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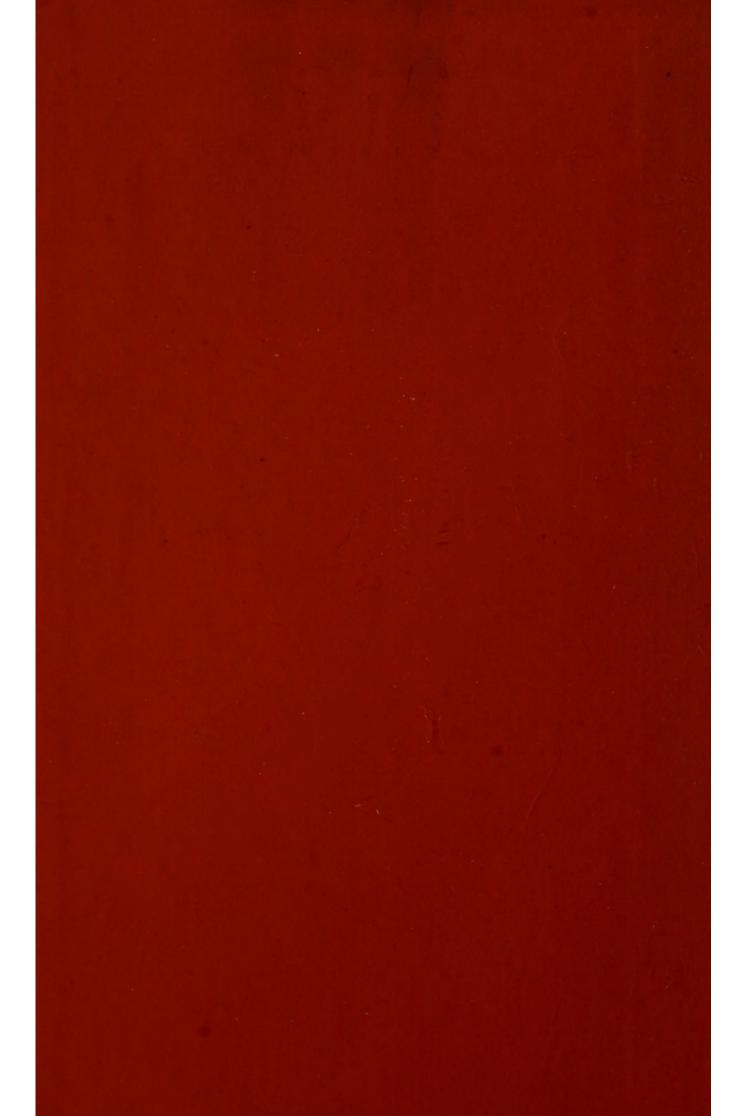
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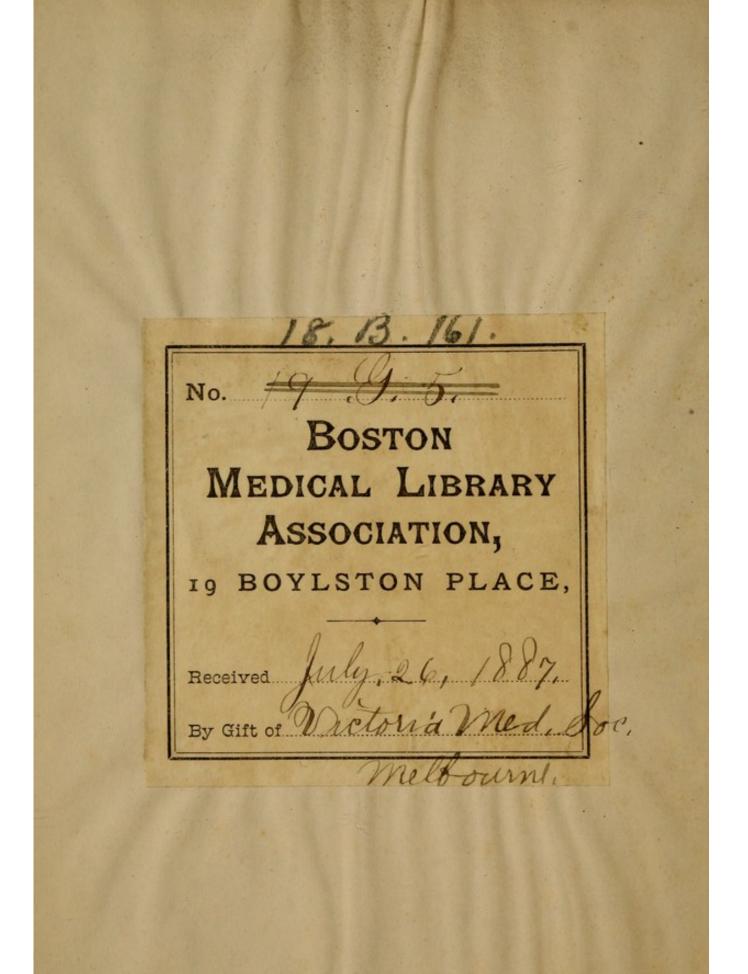
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SPERMATORRHŒA

IN ITS

PHYSIOLOGICAL, MEDICAL, AND LEGAL ASPECTS.

