had not been forbidden him. He continued, therefore, to hang by the hands, from the furniture, doors, &c., without being suspected by any one, and fell, by degrees, into a state of debility and wasting, equal to those caused by the most unbridled masturbation. After a time, from weakness, the patient lost the power of hanging, and his voluntary emissions ceased; but they were soon replaced by nocturnal emissions, which were very difficult of cure.

“The following are a few passages from a letter I have recently received. ‘Being of an ardent temperament, I abused myself, from the age of eight years, by practising masturbation, or rather, by still more hurtful manœuvres. By compressing the penis between my legs, or against the seat on which I was sitting, I produced excitement, which was commonly followed by the discharge of a few drops of viscid and transparent fluid. This practice I repeated several times a day, up to the age of sixteen, when I ceased entirely, having been frightened by the discharge of nearly pure blood, which

occurred several times. From this time I only sought natural enjoyments, but I found it impossible to obtain a complete erection. This state was attributed to weakness, and was combatted by tonics, stimulants, and even irritants of all kinds, which have done me much injury. I used also, cold bathing and cold lotions.'

"I have seen an officer of high rank who had fallen into the same condition, from the practice of similar manœuvres. He experienced his first sensation against the leg of a table, at the early age of ten years, and continued for several years to employ the same means. I have already related the case of another child, who allowed himself to slide down a wooden pole, and the deplorable influence which this circumstance exercised on the remainder of his life.

"In a few of my patients, horse exercise caused the first seminal emissions. I shall relate, by and by, the case of one of these who knew scarcely any other pleasure, and who became quite impotent at the age when virility is generally greatest. The extreme susceptibility which the genital organs manifest at the period of puberty, should prevent horse exercise from being commenced about this period, as is usually done. It should be begun a few years earlier, or a few years later.

"I have already spoken of the danger of allowing children to sleep on the abdomen, (see case thirty-three) I should add, that many of my patients thus contracted habits which ruined their health. Independently of the inconveniences to respiration, digestion, &c., which arise in this position, erections are favored. The least friction awakens new sensations, and once on the track, progress is soon

made. Sometimes recollections have caused the choice of this position ; of this I have related a remarkable example, (see case thirty-four) at other times, scruples early instilled by a sage foresight, but which the violence of the impulse has at length succeeded in eluding, have induced it. Thus, I have been told respecting one of my patients, that he would suffer death rather than defile himself by touching the genital organs, yet, for five or six years, he seldom passed a night without working his own destruction while lying on his abdomen. It is not necessary for me to enter into a description of the other means by which patients have sought to satisfy their genital impulses, without transgressing the religious and moral principles which had been taught them from infancy. Suffice it to say, that if they have succeeded in satisfying their consciences, they have not succeeded in preserving their health.

“ But to abstain from all direct action on the genital organs, is not always sufficient to preserve the patient from serious disorders. A purely nervous excitement, awakened by other senses, or directly produced by erotic ideas, may bring the same results as the worst abuses if prolonged, or repeated erections are caused by it. The following are a few such examples :

“ A student, aged twenty-two, born in Switzerland, of sanguine temperament, and great muscular power, fell into the most complete state of impotence, after having been for some time exposed to ungratified excitement. He had never practised any solitary vice ; but violent and prolonged erections came on, and were produced during the day by the influence of the memory. These erections caused

abundant and frequent nocturnal pollutions. Absence put an end to the excitement. The nocturnal pollutions diminished by degrees, and at length ceased entirely. Yet this patient fell into the same state of impotence as if he had committed the greatest excesses in masturbation, and at the same time preserved the appearance of health and strength. The cause of his impotence was evident on examining his urine, and causing him to watch for diurnal pollutions while at stool, but the cure of these pollutions was only perfect after two years' treatment.

“I have seen another case of the same kind, in a young man who passed from a state of habitual priapism to one of absolute impotence, without any other cause than violent excitement of the genital organs by an ardent attachment; he had never given way to excess of any kind. I shall record by-and-by another case of the same kind. I also had under my care an English officer, who left Calcutta in perfect health and arrived in London completely impotent, after having suffered during two months from almost constant excitement, caused by the presence of a female on board ship. This state so opposed to that which had preceded it, continued for two years—the whole of this time not being marked by the least sign of virility. It is scarcely necessary to add, that this state was produced by diurnal pollutions.

“I related a case a few pages back, in which nocturnal pollutions were caused by reading an obscene book; and I have seen a multitude of cases of this nature. From these I conclude, that in certain very excitable individuals, reading such works, the sight of voluptuous images, lascivious

conversation, in a word, all things that can excite or keep up irritation in the spermatic organs are capable of producing the same effects as actual abuse, even when the will is sufficiently powerful to prevent the thoughts from leading to the acts. On the other hand, an abundant secretion of semen with importunate erections, irritation of the urethra and prostate always results under such circumstances ; and these favor the occurrence of nocturnal and diurnal pollutions as serious, and perhaps more difficult of cure than those produced by masturbation, because it is impossible to act directly on the memory or the imagination.

“It is not sufficient then to prevent all material action on the genital organs ; it is necessary also to prevent all erotic excitement of the senses and all concentration of the ideas on lascivious objects. Fortune’s favors are so distributed that numbers live in absolute indolence without being blamed by the world, because they demand nothing of any one. This inaction produces results, the only remedy for which that I am aware of, is daily fatigue of the body by various kinds of exercise.

“EFFECTS OF ABUSES.—The effects produced by the different kinds of abuse of which I have been treating, vary according to the age of the patient, his idiosyncrasy and the different organs chiefly affected. I have laid particular stress on the causes which may lead to bad habits some time before puberty ; I must now consider their effects during this period.

“The symptoms arising from masturbation in the child have been always hitherto confounded with those produced in the adult ; they present certain distinctive characters, however, which require

our consideration. However young they may be, children lose flesh, and become pale, irritable, morose and passionate; their sleep is short, disturbed, and broken. They fall into a state of marasmus, and at length die, if not prevented from pursuing their course. Examples of such a termination are so well known that I forbear to quote them.

“Analogous symptoms are shown in the adult—follow nearly the same course—and may lead to the same termination; but in infancy more or less severe nervous symptoms are superadded, which are not found in those who commenced the practice after puberty, or which at least are not in the latter case manifested to the same extent. Such are spasms and partial or general convulsions, eclampsia, epilepsy, and paralysis, accompanied with contraction of the limbs; these phenomena were present in all the children whose cases I have noticed, and numerous similar facts have been published by different authors.

“Contractions of the limbs have been well investigated by Dr. Guersten, and he notices that they especially affect such children as are lank, unhealthy-looking, nervous and worn out by bad habits.

“The following case is sufficiently remarkable. In 1824 a woman brought her son, aged eight to the hospital St. Eloi: he had lost the use of his lower extremities for some months. The limbs were fixed, drawn together, and all the muscles contracted. The child was extremely thin and his intellect was much disturbed. Masturbation, the cause of all these disorders, had only been discovered by his mother a few weeks before she placed him under my care, but she had used every means she could

devise to prevent it without effect. After two or three trials I found that it was of no use trusting to the strait-waistcoats and other means usually employed, and accordingly I determined to pass a gum-elastic catheter into the bladder, and to fix it so that the patient should be unable to withdraw it. The presence of the foreign body, excited inflammation of the urethra as I expected; when this occurred, I withdrew the instrument, but replaced it as soon as the inflammation had subsided. I kept up, in this manner, a constant state of inflammation for a fortnight, which rendered the parts so painful that the child was unable to touch them. This treatment produced more decisive success than I had ventured to hope; within eight days the lower extremities had regained sufficient strength and mobility to allow the child to get up, and in another fortnight he was able to run about the wards. I then sent him away threatening him with a return of the same treatment if he relapsed. The pain caused by the catheter seemed to have removed all the other impressions, for his health continued good, and growth followed its ordinary course.

“I have since employed the same means in many cases, with just as much success, and I think it more sure than any other, because it is impossible to rely on the patient’s will, or on the assiduity of those who are appointed to watch over him. In children, too, it leaves an impression on the memory which is often sufficient to destroy the empire of habit, and to prevent a return to the former manœuvres.

“But to resume the consideration of the symptoms observed in children. In childhood, seminal emissions are never experienced, but nevertheless

the patients fall into a state of marasmus, to which some even succumb. These effects, like those observed under the same circumstances in the female, have induced some authors to leave out of their consideration the seminal discharges which are produced by the same acts at a later period. They have attributed the debility which follows all abundant discharges of semen, to the nervous excitement and convulsive motions, which usually accompany the discharge. The accidents observed before puberty are evidently only due to the effects on the nervous system; and, the same sensation accompanying *voluntary* emissions after puberty, it is natural to suppose that the nervous system plays as active part then, as in childhood. I willingly admit the importance of this nervous exhaustion in whatever manner it may be supposed to operate; and supposing, even that its action on the economy is just as important as during childhood, (which is not the case, as I shall presently show,) this is no reason why the actual discharges should not be taken into account, seeing that they greatly modify the character and consequences of the nervous disturbance.

“I have already noticed that the symptoms produced by abuses during childhood present a spasmodic character; this character, without doubt, is derived from the predominance of the nervous system at that period, rendering children so alive to external impressions. This excessive sensibility also explains the great disorder of the economy which children suffer from such manœuvres. Deslandes relates a case, showing that any action of the same kind may produce the same effects at this early age. He says, ‘An observer worthy of credit, Dr. Nurambeau, has communicated to me

the case of a child who procured himself similar sensations by drawing out the navel. His health became much disordered from the effects of this strange habit, which had such a power over him that coercive measures were required for its correction. It is worthy of remark that this patient showed neither erection, nor any other phenomenon of the generative organs, which at all referred to sexual intercourse.' The organs of generation therefore, had no influence in producing the sensations experienced by this child; but the repeated titillation of a very sensitive part produced the same disorder as masturbation.

"It was proved in the debates on a recent criminal trial that death may be caused by prolonged tickling of the sole of the foot. Nervous disorder, arising from such proceedings, may then be carried so far as to cause death, and from this may be imagined the effects of the multiplied convulsive shocks which irritable children produce, by acting on the most sensitive organs in the economy.

"Every excessive loss of semen also, even when unaccompanied by sensation, is followed by debility, and this may be carried so far as to cause death; I have related several such cases in the beginning of this work.

"There exist then two distinct causes; nervous disturbance and debilitating discharges, and both these act at once, when seminal emissions are produced by the influence of the will. It is not to be wondered at, that both these causes should produce nearly the same symptoms, because they both weaken the economy. The action of the first on the nervous system is direct and immediate, and the symptoms that result from it are of a more spasm-

dic character. It is very easy to confound these two causes when they act simultaneously ; but I have just shown that they can be considered separately. The following reason shows the importance of so doing.

“ Whenever we succeed in entirely putting a stop to the habits of abuse in children, we may make sure of obtaining their return to health, and that very quickly. This I have remarked in all the cases of children that have come under my care. I do not mean to infer that the disorder done to nutrition during the progress of development is easily repaired, but that the acute symptoms rapidly disappear, and that all the functions are quickly re-established. If the effects produced are active and serious they cease very rapidly, as soon as the cause is removed, and return to health becomes certain. Unfortunately matters do not follow so simple a course after puberty.

“ What I have just said respecting children, applies equally to females ; this is easily shown by examining the cases in which excision of the clitoris has been performed for the cure of nymphomania. The state of these unfortunates must have been deplorable indeed, to justify the resort to such means ; yet they recovered very rapidly.

“ Why in these two classes of cases, is the cure certain and the return to health rapid, as soon as the vice has been mastered ? It is that the cause of the weakness immediately ceases to act on the economy. Why is it that so many men continue to waste away after they have entirely left off their habits of abuse ? It is because diurnal pollutions have commenced, which are even more debilitating than the abuses which gave rise to them.

“Dr. Deslandes and many others have discovered that there is a great difference in the conditions of persons who have practised masturbation for some time, and then renounced it: but they have not sought the explanation of this fact. It is, however, very important to know why some are cured rapidly and completely, while others continue to suffer and languish during the remainder of their lives. The symptoms experienced by the latter are those produced by diurnal pollutions.

“But if we inquire why some should be affected by diurnal pollutions while others are exempt, we discover that we have been comparing two very different classes of patients. The one class conquered their bad habits by the force of their will; the other class were compelled to renounce them by impotence. The former resisted their desires while they were yet active; they required much perseverance and moral energy in order to succeed; the latter only left off as they were less tempted—the progressive decrease in their erections being due to the presence of undiscovered diurnal pollutions.

“Such patients deceive themselves as to the cause of their changing their habits, and are astonished at not finding any benefit arise from such change. Some of them even remark to their medical attendants that it is after they have left off their malpractices, that their health has become altered.

“All these circumstances, embarrassing at first sight, are easily explained on a little reflection. At first the genital organs are healthy; the constitution is uninjured; no seminal emissions occur except those that are induced voluntarily; and the activity of the digestive organs permits a rapid repair of the losses. But as soon as irritation is set up in

the spermatic organs, a large quantity of semen is secreted and escapes every day, and several times a day without the patient's knowledge; the digestion is disordered; the erections and voluptuous sensations diminish, because the semen is less perfectly formed; the provocatives are, therefore, weakened by degrees, and the patient renounces without difficulty, habits which only inspire him with disgust. He wonders that his health still continues to grow worse, for he has not discovered that he passes daily, by often repeated evacuations, more semen than he formerly passed in a perceptible manner, and he does not take into account the difficulty felt by his economy of repairing these frequent discharges.

"We must not then confound those, whose virility leaves them, with those whom the power of their will causes to recover, and we must not be surprised at seeing the alteration in the habits of each followed by very different consequences.

"In order to make the distinctive characters of these two positions clear, I have laid stress on their most striking points, but there are numerous slight shades of distinction, which I have not mentioned. For instance, in some cases the two classes of phenomenon occur successively in a very distinct manner, at very near periods. Many patients having corrected themselves once, find their health promptly re-established. But when, after recovering their strength, they have relapsed into their former habits, on renouncing them a second time they obtain no benefit. These different results under apparently similar circumstances can only be explained by the occurrence of diurnal pollutions in consequence of the return to habits of abuse.

“Case thirty-one is a clear and perfect proof of the correctness of this explanation; the patient recovered twice after having twice conquered his passion, but the third time he only gave it up through disgust, and his health continued to deteriorate until cauterization arrested the diurnal pollutions from which he suffered.

“There are many circumstances which interfere with the good resolutions of those addicted to masturbation, After a few days of absolute continence, attained with much difficulty, they frequently suffer from nocturnal pollutions, the more frequent and the more abundant in proportion as the spermatic organs have been much irritated: the patients always feel more debilitated by these involuntary discharges, than by those which they previously excited. Instead of combating these pollutions by suitable means, or after having employed one or two plans unsuccessfully, they think they will be able to diminish the evil by recurring to their former habits at distant intervals, and they thus relapse, increasing still more the irritation of the parts. Soon after diurnal pollutions commence, and rapidly produce their effects, but as these are not discovered, the patients rejoice to find the nocturnal discharges gradually disappearing. But their health daily grows worse; this they cannot comprehend, and are frequently led to imagine that they have mistaken the cause of their disorder.”

CHAPTER XII.

EROTOMANIA AND SATYRIASIS.

THESE two affections are usually confounded together, but there is considerable difference in their nature, though their manifestations are similar. In both of them there is an unnatural excitation of sexual desire, so that it sometimes becomes utterly uncontrollable, and gratification is sought at any cost. In these cases there is a real furor, or madness, which arises from *disease*, and is not a mere moral aberration, as uninformed people suppose.

Satyriasis arises from a disease of the sexual organs or of some of the adjoining parts, which keeps them in a constant state of irritation, sometimes so great that the patient cannot obtain the slightest relief, either sleeping or awake, but is kept the whole time in a state of furious excitement.

The diseases that are most likely to produce Satyriasis are those of the urethra and prostate gland, though sometimes gravel, or even the piles will originate it. Dr. Curling remarks that "The irritation attending the morbid condition of the mucous membrane of the prostatic portions of the urethra, tends, in a very material degree, to excite both the excessive seminal discharge and the secretions of the prostate, and to produce that morbid craving for indulgence and abuse, which persons who have brought themselves to this state find so difficult to repress and resist. It is well known that any irritation at the orific of an excretory duct

usually acts as a stimulus to the secretion of the gland. Thus hurtful matter in the duodenum produces a flow of bile ; and a foreign body in the conjunctiva, as an inverted eyelash, a discharge of tears. So it is with the Testes, when irritation exists at the Orifices of their excretory ducts. The disorder at this part, moreover, appears to react on the brain, and to become in part the cause of the patient's mind being constantly occupied with subjects of sexual excitement, and of his indifference and apathy to other matters. So that the local disease induced by abuse powerfully aids in perpetuating the mischief, and, judging from the experience which I have had in these cases, is the object to which our treatment should be first directed.

In many of these cases it is of no use reasoning with the patient, and telling him to control himself, unless the exciting disease be also corrected ; it would in short be of little more use than telling him he must not give way to a diarrhœa or any other morbid action. In a note in Dr. Curling's work this truth is well laid down, and applied to a class of cases for which usually no excuse is thought to exist. The writer says, "This is a truth, I fear, not sufficiently impressed on the minds of medical men. One would be loath to offer any apology for the vicious habits and indulgences to which, it is well known, *old men* are occasionally addicted,—a melancholy example of the kind, in the higher ranks of life, having lately been brought under public notice. I cannot but think, however, that, in many instances, these cases are not undeserving of professional sympathy, and that the erotic longings which sometimes continue to distress the aged, long after the period at which, in the course of nature, they

should have ceased, depend as much on physical infirmity as mental depravity, the former inciting and producing the morbid desires. If these propensities were regarded and treated as symptoms of disease, (and that they frequently occur in connexion with affections of the urinary passage is well known to practical surgeons), I believe they would often subside, and the distressing results to which they lead would be altogether avoided."

The same remarks also apply to every other period of life, and especially to youth, as every physician of experience in such matters must be well aware. I know that, in numerous instances, the sexual feelings of young persons are preternaturally excited by local disease, and that their genital organs are thus kept in a state of excitement by causes over which they have no control. This fact should be kept always in view when considering such cases, and we should recollect that a medical prescription may often accomplish reform, when a moral precept has failed, of which the foregoing Chapters of this work will furnish many illustrations.

I was once consulted by a married man, the father of a family, whose habits had always been strictly moral and proper, but who suddenly found himself subject to occasional fits of the most intense sexual excitement, over which he had but little control. So completely was he the slave of his morbid feelings, in fact, that it was with the greatest difficulty he kept himself from the most disgraceful and licentious indulgence. He had latterly shut himself up alone when one of these fits came on, and was at other times in constant fear that he should sometime or other ruin his reputation for ever, even if he did nothing more serious. The condition of this man

was truly pitiable, subject as he was to a state of misery for which, if it were known, he would receive condemnation instead of sympathy. "Every one would tell me," he remarked, with tears in his eyes, "that it was disgraceful, and that I ought not to give way to it, *but I cannot help it though it were to save my life*, and I have sent for you because I think you must understand my true position."—I found on examination that this gentleman was affected with a chronic inflammation of the prostate gland, and lower part of the urethra, which was liable, from various slight causes, to become temporarily worse, and to produce that excitation of the genitals above described. He distinctly remembered that before each of the fits he had either taken some severe exercise, or been subject to some unusual mental agitation or perhaps had committed some error in drink or diet, which seemed to bring it on. But of late the parts had become so extremely sensitive that the simplest excitement, of any kind, brought on an attack, and it was scarcely possible for him to avoid one long together.

I immediately informed him of the cause of his trouble, and as it was not the result of abuse of any kind, and apparently not unusually severe, I felt justified in promising him relief, and immediately put him under proper treatment.—The diet and drink were rigidly regulated, bathing and regular exercise enjoined, and a tonic of Iron and Gentian administered. I also found it necessary to use the caustic internally, and to advise astringent lotions, with occasional injections to keep the bowels free. Under this treatment the irritation soon began to subside, and in two months he had no return of his erotic fits.—Now if this man had committed some

gross immorality during one of these periods of excitement, it would have been considered merely as the result of moral depravity, and nothing would have been thought of but *punishment*, instead of medical treatment.—It is unfortunately true that moral depravity is often the only cause of such improper actions, and then they ought to be visited accordingly ; my object here is not to apologize for anything of *that* kind, but simply to show that there are often *other* cases, of a totally different character, which should be considered in a different light.