BY THE SAME AUTHOR.

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SPERMATORRHŒA

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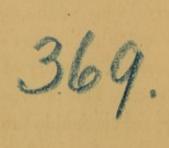
BY

JAMES GEORGE BEANEY, F.R.C.S.,

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Melbourne : F. F BAILLIERE, PUBLISHER.

1872.



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Society has a serious charge to lay at the door of the Medical Profession, for its culpable neglect of one of the most important, and serious category of diseases to which mankind is subject. The profession, as a whole, is accused of the unreasonable abnegation of a portion of its duties, in the refusal, often, to assist the feeble victims of sexual excesses, by its counsel and personal influence, as well as by its medical knowledge. It is in some degree justly taunted with having driven a large section of the community—and they the most to be pitied—into the hands of the vilest impostors, and the most designing charlatans, by whom for years they have been cajoled, plundered, and destroyed.

The members of the profession must consider themselves in no small degree responsible for the thousands of wretched sufferers who have drifted into imbecility and the mad-house, and even into the grave, from self-pollution, because they, the healers of mankind, had miserably failed to do their duty, and had left the

sufferers without the aids that science might have provided. And why is this? Are not the functions of the surgeon to embrace all the maladies to which the body is liable, irrespective of the causes which may have given rise to them, or of the character of the maladies themselves? The true surgeon or physician waits on suffering humanity during the entire journey from the cradle to the grave, and never rejects the appeal of the sick, under whatever phase his malady may present itself. The medical man is not a censor; he is, or ought to be, the sick man's best friend. It cannot be, for a moment, assumed that the genital organs are to be exempt from his care. when diseased; yet, something akin to a prurient delicacy has caused many excellent men in past days to ignore these disorders. It is too true that the profession has - until very lately - systematically handed over these ailments of the reproductive organs to the tender mercies of the Kahns, Le Merts, Jordans, et hoc genus omne, who outrage decency, and who perpetrate the most shameless frauds.

Fortunately this state of things is passing away, and the most eminent in the profession are calling public attention to the fact, that they no longer treat the diseases of the organs of reproduction with indifference, but, on the contrary, embrace them in their practice, with the same interest as they do any other of the many ills that flesh is heir to.

M. Lallemand, of France, was one of the first, who, by his writings, drew the attention of the profession to this subject, in a work of great merit on

Spermatorrhœa, which was published in France, and translated from the French into other European languages. This work attracted the attention of the profession generally. Since then, more special interest has been taken in the diseases of the reproductive organs; and the existence of spermatorrhœa, with its kindred disorders, has been fully recognised.

This valuable work, although pourtraying diseases of this class with a higher colouring than may be considered warrantable by some of the profession, is highly descriptive of the physical evils which seminal irregularities and excesses engender. It also demonstrates the gravity of the consequences, to the patient, of professional neglect. The appearance of M. Lallemand's work has, however, been the means of bringing out several others, from the pens of our leading English physicians, which have been of great service in directing investigation to diseases of the reproductive system. Our medical literature can now boast of some very able and exhaustive monographs on this subject. Conspicuous amongst these, are those of Mr. Acton and Mr. Courtney,-both surgeons of recognised standing in the profession, which throw much light on the pathology of this long-neglected path of medical inquiry.

This brochure is intended to exercise the same influence in these colonies that the works to which I refer exercise in Europe, by spreading correct information amongst our populations in reference to the class of diseases under consideration. It is also

designed to lead those who are afflicted by them, to abandon the pretentious quacks, who, by their fulsome circulars and advertisements, fill their victims with alarm, and extort unreasonable largesses under the influence of the terror which they inspire. It is to be hoped, that the legitimate and honourable practitioners of the colony will be resorted to for legitimate and scientific treatment, in disorders of the generative organs.