Satyriasis is very apt to follow from the first attempt at masturbation and from excessive indulgence, particularly in those who use stimulating food or drink.—I have also known tobacco and opium to bring on an attack, and still more frequently certain medicines when improperly used, such as cantharides and phosphorus.

Erotomania differs from Satyriasis as respects the seat of the disease, which in this case is in the *brain*, and not in the genitals, they being affected only secondarily. It is in fact a species of mania or insanity in which the mind is constantly occupied with sexual matters, and a constant morbid desire is experienced for indulgence, sometimes even when the patient is completely impotent. Dr. Copeland draws the distinction between the two diseases very clearly, and I will, therefore, quote his words, merely remarking that *Nymphomania*, to which he refers, is merely the same disease in the female as Satyriasis in the male:—

“ *Erotomania*—*Monomanie erotique* of ESQUIROL—is characterized by an excessive love of some object, real or imaginary.—It is a mental affection in which

amorous ideas are as fixed and dominant, as religious ideas are in religious monomania or melancholia. Erotomania is very different from satyriasis and nymphomania. In the latter, the mischief is in the reproductive organs; in the former, it is in the mind. The one is a physical, the other a moral disorder. Erotomania is the result of an excited imagination, unrestrained by the powers of the understanding; satyriasis and nymphomania proceed from the local irritation of the sexual organs, reacting upon the brain, and exciting the passions beyond the restraints of reason. In the former, there is neither indecency nor the want of chastity; in the latter, there is unrestrained expression of sexual desire and excitement. The one is commonly caused by ungratified or disappointed affection excited in a virtuous mind; the other, by inordinate irritation or indulgence of the sexual passion.

“In erotomania, the eyes are bright, the manner and expressions tender and passionate, and the actions free, without passing the limits of decency. Self and selfish interests are all forgotten in the devotion paid, often in secret, to the object of the mind’s adoration. A state of ecstasy often occurs in the contemplation of the perfections which the imagination attaches to the subject of its admiration. The bodily functions languish during this state of moral disorder; the countenance becomes pale and depressed; the features shrunk; the body emaciated; the temper inquiet and irritable; and the mind agitated and despairing. The ideas continually revert to the loved and desired object; and opposition or endeavors to turn them in a different direction only render them more concentrated and determined in their devotion. At last, parents and

fortune are abandoned, social ties broken asunder, and the most painful difficulties are encountered in order to obtain the object of admiration.

“In some cases, the attempts made by the patient to conceal and overcome this affection occasion a state of irritative fever, with sadness, depression, loss of appetite, emaciation, &c., which has not inappropriately been termed by LORRY *Erotic Fever*, and which, after continuing an indeterminate period, may even terminate fatally. When a young person becomes sad, absent in mind, pale and emaciated, sighs frequently, sheds tears without any obvious reason, is incapable of mental or bodily exertion, scarcely speaks to any one, loses appetite, &c., it is sufficiently evident that the mind is inordinately possessed by some desired object. If a strong effort be not made to dispossess it of the predominant sentiment, or if the object of desire be not obtained, the symptoms become still more distressing. The corporeal functions languish, the eyes sink, the pulse becomes weak and irregular, and the nights disturbed and sleepless. At last a form of slow hectic is produced; and the weaker organs, especially the lungs and heart, are the seat of slowly-produced disease; the whole frame is blighted, and the patient sinks from the injurious influence of the mental affection on the vital organs.

“This form of moral disorder may increase, and affect the intellects in a much more serious manner, until general insanity or mania is developed; and, with the progress of time, it may at last terminate in dementia or incoherent insanity. In each of these, the primary character of the disorder, or the original moral affection, will still continue to be manifested by the frequent suggestion of the same

train of ideas, or recurrence to the object of devotion."

The treatment of these cases requires great skill and experience on the part of the physician, and frequently a continued observation for a long time, in order to determine what the exciting cause really is. It may be wholly moral or wholly physical, or it may be partly both, and this must be ascertained before any good can be accomplished. The fact is *philosophy* is required as much as physiology, and the most *perfect confidence* must exist between the physician and the patient. *The affections* have often much to do with these peculiar troubles, and it should not be forgotten that there is a great difference in the *temperaments* of different persons, and also in the *sensitiveness* or *impressibility* of their natures.—Those who wish to study the philosophy of this curious subject in relation to the other sex, should read the articles on *Hysteria* and *Chlorosis* in my "Diseases of Woman." Some persons always recommend *marriage* in these cases, to single persons, and there is no doubt but it is sometimes what is required, but at other times it is *highly improper*. In certain forms of physical derangement especially, marriage would only aggravate the evil, and the patient would in all probability ultimately become totally unfit for the married state. This advice, therefore, if followed, would not only fail of doing any good to persons so situated, but would make *two unhappy instead of one*.—It will be seen that some forms of Erotomania are identical with what is called, commonly, *Love Sickness*.

Again, I remark, that in all such cases *good judgment* is required equally with skill.

CHAPTER XI.

GENERAL REMARKS ON THE PRESERVATION AND RESTORATION OF THE SEXUAL POWERS.

THIS Chapter is intended to embrace all those items of information, and those interesting facts not directly needed in any of the previous articles, but which nevertheless it is useful to know. Some of these are *moral*, some *medical*, and some *physiological*, and the whole of them will be found highly *suggestive*, as well as directly *instructive*. It is precisely this kind of information that is very frequently most needed, but hitherto there has been no source, except dear-bought experience, from which it could be obtained. The grand object of medical science should be to *prevent* disease, if *possible*, rather than attempt to cure it, and such knowledge is an important agent in prevention.

It is unfortunately the case, as our previous articles have shown, that the sexual power is liable to be impaired, or even totally lost, from a variety of causes, and that it is exceedingly difficult of restoration. There are, however, many apparently simple rules which, if duly observed, would prevent much of the injury now experienced, and there are also many others equally simple which will often materially assist in its restoration. The object of this Chapter is to point out many of these, chiefly in the form of suggestions and hints; the strictly medical treatment having been fully entered into already.

It is very essential to the preservation of the

sexual power that the general health should be good, and that there should be no serious derangements of any of the vital functions. When the general health is impaired and the vital energies are low, the sexual organs are sure to be weakened, and usually more in proportion than any of the others. Owing to their extensive sympathies also they are sure to be affected by the diseases of all the other organs, and not unfrequently this sympathetic injury becomes very serious. The stomach particularly exerts a great influence over the generative organs, both beneficial and injurious. Long-continued dyspepsia is nearly always accompanied by weakened sexual power and desire, and even temporary attacks of indigestion will, for a time, produce similar effects. On the other hand a healthy stomach, with perfect digestion and nutrition, is highly conducive to sexual vigor. We may even go much further, and show that high feeding is nearly sure to over-excite the genital organs, or in other words that gluttony leads to licentiousness. This is a truth too often lost sight of in the education of children, many of whom, though predisposed to sexual ardor, are stimulated with rich food and exciting drinks till their passions become overpoweringly strong.—In short the stomach exerts a most decided sympathetic influence over the generative organs, and we are thus enabled, by proper attention to the diet and drink, to either increase or weaken their power to a great extent.

Some kinds of food stimulate the sexual organs while other kinds have the contrary effect upon them. Shell-fish, as before stated, are usually stimulating, owing to the phosphorus they contain, but other fish have no such power. Flesh-meat is sti-

mulating merely because it is nutritious, but it is a great mistake to suppose that it is of necessity more so than vegetables. There are some vegetables that are often more stimulating than flesh, especially those that are *farinaceous* or contain much starch, as the potato for instance, which, when of good quality, contains most of the elements the body needs. Most strong tasted or aromatic vegetables have a stimulant effect, such as Celery, Parsnips, Onions, and *Asparagus*, especially, and so have all seasoning herbs, such as Mint, Sage, Pennyroyal, and Thyme. Spices and condiments have a still stronger action, especially the Peppers and Nutmeg.—Mushrooms stimulate some people very much, and Truffles still more, and even Olives exert a marked influence at times. The flesh of birds I think is not stimulating, except that which is red, such as ducks and geese. I have several times been assured that eating freely of the *Canvass-back duck*, when in season, has been highly beneficial to those who were weakened by excess, probably partly from its own nature and partly from the wild Celery on which it feeds. Of all meats, however, *Turtle* has the greatest reputation for exciting the generative organs, and I think with good reason. It is undoubtedly highly nutritious, and it appears also to contain some *heating* principle, which specially affects those parts.

As a general rule all watery vegetables, such as turnips, cabbage, and squash, have no such effect as those enumerated, and are therefor proper when we wish to keep down excitement. Acid fruits also come under the same category, and indeed fruits generally, except some highly-flavored ones, such as peaches, and pine-apples which are un-

doubtedly *aphrodisiac*, except they disagree with the stomach.

Tomatoes are rather stimulating, and so are most kinds of beans, especially the Lima Beans, but peas are not so. Wheaten bread or wheaten flour in any form, is more stimulating than the flour of any other grain, while Indian meal is probably the least so. When we desire an *anaphrodisiac* effect therefore, Indian bread should be used, with mush, samp or hominy, instead of wheaten bread or potatoes. Rice is unstimulating, but sago, tapioca, and arrow-root are the reverse.

In regard to drinks it may be stated that all alcoholic liquors are highly stimulating when first taken, but they soon lose their power if used too long or intemperately, and then they become injurious. Wine has a more strengthening effect than spirits of any kind, and ale or porter is still better than wine. Those who desire to keep their passions down should not take either wine or malt liquor in any quantity.—Most of the cordials in use are highly exciting owing to the spices they contain, and so are many of the so-called bitters.—Coffee is almost as stimulating as wine, and should never be used by those who are disposed to involuntary emissions, nor by those whose desires are too strong. Tea is different from coffee in this respect, and is therefore the better drink in such cases. Milk, though highly nutritious, is not stimulating, and it therefore forms an excellent drink for those who are disposed to emissions or exciting dreams; such persons, however, will do better to use cold water only, and they should also avoid all *warm* fluids, no matter how simple, because warm drinks always excite the flow of urine, and of course stimulate the sexual organs

also. Those who *cannot* use the cold water only may drink soda and mineral waters as much as they choose, or lemonade if it agrees with them, none of these being in the least degree exciting.