Spermatorrhœa, impotence, and sterility, "are subjects of much greater practical importance than has been conceived by many, and often involve the happiness, and perpetuation, of families. Yet have they, by a sort of professional prudery, been either entirely overlooked by medical writers, or very imperfectly discussed, and thereby relinquished to the irregular practitioner, or to the entirely unqualified empiric. In the present era of high refinement, and of luxurious, if not vicious, enjoyments: and under the influence of noxious plans, and systems of education; instances are very numerous, for which medical advice is required for the removal of the morbidly disqualifying conditions about to be considered, but which is not resorted to so frequently as it ought to be. Since advice is thus often necessary, the ability of those, from whom the community have a right to expect it, and that too of the most judicious kind, should be equally great in providing it. There is every reason, also, to believe THAT IT WOULD BE OFTENER SOUGHT AFTER, IF THE SUBJECT WERE KNOWN TO BE MORE

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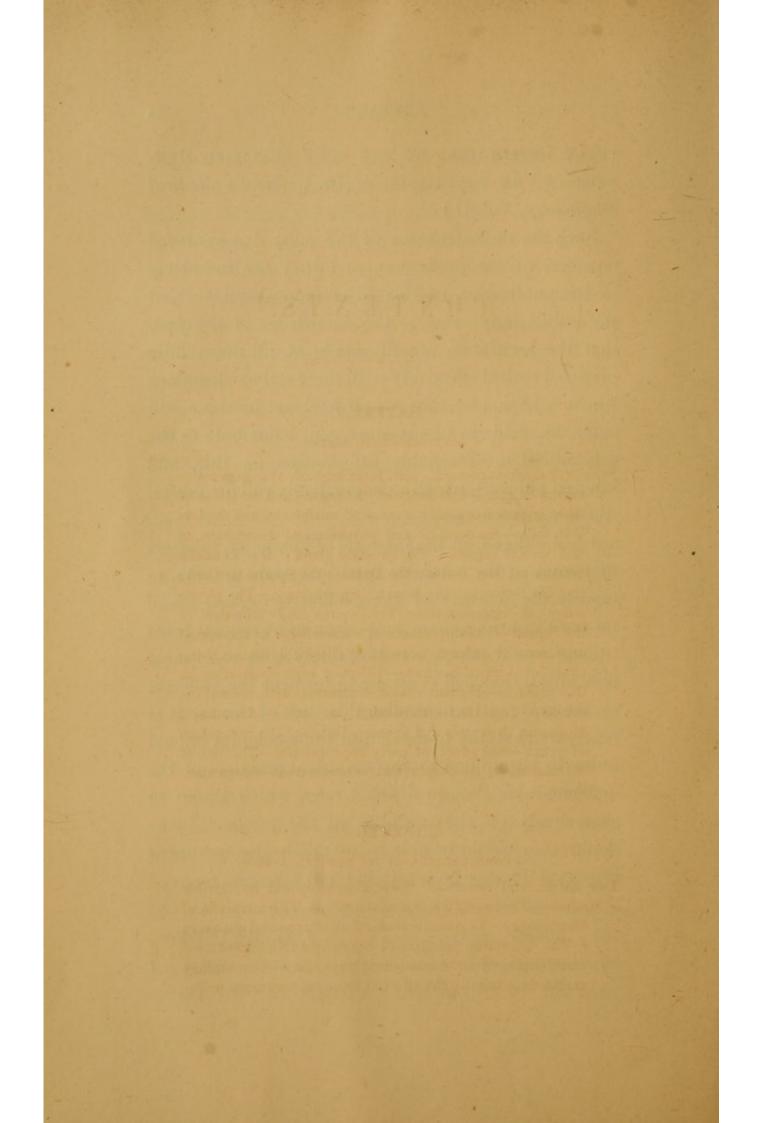
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FULLY ENTERTAINED BY THE DULY QUALIFIED MEM-BERS OF THE PROFESSION."—(Dr. Copland's Medical Dictionary, Vol. II.)

Such are the utterances of the most distinguished members of our profession, and they are incentives to the publication of this brief monograph, so that the public may come to the knowledge of the fact, that the legitimate practitioner is at all times fully prepared to deal effectively with these serious disorders. I have a hope, also, that my professional brethren will enter the field, in like manner, and contribute to the dissemination of reliable information on this, and kindred subjects, which so imperatively call for professional vigilance.

I feel obliged, in the interests of humanity, to assert that some of the methods used by certain quacks, to remedy the diseases of the generative organs, are of the most injurious character,—such as no regular practitioner would adopt,—and infallibly lead to organic difficulties, that will continue to torment the sufferers to the grave. To neutralize this state of things, it is necessary that the profession in these colonies should unite to put an end to the empirical practices of the dishonourable class to which I refer, which trades so shamelessly on the credulity of the public. By so doing they would be able to establish the treatment of sexual diseases on a rational and scientific basis.