Next to the stomach, it is important to attend to the state of the bowels, as they exercise considerable influence over the generative organs, and may affect them in a very injurious manner. The bad effect of piles has already been alluded to, and also constipation, but this last disability is of more consequence than it has perhaps been represented to be. No person must expect to escape seminal weakness who is habitually constipated, no matter how vigorous and healthy the genital organs themselves may appear to be. It is, therefore, very important, as a means of preserving sexual vigor, that the bowels should be always properly regulated, and frequently a little attention to this point is all that is needed to complete a recovery.—The opposite state, diarrhœa, though of course weakening, is not so decidedly hurtful as constipation, and its effects are soon recovered from.

Next to the stomach and bowels the *urinary organs* may be mentioned as exerting great influence over the sexual system. The proof of this has already been given, but I think it necessary to call attention to the fact here as one of the very first importance. If the kidneys or bladder be affected in any way the genital organs are sure to be affected likewise, and if the urine have an irritating quality, it is nearly certain to act on the urethra and ducts so as to cause sexual excitement or spermatorrhœa. This is particularly important in regard to children, many of whom are disposed to precocious virility or to masturbation, simply from being affected with

gravel or with some disease of the kidney or bladder. Those children most liable to such troubles usually find it difficult to hold their urine during the night, and it is very high colored, with a strong odor. Such children are very apt to be subject to spermatorrhœa in after-life, and also to be addicted to self-abuse; it is, therefore, very important that all such affections of the urinary organs should be promptly attended to. At every after-period of life also such matters require serious attention; for many a man is kept diseased and impotent by the same causes, which may operate so powerfully as to neutralize all attempts at cure while they remain.—When any of these diseases exist, at any period, it is requisite, of course, that the diet and drink should be regulated especially in reference to them, the urinary organs being readily affected by those agents.

Constant and healthy exercise of the whole *muscular* system is also of great importance to the preservation of sexual power. It is true that if a man takes little exertion, particularly if he lives high, he will be apt to exhibit an unusual tendency to amorous indulgence, because, as before remarked, gluttony and idleness lead to licentiousness. This effect, however, is only a temporary one and sooner or later the individual finds that he has *permanently exhausted* his vital energy and that his health and strength is seriously impaired. The vital power that may be *safely* expended in sexual indulgence is only the *surplus*, after every part of the system has appropriated its due amount, and if more be so expended some part must suffer. In other words we may suppose that every healthy man has a certain stock of vital energy, which we will call his

capital, to which he keeps adding, more or less, by the function of nutrition ; this addition may be compared to *interest* which may be expended without any loss of capital, and of course without making him any poorer. If, however, by any *excess* he expends more than this addition the capital is proportionably diminished, *and permanently too, for it can seldom be again made up.*

Now, the idle man does not expend enough vital energy on his muscular system to keep it healthy, but at the same time gives a superabundance of it to the sexual organs, so that they are over-stimulated, and suffer from excess. They become habituated to great indulgence, and are constantly causing a drain on the vital power, that soon exhausts both principal and interest and leaves the individual completely exhausted.

The philosophy of this has been frequently alluded to in the course of the present work, but it is so important that I wish to present it in a strong light. I am fully persuaded that there is no case of precocious or excessive sexual propensity, unless caused by disease, that cannot be easily subdued by *muscular exercise*. No matter how vigorously the seminal glands may act, in a state of leisure, they *must* become less active if the body be exhausted by active exertion, and to this rule there is scarcely any limit. One of the Reports of the Massachusetts Lunatic Asylum strongly impresses this truth, and shows conclusively that we have, in *hard labor*, a *certain means* of subduing this propensity to its proper limits under any circumstances. The application of this truth to young persons is obvious, numbers of whom are made licentious only by bodily inactivity and over-feeding.

The invalid, or the man whose powers are impaired must of course husband his strength, because he does not require exhaustion, but only sufficient exercise to ensure health.

Exercise of the *mind* is also equally as important as exercise of the body. The man who is mentally idle is nearly certain to experience too strongly the force of the animal propensities, and licentious thoughts are too often indulged merely from the absence of better ones. It must be recollected, however, that too much mental exertion, particularly if attended with care and anxiety, is most destructive to the sexual power, and frequently leads to impotence, as many of our cases have shown. Those who wish, therefore, to preserve their virility should endeavor to maintain a happy medium, laboring with the mind sufficiently for health and utility, and endeavoring to preserve perfect calmness and equanimity. This subject was explained in one of our former chapters on *Impotence*, and the remarks there made may be again referred to, in connection with these, with advantage.

There are many indulgences which people allow themselves, some of which are apparently very simple, that exert a decided influence over the sexual organs, and in time impair their power. Some of these have been alluded to, particularly the use of tobacco and other narcotics, but there are some others also deserving of notice, though of less consequence. Some persons are much affected by *odors*, which operate either as stimulants or as sedatives to the nervous system, and sometimes produce peculiar effects. That there are odors that specially excite the sexual instinct is beyond question, some naturally and others artificially, though different

people experience their effects in very different degrees. There are also others that exert an opposite influence, though seldom in so decided a manner. Very sensitive people, particularly those in whom the sexual instinct is naturally strong, may be as much excited by a mere scent as by a medicine conveyed into the stomach, as I have frequently seen. *Hysteria* is often excited in this way in females, as I have shown in my work on the Diseases of Women, and various forms of nervous excitement frequently supervene in the other sex from the same cause.

It may be stated, as a general rule, that all powerful odors *may* produce effects of this kind, and they are, therefore, better avoided, particularly the habitual use of them. There are some particular scents that exhibit this power more constantly, and to a greater degree than others, and several of these are articles of common use in the *toilette*. An enumeration of these would embrace many of the choicest *perfumes* used, but it is scarcely possible to particularize among so many, nor is it necessary, as the whole are better avoided. The very *origin*, and *natural use* of some of these indicates clearly enough the purpose Nature intended them to fulfil, in the animals from which they are taken, and I cannot but think that few *females* at least would use them if they really knew what they were. *Musk*, especially, is an article of this kind, the aphrodisiac effects of which I have sometimes seen exhibited in the most unequivocal manner.

The readers of classic poetry will call to mind the story of the *Indian Prince*, who exhibited such marvellous powers merely from smelling the flowers of the *Nympha odorato*, and also several other in-

stances in which the aphrodisiac power of different odors is distinctly alluded to, showing that the general truth was known centuries ago. Some of these accounts are of course much exaggerated, but most of them are founded upon actual truths, as I have in some cases proved, and I believe the statement about the *Nympha* is one that is entitled to consideration.

Perhaps, however, the most important suggestions, as regards the preservation of the procreative power, are those relating to its actual use. It is well known, respecting all the other vital functions, that their healthy performance and preservation, depends materially upon their being exercised at proper times, and under proper circumstances, and it is the same with the generative functions. Many persons think, because the genital organs are usually capable of action at any time, and under almost any circumstances, that it is therefore of little consequence what time is chosen, nor under what circumstances it may be. This, however, is a great mistake, as any one may soon discover by studying his own experience.

The *time* for sexual indulgence should be so chosen that the temporary excitement and after-exhaustion resulting from it, may not interfere with any of the bodily or mental functions, nor distress the system by necessitating too much effort during any needful exertion. Ignorance of this important rule, and consequent neglect of it, very often leads to great inconvenience, and even serious mischief. Sexual indulgence just after eating is nearly certain to be followed by indigestion, even if it does not cause immediate vomiting, owing to the temporary loss of nervous power thereby produced, which arrests the action of the stomach. Just *before* eating

also the same evils may follow, from the stomach being made so weak that digestion cannot properly commence, and the food consequently ferments. Many times I have heard men confirm this truth, when explained to them, though they had previously never dreamt that their troubles arose from such a cause, and when our previous explanations are borne in mind, respecting the *nervous sympathies* of the sexual organs, the philosophy of it will be evident. The proper time for this indulgence therefore, in reference to taking food, is at a sufficient interval after eating for digestion to be nearly accomplished, and before another meal begins to be needed. By observing this rule the action of the stomach is not interfered with, and no indigestion or nausea are likely to follow. It is true, that most men experience *stronger desire* for indulgence *immediately after* a full meal, particularly when stimulating drinks have been used, but this does not prove that they choose the best time. The desire they then experience is merely a factitious one, produced by the general excitement of the whole system, and the exhaustion afterwards felt is nearly always in proportion. In the same manner a man, while under excitement from alcohol, may feel disposed to great bodily activity, and may exhibit astonishing strength, but when the stimulus is withdrawn he feels a corresponding prostration and lassitude. This is the reason also why sexual indulgence should not be sought during such excitement, for the disposition is nearly sure to be stronger than natural, and the over-excitement is followed by proportionate exhaustion. In *Poetry*, I am aware, *Venus* and *Bacchus* are associated together, but Poetry is not always *Physiology*, nor even *common sense*, nor should the licentious furor

produced by wine be in any way considered as the promptings of nature.

Upon the same principles it is obviously injudicious to seek indulgence just previous to any mental effort being made, because the vital energy will be too much exhausted to allow of such effort being made with advantage. Nor is it advisable immediately *after* any great mental effort, because it is injurious to have *two* causes of exhaustion in action at the same time.—The same remarks also apply to *muscular exercise*, which should neither immediately follow nor closely precede sexual indulgence, for the reasons above given.—In short the period chosen should be one when both body and mind can enjoy repose, at least for a short period, both before and after, and when none of the functions are likely to be disturbed.

The time of day is a matter of secondary importance or rather no preferable time can be named, because it must so much depend upon how the individual is circumstanced. That of course will be the best time when the above-mentioned rules can be most fully observed. Some medical writers suggest the evening, because the business of the day is then over and the repose of night is to follow, and this probably is the best period, generally speaking. Others again recommend the morning, because there is then the greatest vigor, and in case of conception the *offspring* may be benefitted thereby. This, however, I feel assured, is a bad suggestion, for the business of the day will be very apt to oppress a man who starts exhausted, and the various functions of his system will very likely be imperfectly performed. The notion about the offspring being influenced at *the moment of concep-*

tion, by the state of the male system, I have already shown the fallacy of, because that moment may not nearly correspond with the period of association.

The duration of the sexual power, like any other, materially depends on the manner in which it is used, and this should therefore be duly considered by those who think its preservation worth striving for. A certain amount of natural indulgence is probably essential, *in most cases*, to perfect health, but when that amount is exceeded of course more or less permanent injury results, as before shown. Every individual should, therefore, endeavor to ascertain, for his own guidance, the proper limits to his gratification, and if he will attend to what has been previously stated on this point that limit may be readily ascertained. By doing this a *real gain* will always be made, for the extra duration of the power which this will ensure will more than compensate for any temporary denial.—With some people whose systems are in regular action, and whose health is nearly uniform, the observance of a *regular period* is found to be advantageous, and highly conducive to the preservation of the virile power, as it prevents both excess and gradual decline.

These hints and suggestions, though apparently simple and common-place, are nevertheless of great value, and if duly observed would probably do more towards preventing untimely decay than all the medical treatment ever practised. Decay is caused, in numerous instances, *by a number of small causes* operating together, and if each of those be removed, as it may generally be very readily, the decay is of course prevented. People are too apt to take notice only of the more striking agents of de-

struction, passing unnoticed these apparently simple ones, as being of small consequence while in reality they are the most important.

There are few persons of good health, who will attend to the above suggestions, and the advice formerly given, but what may preserve their powers to an indefinite period of their existence, particularly if they practice *cold local bathing* over the parts, and avoid all improper excitement.—There is no particular time of life when the powers of the male system decay, but they may be preserved to extreme old age, as many cases have proved.—Old Parr for instance was condemned to do Penance *when over a hundred years old*, for an amorous intrigue, and he had several children after that period.

There are some other circumstances, connected with the association of the sexes, that exert an important influence over the duration and manifestation of the sexual power, but as they do not concern man alone it is not necessary to enter fully into a consideration of them here, but merely to point them out as concerning both sexes.

There is no doubt but that Nature has instituted, in numerous instances at least, if not universally, a peculiar fitness, or *adaptation* between particular individuals of opposite sexes, that makes them more appropriate companions to each other, in marriage, than they can ever be to others. And on the contrary, it is equally certain that there is as great an *unfitness* in some individuals, so that their union is in every way objectionable. This adaptation may be either mental, moral, or physical, or it may be all three, and sometimes it consists in something we cannot understand, though its existence is too obvious to admit of dispute. Nature frequently exhibits

wonderful sympathies and antipathies, which we cannot comprehend, but which should be attended to, as far as possible, in making our arrangements, for it is always injurious to run counter to them. There are many causes of unfitness, and consequent unhappiness, that could be discovered before marriage, and many others that could be corrected after, if the parties possessed a certain amount of physiological knowledge, but unfortunately such knowledge is seldom obtained in time, and the consequences must be experienced. It is not my purpose to discuss this matter fully here, but merely to show its bearing upon the subject now being discussed. There is no question but that association between persons properly adapted to each other is less exhaustive, and may be more frequently indulged, than between those who are naturally unfitted to be companions. And it is also certain that the circumstances under which the association occurs may very much determine the effect it will have. It is requisite, for the act to be truly pleasurable and advantageous, that it should be fully approved both by the feelings and the judgment, otherwise it will be more or less regretted, and more or less injury will follow, no matter what amount of mere animal gratification was experienced. This is the reason why mere licentious debauchery is always followed by remorse, and ill health, while legitimate association in marriage, with a loved and respected partner leads to no such evil results. It is a fact equally important to individuals and to society at large, that the institution of marriage is conducive both to health and to happiness, and that the duration of life, in both sexes, *is longer in that state than in any other*. Many men fall into a great error in regard to this subject,

and suppose that they can realize *more pleasure* in the unlicensed indulgence of the single state than when married. *This is, however, a fatal mistake*, for they really enjoy less, and are after all dissatisfied with themselves, while the duration of their powers is materially shortened.

Some little time ago I had a very interesting conversation on this subject with a *Swedenborgian*, who remarked that many of the principles laid down in my lectures exactly corresponded with his *spiritual* views on marriage, and that his own experience fully corroborated the truth of what I had stated. He told me that in his youth he was unfortunately led into a licentious course of life, and experienced in consequence all that *self-accusation* and loss of real pleasure which I described, but that since his marriage, and in consequence of the important truths learned from Swedenborg's writings, he had subjected his passions to the control of reason, and had led, as he expressed it *a new life*. He assured me that, with the partner of his bosom, association was *never followed by exhaustion* to either, but on the contrary by a feeling of *increased strength and pleasure* to both, and I have no doubt but he spoke the literal truth, for I have been frequently told the same by others. *He* regarded this as a *spiritual* effect, while *I* looked upon it as a simple *physiological* one, but be that as it may the fact is an important one, both as regards health and morals. These subjects, however, will be fully discussed in a work on *the Reproductive Functions and Marriage*, which I have been for a long time preparing, and which will be shortly issued. It has been delayed in order to institute a number of experiments, and an extended series of observations,

to clear up all doubtful points and make the explanation complete.

Another important requisite for the healthy action and extended duration of the sexual power, in both, is a near correspondence in *age*. Experience has proved beyond doubt that when there is *great disparity* of age, in marriage, the elder person *is nearly sure to benefit at the expense of the younger*, sometimes even sufficiently to compensate for the loss resulting from great excess. This fact was acted upon medically in former times, and is now even in some countries, by procuring young females to sleep with old men, so that they may be strengthened thereby, which they nearly always are, though the females suffer a corresponding loss, and not unfrequently waste and die in consequence. Such unnatural practises are therefore properly discountenanced now, both by reason and morality, though we sometimes see a near approach to them in marriage. It is even known that when children sleep with old persons they suffer from it, and sometimes even die, without the causes of their sickness being suspected. In all probability young men who marry old females suffer in the same way, and to an equal extent, providing they are as exclusive in their companionship, but there are many causes that may make it otherwise in their case.

What constitutes a great disparity of age must of course depend upon various circumstances, besides the number of years. Some persons are younger at *forty* or even *fifty*, in respect to health and probable longevity, than others are at twenty-five or thirty and this must be taken into account. Generally speaking, however, there should not be much more than *ten years* difference under any circumstances,

and only half that is better, the man being the elder. — Besides health this principle of similarity of age has an important bearing upon the relative number of the sexes born, as shown in my *Matron's Manual*, to which I refer those who wish for more extended information on the subject.

The explanation of the above-mentioned fact is probably this,—all living bodies are constantly giving off portions of their substance, in the form of insensible perspiration, and these particles thrown off are in the same state, in regard to age and health or disease, as the body from which they emanate. The same bodies are also as constantly *absorbing*, both by the lungs and by the skin, whatever is presented to them in a proper form, which partly counterbalances the loss. Young healthy persons are, therefore, always giving off a stream of fresh wholesome material from their bodies, and old or diseased persons as constantly give off a stream of morbid and decaying matter, which explains why it is that the young suffer and the old benefit when they live together. The waste of the old persons is in part made up by absorbing the fresh exhalation from the young, and they become thereby rejuvenated, while the waste of the young persons is only made up by absorbing the decaying exhalation from the old, and they in consequence speedily decay and become old likewise. The celebrated Hufeland, in his "*Art of Prolonging Life*," gives some curious instances of the practical application of this fact which are highly interesting, in a scientific point of view, though morally reprehensible. Among others he tells us of an old man who had the superintendence of a kind of almshouse, in which were a large number of young

girls, in whose society he passed nearly the whole of his time. He contrived to have a number of them always around him, so that he was constantly in an atmosphere as it were of youthful exhalation, and by these means he preserved his life to an extreme old age, with all his powers in full vigor. A similar practice, to a certain extent, has even been adopted in London and Paris very recently, as was discovered in the evidence on a Police Trial. It appeared, from the statements made, that a number of poor young married females were hired to attend, at certain establishments, for so many hours in the day, to associate with superannuated old men. And not only did these young females associate in company with the aged patients, but they also supplied them with what ought to be kept for infantile nutriment alone,—in short they acted as *wet nurses* to them!—The results of the practice were said to be *very satisfactory*, but fortunately there is not sufficient degradation and poverty in this country to make it available here, though I have known it attempted.—With persons of equal age, and similar condition of health, the exhalations are similar, and there is an equal loss and gain on both sides.—During sexual excitement the insensible exhalation is much increased, and therefore the effects above-mentioned are more evident where there is association, and this perhaps explains, as my Swedenborgian friend remarked, why it is that in a *proper marriage no exhaustion at all is experienced*, there being merely a reciprocal interchange exactly corresponding in both.

THE END.

DR. HOLLICK'S PRIVATE LECTURES.

DR. H., has long been engaged, as much as his extensive practice would allow him, in the delivery of Public Lectures, to Ladies and Gentlemen separately, on the Physiology and Diseases of the Reproductive System. These Lectures have been attended by numerous audiences, of both sexes, in many of the chief cities of the Union, and have every where received the unqualified approbation of all who have heard them. They are appropriately illustrated by Anatomical *Models* and *Plates*, of the most complete and costly kind, so that unprofessional persons can easily comprehend the explanations given. The object of these Lectures is to give a practical knowledge of those diseases and imperfections, to which all are liable, that appertain to the Reproductive System alone, so that they may be both guarded against, and properly treated, by all persons for themselves. The unfortunate prevalence of these affections, and the extent to which they influence human health and

happiness, is well known, and every one who has reflected upon the subject must see the great utility of such a popular exposition.

The causes of many of these diseases can be readily avoided when they are known, or they can be easily cured in the early stages, but when allowed to remain too long unchecked they become utterly incurable. How much more important it is therefore for the people to be taught how to *prevent*, than for physicians only to experiment with means of cure. It is a great mistake to suppose that a general knowledge of such matters is of no utility, merely because it is not extensive, for the smallest amount may often enable a person to avoid evils that all the skill in the world could not cure.

Dr. Hollick's Lectures are intended to give this desirable information, in a familiar and unobjectionable form, so as to be practically useful to every one. How far they have done so may be judged by the appended notices.

Notices of Dr. Hollick's Lectures.

DR. HOLLICK AND PHYSIOLOGY.—The second of a series of Lectures, by this gentleman, on human physiology, and the all important truths connected with our physical constitution, was attended by a full house, in National Hall, last evening. The time was well spent, and so appeared to think the audience. On the delivery of the first of these Lectures on Tuesday evening, the speaker in a comprehensive and well-digested exordium, placed himself and the subject right with the public. His manner, language and style, did the first; his sound logic, his argument, his candor and research, accomplished the second. Apart from the interesting and apposite details of the wonders of reproduction, the illustrations of the immutable wisdom of nature, which teem in the animal and vegetable worlds—which

“ Glows in each stem, and blossoms in each tree ;
Lives through all life, extends through all extent,
Spreads undivided, operates unspent.”

Apart from all this, Dr. Hollick's Lecture was excellent as a defence of truth, a vindication of the right of free and unshackled inquiry, and as a convincing refutation of that silly, but far too prevalent opinion that there are truths of which it is better to remain in a state of ignorance. Had nothing else been imparted in the forcible and well defined exordium of Dr. Hollick than this judicious demolition of that fallacious, silly, but injurious twaddle which would forbid research to pass in advance of the old landmarks prescribed by custom, ignorance, or a spurious morality—even that would well deserve the public patronage. Truths, well set forth, will make an impression, whether their investigation be fashionable or not. There is an affinity between the capacity to learn, and the truths to be learned, which always results, when a fitting opportunity is presented, in a free inquiry, and the gentleman who is bringing, in a judicious and elevated manner, a knowledge of those fundamental principles of our corporeal existence which are abused because unknown, will accomplish more good than half a dozen teachers of higher pretensions, and lower ability. It was gratifying to observe the decorum—the sense of respect for both speaker and subject, that was observed throughout the evening, which evidently shows that those who go there are actuated by higher motives than mere curiosity; by desires more ennobling than a passing gratification; in a word, it was clear that those who composed Dr. H.'s hearers, were men who know and dare to think, and who will profit by these most useful discourses.—*New York Herald*, August 7, 1844.

At a Meeting of the Class attendant upon Dr. Hollick's Select Lectures on the Physiology and Philosophy of the "Origin of Life" in Plants and Animals, held at the Lecture Room of the Museum, Wednesday evening, December 1, 1844, George G. West, Esq., was called to the Chair, and Samuel W. Black appointed Secretary.

Resolved, That we have listened with unfeigned pleasure and interest to the Courses of Lectures delivered by Dr. Hollick, and now brought to a close, and that we deem it an act of justice to him and the community, to express our entire confidence in his character, ability, and the manner of illustrating his subject, which, to use the words of a daily journal, "is couched in such delicate as well as perspicuous language, that the most fastidious could find no fault, nor the idlest curiosity go away unimproved."

Resolved, That a committee of three be appointed to tender to Dr. H. the thanks of the Class for his courtesy to the members in affording them every facility for obtaining information upon the subject of his Lectures, and that he be requested to repeat the Course at the earliest period consistent with his other engagements.

Published in all the Philadelphia daily papers of December 14, 1844, and signed by *one hundred and forty* of the most respectable and influential inhabitants.

(See similar Resolutions, with *over two hundred names* attached, in the Philadelphia daily papers of March 9, 1844; also of March 16; and on several other occasions.)

From the Philadelphia Daily Papers, Feb. 21, 1845.

At a meeting of the Ladies composing Dr. Hollick's Class, held on Wednesday afternoon, February 19th, in the Lecture Room of the Museum, the following resolutions were unanimously adopted, and ordered to be published in one or more of the city papers :


Resolved, That we have listened with great pleasure and interest to Dr. Hollick's Lectures, and are happy to add our testimony to the many already recorded in behalf of such Lectures : and regarding Dr. Hollick as a benefactor of his race, and especially of our sex, we cordially wish for him abundant success, and ample reward in the consciousness of doing good.

Resolved, That we will exert ourselves to induce our female friends and acquaintances to avail themselves of the great and rare privilege of obtaining the valuable instruction imparted in these Lectures in so chaste and dignified a manner.

Signed on behalf of the meeting by

SUSAN WOOD, President.

SARAH WEBB, Secretary.

 With over 50 names attached thereto.

(See also similar Resolutions, with numerous names, on Feb. 27, 1846, March 20, 1840, and on April 10, 1846, with over *three hundred names* attached.)

DR. HOLLICK'S LECTURES.—The third and last course of Lectures by Dr. Hollick, will commence this evening in the Franklin Saloon, corner of Baltimore and North streets. This will positively be the last course during his present visit to this city. We cordially say to those who love a scientific treat not to fail to attend. More instruction is contained in those three Lectures, than can be mastered by a twelve month's reading.—*Baltimore Clipper*, March 30, 1847.

From the U. S. Gazette, Phila., Feb. 18, 1845.

DR. HOLLICK.—The first of a course of three Lectures was given by this gentleman last night, in the Lecture Room of the Philadelphia Museum, and it is scarcely necessary to say, was listened to by a large audience with the deepest interest. The doctor not only reasons philosophically, but has the happy faculty of imparting information in an easy and plain manner, so that it may be comprehended by even those not at all conversant with medical science.

DR. HOLLICK'S LECTURES.—Last evening Dr. Hollick delivered another of his Lectures on the "Origin of Life." These Lectures continue to attract much attention, and are commended by all who hear them. During the past week Dr. H. has given a private Lecture and exhibition of his models to many of our prominent Senators and public men, all of whom expressed themselves highly gratified, and desirous that another class should be formed to accommodate their friends who had not attended.—*National Intelligencer*, Jan. 30, 1846.

DR. HOLLICK'S Second Lecture was delivered last Wednesday night at Concert Hall. The Lecture was well attended by many distinguished gentlemen, among whom were noticed Ex-President Adams, several members of Congress, and eminent medical practitioners. The Lecturer seemed to make a very favorable impression upon the audience.—*National Intelligencer*, Washington, D. C., Jan. 25, 1845.

☞ DR. HOLLICK commences a new course of Lectures on the Parental Instinct, &c., at the corner of Broadway and Grand street, this evening. We were formerly prejudiced against Dr. H., believing that his Lectures were calculated rather to gratify a prurient curiosity than to impart useful knowledge. The testimony of very many of his auditors, however, including some of the purest and wisest among those we know, has satisfied us that we were mistaken, and we now believe that many must be profited by his inculcations, while none can find food therein for a vicious sensuality.—*N. Y. Tribune* May 11, 1847.

A GOLD MEDAL TO DOCTOR HOLLICK.—The Ladies of Dr. Hollick's class have presented him with a beautiful Gold Medal, enclosed in a handsome morocco case. The front of the Medal bears the following inscription :

"Presented to Frederick Hollick, M. D., by the Ladies who attended his Lectures on Pysiological Science, delivered at Philadelphia, March, 1846, as an expression of their approbation of the knowledge therein conveyed, and as a testimonial of personal regard."

On the reverse is the Sun, and reflected by the rays of the luminary, a scroll containing the words

"To give light to them that sit in darkness."

Phila. Spirit of the Times, March 28, 1846.

"LETTERS FROM NEW YORK, NO. 11."

" * * * * * There have been several courses of Lectures on Anatomy, this winter, adapted to popular comprehension. I rejoice at this ; for it has long been a cherished wish with me that a general knowledge of the structure of our bodies, and the laws which govern it, should extend from the scientific few into the common education of the people. I know of nothing so well calculated to diminish vice and vulgarity as universal and rational information on these subjects. But the impure state of society has so perverted nature, and blinded common sense, that intelligent women, though eagerly studying the structure of the Earth, the attraction of the Planets, and the reproduction of Plants, seem ashamed to know anything of the structure of the human Body, and of those Physiological facts most intimately connected with their deepest and purest emotions, and the holiest experience of their lives. I am often tempted to say, as Sir C. Grandison did to the Prude—' Wottest thou not how much *in-delicacy* there is in thy delicacy ?'

"The only Lectures I happened to attend were those of Dr. Hollick, which interested and edified me much. They were plain, familiar conversations, uttered and listened to with great modesty of language, and propriety of demeanor. The Manikin, or Artificial Anatomy, by which he illustrated his subject, is a most wonderful machine invented by a French Physician. It is made of *papier mache*, and represents the human body with admirable perfection, in the shape, coloring, and arrangement even to the minutest fibres. By the removal of wires it can be dissected completely, so as to show the locality and functions of the various Organs, the interior of the Heart, Lungs, &c.

"Until I examined this curious piece of mechanism, I had very faint and imperfect ideas of the miraculous machinery of the house we live in. I found it highly suggestive of many things to my mind." * * *

L. M. C.

[Extract from a Letter in the "Boston Courier" of Monday, June 3d, 1844, by Mrs. L. M. Child.]

For the Citizen.

PHYSIOLOGY AND ANATOMY.

DR. HOLLICK'S Lectures on Physiology and Anatomy, recently given in this city, cannot be too highly appreciated. The aim of the Lecturer seems to be an elevated one, and I doubt not he has in this way accomplished, and will continue to accomplish much good. The object is one which cannot fail to interest every person who has a desire to become acquainted with the wonderful mechanism of the human frame; and is couched in such delicate terms that the feelings of the most fastidious could not be shocked, and at the same time, care is taken that the language be such that every individual of ordinary ability may understand.

Dr. H. may truly be considered a benefactor of the present age, and as such should be patronized and encouraged by the wise and good.

A FRIEND OF HUMANITY.

Christian Citizen, Worcester, Mass., December 16, 1848.

DR. HOLLICK'S Lectures were so popular and so well attended last week that he has been induced to commence another course this week in Tremont Temple, where all will have a fine opportunity to see and to hear. The first lecture of the new course will be given to the ladies to-morrow afternoon at half past three, and in the evening to gentlemen at half past seven, in the large Hall of Tremont Temple. An entirely new course will be given to the ladies. The Lecturer has every qualification to communicate instruction in a pleasing manner. His complete apparatus of Anatomical Models and Diagrams affords grand facilities to his auditors in understanding the subjects upon which he treats. His sobriety, earnestness, unassuming manner, happy use of language, distinct articulation and thorough knowledge of his subjects make his Lectures exceedingly interesting as well as instructive. We are glad he has taken the Tremont Temple, for he will now be able to accommodate all his hearers.—*Boston Mail, March 6, 1848.*

DR. HOLLICK commences to-day his new course of lectures. At his last lecture to ladies the hall was completely filled, and over *three hundred* were, from necessity, sent away! The disappointed may, however, have another opportunity to-day, if they attend early; he begins at four o'clock. It is impossible to convey any idea of the enthusiasm the doctor has excited among both ladies and gentlemen. They remain around him in crowds, for hours after his lecture is over, asking for further information, and closely examining the models, &c. His previous reputation as an author, and as the originator of this system of popular lectures on Physiology, has excited an intense desire to hear him in the minds of thousands. His discourses, it must be remembered, are not superficial, and merely entertaining, but complete and deeply instructive. See his advertisement. Gentlemen's class at 7½.—*Boston Post, February 28, 1848.*

DR. HOLLICK'S FIRST LECTURE.—We attended Dr. Hollick's first Lecture on the "Origin of Life," delivered at Washington Hall, Bromfield street, on Monday evening, and came away, highly gratified both with the style and matter of the lecturer. Dr. H. is a clear and forcible speaker, and while his language is perfectly familiar and perspicuous, he yet approaches his subject with a delicacy and reverence which command attention and respect. Nothing but a false and mawkish sensibility could take offence at his discourse; and having critically listened to his first Lecture, and his synoptical sketch of his course, we confess that our doubts of the propriety of their being attended by ladies—and we had our doubts—were entirely dispelled, and we can now appreciate the commendations bestowed by Mrs. Child upon his course.—*Boston Times*, Feb. 23, 1848.

DR. HOLLICK'S new series of select Physiological Lectures commences to-day, and will no doubt be well attended. These Lectures have many features peculiarly their own, by which they are distinguished from all others of a similar kind. They are not superficial, nor merely entertaining, but deeply interesting and practically useful. Not the slightest approach to levity, or impropriety, is ever seen or heard in them, so that even the most fastidious can find no objection.—The testimony of numerous eminent citizens, and the fact that so many Ladies attended last week that numbers could not gain admission, is proof enough of this. Several have remarked that the information they gained was above all price. The audience is always very select, and the number is never allowed to be too great for comfort. It will be requisite to go early, however, to find seats. Remember, the gentlemen in the evening, and the ladies in the afternoon.—*Boston Chronotype*, March 7, 1848.

DR. HOLLICK'S LECTURE to the Ladies, last Friday, was listened to with the greatest satisfaction, by an audience as large as the Hall would contain; in fact, two or three hundred ladies could not obtain admission. The gentlemen's class was also as fully attended as the Doctor's arrangements allowed, and gave equal satisfaction. Every thing is so arranged that all can see and hear without discomfort; and the subject is so clearly explained, and yet in so pleasing and proper a manner, that all are interested and instructed, without even the most sensitive and refined delicacy being in the least offended. The ladies have another opportunity again at four o'clock to-day, and the gentlemen at 7½ o'clock. See advertisement.—*Boston Courier*, February 28, 1848.

DR. HOLLICK'S PRIVATE LECTURES ON MARRIAGE.—When Dr. H. was here last winter, he delivered a series of Physiological Lectures on the subject of Marriage, which were numerous attended and warmly approved. Many of those who then heard them have requested their repetition, and it will be seen by the advertisement that they are to commence to-morrow, for gentlemen, and on Thursday for ladies. Married persons will readily understand the nature of the topics to be introduced, and will see their importance, especially to them. The want of such information, at a timely period, is the cause of incalculable suffering and unhappiness.—*Boston Bee*, March 20, 1849.

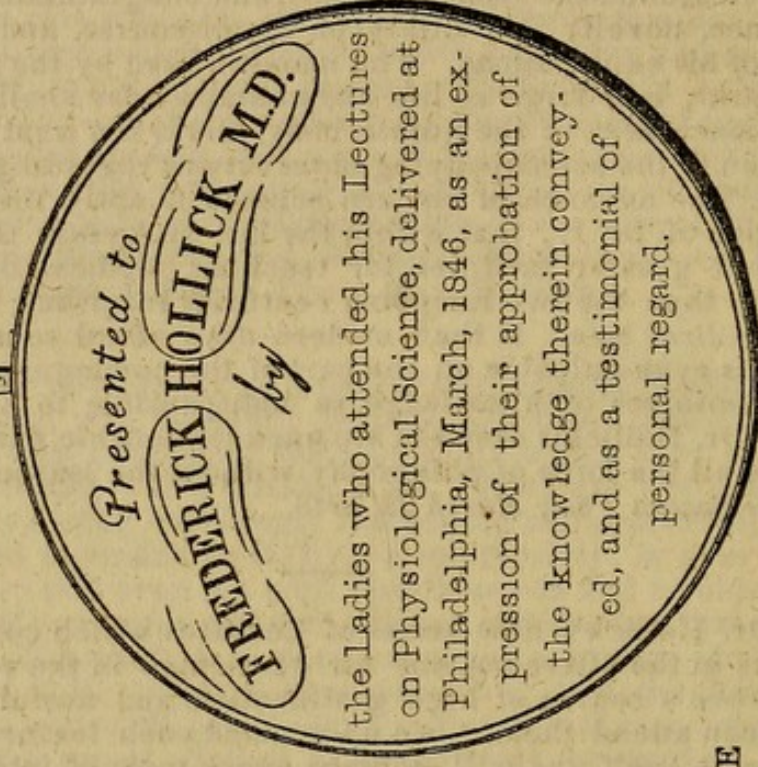
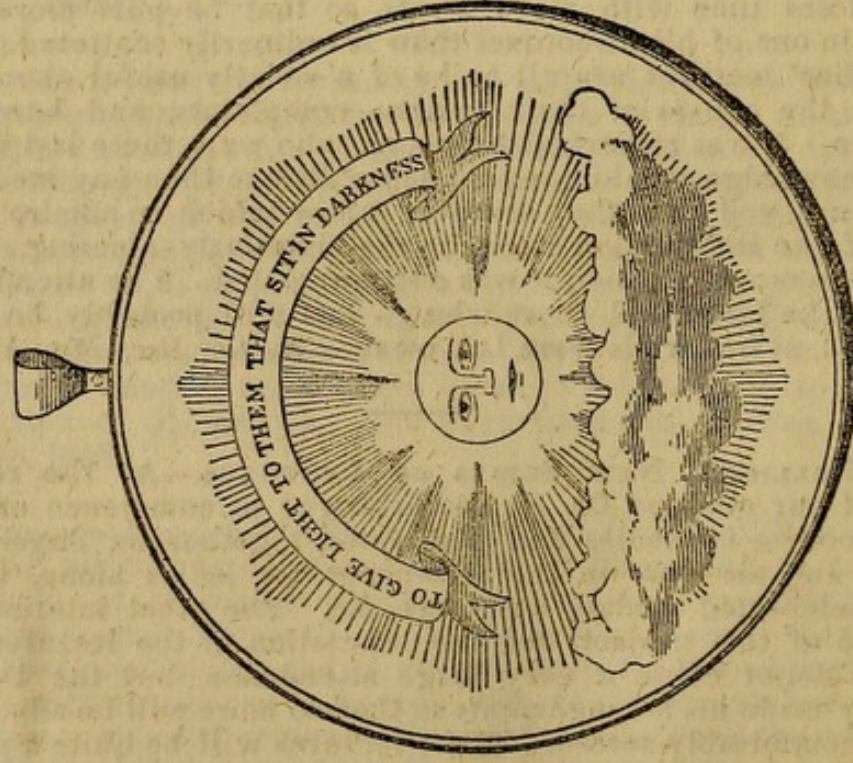
DR. HOLLICK'S course of lectures at Washingtonian Hall on the Origin of Life, commenced on Monday, and were listened to with breathless attention till the close, when the audience, in a body, assembled around the speaker's stand, and congratulated him upon the excellence, novelty and utility of his discourse, and the vigor and felicity of his explanations. The manikin used by the Dr. to illustrate his remarks, is as large as life, and contains a fac simile of all the important machinery of the human body, and it is a treat to behold them and listen to the accompanying observations regarding their uses and abuses. The advance of modern science is aptly illustrated by the declaration of Dr. H., that within the last two years there have been discovered greater facilities for teaching medical doctrines to the *multitude* than the two foregoing centuries furnished for the instruction of *medical men*. If then, modern days afford so much additional light, it is even culpable on the part of the community if they do not avail themselves of knowledge so indispensable to health and happiness. Dr. Hollick's remarks are unexceptionable, easily understood, and have all the force of philosophy without the learned jargon of the pedant.—*Boston Post*, March 23, 1848.

Dr. Hollick's new series of Lectures which commence to-day for ladies in the afternoon, and for gentlemen in the evening, will no doubt prove a source of high gratification, and useful instruction, to all who can attend them. We understand each lecture will be quite complete by itself, and will embrace every topic of interest and every fact of value, that have the slightest bearing upon the subject discussed. The Dr. has a most admirable power of condensation, and never loses time with mere words, so that he puts more valuable matter in one of his discourses than is ordinarily scattered over four. The ladies' lectures are all to be of a strictly useful character, embracing the causes of their various complaints, and how to avoid them, &c. It was remarked by many, who were there last week, that such knowledge would prevent more disease than any medical skill could cure, and that they scarcely knew which to admire most, the value of the information itself, or the singularly pleasing, plain, and delicate manner in which it was communicated. The attendance will no doubt be large, and those who go late will probably be again disappointed, as hundreds were last week.—*Boston Bee*, March 7, 1848.

DR. HOLLICK'S NEW SERIES OF LECTURES.—At the request of many of our citizens Dr. H. has arranged to commence on Monday next, a course for ladies and gentlemen together, on Physiology and Health, and also one in the afternoons for ladies alone, illustrated by his celebrated models, paintings, &c. The great interest and importance of this subject, and the reputation of the lecturer himself, will no doubt cause a very large attendance, but the Doctor has properly made his arrangements so that no more will be admitted than can be comfortably seated. These lectures will be quite a prominent feature in next week's entertainments, and we should not be surprised if the Doctor is even better patronized than he was last winter, when hundreds could not obtain admission to hear him.—*Boston Times*, November 1848.

THE GOLD MEDAL PRESENTED TO DR. HOLLICK,

BY



THE

LADIES OF PHILADELPHIA.

WRITING DESK AND GOLD PEN PRESENTED TO DR. H. BY ONE
OF HIS LADY CLASSES.



DR. HOLLICK—Dear Sir: The members of your class, desiring the gratification of offering you some testimonial of their personal regard, and grateful appreciation of the benefits which you are conferring upon them and their sex generally, respectfully request your acceptance of the accompanying writing desk.

Were it necessary, we might repeat our assurances that your services to humanity will be, by us, long and gratefully remembered. The women of this generation have reason to rejoice that, by your efforts, a new and extensive field of information has been opened to them, whence they may derive treasures of knowledge, of immense importance to themselves and their posterity, hitherto concealed within professional enclosures.

Wishing you health and happiness, we beg leave to subscribe ourselves,

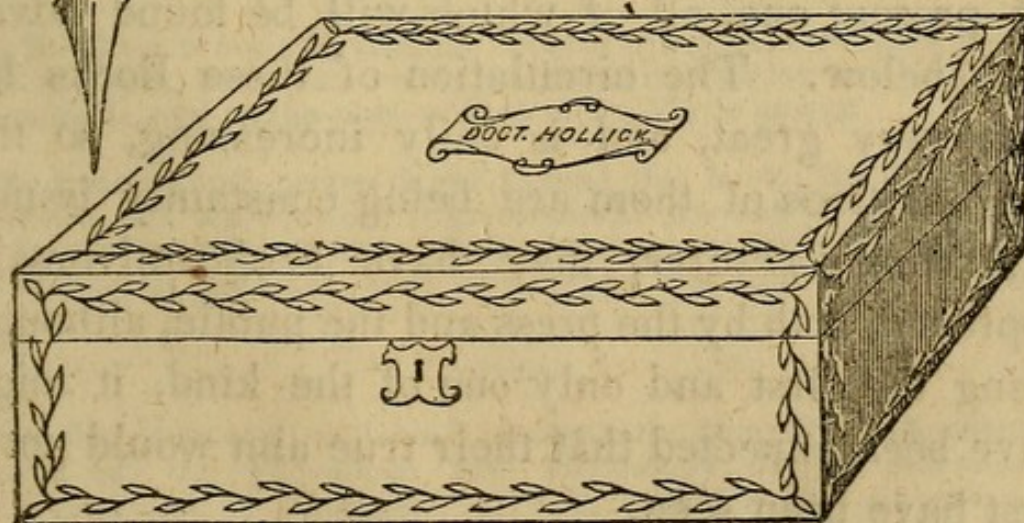
Truly your Friends,

Signed on behalf of the class by,

M. G.

O. W. B.

Phila. March 20, 1845.



DR. HOLLICK'S BOOKS.

MANY persons not able to attend Dr. Hollick's Lectures, and yet desirous of obtaining similar information, have requested him to write books suitable for their instruction; and many of his audience also, wishing to make their acquaintance with these subjects more complete, and to always have a manual of reference by them, have seconded the request. As much as his time has allowed he has complied with this requisition, and has published various works of this character, including the present one, all of which will be found advertised below. The circulation of these Books has been very great, and is daily increasing, so that large editions of them are being constantly issued. Like the Lectures, they have been universally approved, both by the press and the public, although, being the first and only one of the kind, it might have been expected that their true aim would not at first have been seen.

DR. HOLLICK'S GREAT WORK FOR MEN.

THE MALE GENERATIVE ORGANS.

IN HEALTH AND DISEASE,

FROM INFANCY TO OLD AGE.

A COMPLETE Scientific Treatise on the Anatomy and Physiology of the *Male System*, with a description of the

CAUSES, SYMPTOMS AND TREATMENT

of all the Diseases and Infirmitie*s* to which it is liable, *adapted for every man's own private use*, and including an introductory account of all the new discoveries concerning the Physiology of the Female system and the process of Reproduction. With colored frontispiece, and numerous appropriate Anatomical plates.

PRICE ONE DOLLAR.

Published by Nafis & Cornish, Pearl street, New York.

N. B.—This is not a treatise on *Veneral* complaints, nor does it even speak of them, but treats solely on those difficulties to which *every man is liable*, and on the preservation of the Virile power.

☞ Every Adult person ought to read this book ; the information it contains, and the warning it gives would prevent years of misery, and save thousands of lives, if given in time. Parents especially should read it, to learn how to PREVENT the destruction of their children.

Also the "ORIGIN OF LIFE," a complete Scientific and popular Treatise on the Philosophy and Physiology of the REPRODUCTIVE FUNCTIONS, in Plants and Animals, with TWELVE ANATOMICAL PLATES, AND ALL THE NEW DISCOVERIES. Thirteenth Edition. Price *One Dollar*.

WORKS PUBLISHED BY DR. HOLLICK.

[For every Females' own private use!]

THE DISEASES OF WOMAN,

Their Causes and Cure familiarly explained, with *Practical Hints* for their prevention and for the preservation of Female Health. By F. HOLLICK, M. D. Especially designed for every Female's Private Use.

BURGESS, STRINGER & Co., corner of Broadway and Ann street, New York, and for sale by all Booksellers. Price \$1—300 pages, beautifully bound, and illustrated with numerous splendid *Anatomical Plates*.

From the New York Sunday Times.

Dr. Hollick's great work, *THE DISEASES OF WOMAN*, which will be found advertised in another column, is truly a valuable production, and well sustains the author's well-earned reputation. It is a complete practical treatise on female diseases, scientific enough for a medical man, and yet so plain that every body can understand it, and so delicately written that even the most fastidious cannot object to a single passage. Much of the matter it contains is quite new in this country, even to medical men, and of the greatest interest and importance. The anatomical plates are superb, and the whole book is excellently got up. Every adult female in the land should read this book; the information it gives would prevent an incalculable amount of disease and suffering, if possessed in time; or it will teach the best way to cure it when unfortunately established.

~~~~~  
✂ The price of each of the above works is *One Dollar*, and they may all be purchased either of Dr. H., or the Publishers, or any of the Booksellers in Town or Country. The Publishers will also send them by Post to any part, on receiving the money and address.

There is no derangement whatever, affecting the Reproductive System, in either sex, nor any thing requisite in the practice of Midwifery, but what will be found fully explained in these works. They form in fact a complete practical, popular, medical and obstetrical Library, containing the fullest and newest information, so simplified as to be adapted for popular use, and yet so thoroughly scientific that they will serve as Manuals for Students and Medical men.

## OUTLINES OF ANATOMY AND PHYSIOLOGY.

BY FREDERICK HOLLICK, M. D.

THIS is the most complete, and at the same time most simple work ever issued on the subject. It is illustrated in a novel manner, by a *large colored Plate* of the Human Organization, which *dissects* by means of separate layers, *from the surface of the Abdomen down to the Spine*, showing all the Organs in their proper places, all connected together, and many of them in sections! the whole being colored to life. This plate is on an entire new plan, nothing of the kind having ever before been invented; it is almost as complete as a model, and is invaluable for private study, for teachers, and for Medical students. The explanations are familiar, and divested of technicalities; and it is still further illustrated by separate wood-cuts throughout the work, and a beautifully engraved portrait on Steel of the author. One volume, quarto, bound.—Price \$1. Third Edition.

Published by T. B. PETERSON, No. 98 Chesnut street, Philadelphia.

DR. HOLLICK'S "*Outlines of Anatomy and Physiology*," for sale by the booksellers, is an excellent publication. The dissected plate will teach a beginner much more regarding the position, character, and appearance of the human organs, than any work whatever, with disconnected illustrations. The letter press is succinct and intelligible, and to those who, knowing nothing of anatomy and physiology, are desirous of obtaining general information on these subjects, without much expense, we heartily commend Dr. Hollick's "*Outlines*."—*Boston Post*.

## The Matron's Manual of Midwifery, and the Diseases of Pregnancy and Childbirth.

THIS work explains the whole process of labor, and all its difficulties, with the proper mode of assisting, in such a simple manner, but at the same time so correctly and scientifically, that any female could, after reading it, assist another during delivery with confidence and success. The diseases also of pregnancy and childbed, are fully explained, with the simplest and best mode of treating them, and also the accidents to which the new born infant is liable.

This book will serve as a Manual for students and practitioners, as well as for females, and will be found to contain full information on every point of interest connected with this great subject. No female who values her own welfare, and who desires to be useful in cases of emergency, will neglect to possess it.

It is illustrated by *over Fifty splendid Plates*, especially designed for this work, and calculated to explain every part of the process.

A supplementary chapter contains a full account of the use of *Ether* and *Chloroform* to prevent pain in labor, with numerous cases, so that every one can judge of the value of these agents.

Published by T. W. Strong 98 Nassau street, N. Y. Price, only \$1.

## NOTICE.

---

PERSONS wishing to communicate with Dr. H., are requested to address to "*Dr. F. Hollick, New York,*" and if he is not then in that city the Letter will be forwarded to him. If advice be requested the statement of the case must be full and explicit, with a correct history of its origin, if that be known, and its progress. A fee of *Five Dollars* must also accompany all such Letters, or they cannot be answered, so many being constantly received, that the mere reading of them occupies considerable time. If interviews be desired, or visits requested, Dr. H. will endeavor to accommodate applicants as far as he can, but he begs to remark that his time is much occupied, and that such appointments are sometimes difficult to arrange immediately.

Dr. H. is fully prepared with all the apparatus required to practice any of the modes of treatment described in his books, or to supply any of the remedies therein referred to, but he thinks it necessary to remark, that many of these from requiring his personal supervision, and occupying considerable time, are necessarily expensive.