J. G. BEANEY.



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SPERMATORRHŒA

IN ITS

PHYSIOLOGICAL, MEDICAL, AND LEGAL ASPECTS.

CHAPTER I.

PHYSIOLOGICAL ASPECT.

"The only way by which some of the most important functional ailments, and aberrant physiological states affecting humanity, can be rescued from the grasp of the most disgusting and villanous quackery, and treated with benefit to the patient, is by the scientific and conscientious practitioner OPENLY taking them under his own charge."—Lancet, May 30, 1857.

STRUCTURE, arrangement, and functions, of the generative organs in man—Ignorance of the nature and functions of these organs frequently a cause of misfortune and deplorable folly— Anatomical and physiological description of the sexual organs: The prostate gland; the Vesiculæ Seminales; the Testes; the Dartos; the Spermatic Cord; the Vas Deferens; the Semen; Spermatozoa—The physiology of impregnation— The source and secretion of Semen—The importance of a knowledge of the sexual organism, in order to prevent or check the demoralising effects of sensual instincts—Effect of high civilisation on the passions—Human reason contrasted with animal instincts—Imperfect knowledge an evil—Anatomical Museums, their uses and abuses—Duties of the instructors of youth—Sad effects of early improprieties—The vice of Masturbation, its causes and consequences—Spermatorrhœa.

In entering upon this chapter I deem it necessary to furnish the reader with some information, in a popular dress, on the structure and arrangement of the organs, which are the special theme of discussion in this work.

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I do so because I believe that, when the complicated anatomy of the organs required to bring about the completion of sexual function is considered, there will be a greater likelihood of the readers apprehending the importance of the statements that will be made in this, and the subsequent chapters.

In this age of progress and mental culture, when all sciences are popularized to the utmost, so that their outlines may be seen and known by all, it is a defect in our schemes of education to leave out the structure and physiology of the organs of generation.

Another argument in support of the generalization of information is, that the more knowledge of this kind is attained, the less likelihood will there be that excesses will be committed.

Ignorance is the fruitful parent of most of the follies and misfortunes of society; hence any course which tends to lessen the extent of such a cause, must be conducive to our social welfare.

It is commonly admitted by thinking men who have made Spermatorrhœa and its associated diseases subjects of observation, that an absence of information as to the internal anatomy and functions of the sexual organs, has led, in a great measure, to the excesses which have been committed; and they are of opinion that it is advisable to disseminate more information bearing on the subject. Believing that there is some truth in the supposition laid down, I shall contribute my quota in the following pages.

The parts which contribute, by their harmonious operation, to the development and performance of

those wonderful functions constituting the generative act, are many and complicated, exhibiting, in a marvellous degree, that inconceivable adaption to accomplish her ends, which, in nature's mechanism, so fills us with profound admiration. They are singularly suggestive of the importance of the secretion provided, and the function to be performed.

The principal are the prostate gland; the vesiculæ seminales; the penis; the urethra; the testes; the scrotum; the spermatic cord; the vas deferens; and the epididymis. These are the chief of the components which make up the organic basis of generative activity.

THE PROSTATE GLAND (from the Greek *proïstemi*, to place before) is situated in front of the neck of the bladder, close upon the rectum, through which it may be felt by the introduction of the finger.

It surrounds the commencement of the urethra to the distance of about an inch of that tube, and in size and form is not unlike a Spanish chesnut, the thickest portion towards the bladder and the convex side towards the rectum.

It is held in its place very firmly, by what are called the anterior and lateral ligaments of the bladder, and by a sheath of fascia which completely encloses it. It consists of three lobes, or apparent divisions, two lateral ones, and a middle one: the smaller or middle lobe passing from one lateral lobe to the other.

Its structure is partly muscular and partly glandular tissue; the glandular portion being only about onethird of the whole, and composed of about fifty small glands of a pear shape.

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Its function is to secrete a fluid called the prostatic fluid, and when in action, to pour it out into the portion of the urethra which it covers, and which is therefore called the prostatic portion. The ducts by which this fluid leaves the prostate are about twenty in number. The character and use of the secretion I shall refer to further on.

The situation of the orifices of the prostatic ducts, and their large numbers, aid in a measure the view I have taken with respect to the office of this gland.

Their position around, and in front of, the openings of the ejaculatory ducts, shadows out an intention of preparing the way for the passage of the secretion contained within these latter canals. The gland is traversed by the ejaculatory ducts just mentioned, which ducts lead from the vesiculæ seminales, and convey the true semen.

THE VESICULÆ SEMINALES.—These are two lobulated and pear-shaped bodies about two inches in length, occupying a situation near the organ just described, and of course outside the bladder, against which they rest.

The upper surface of these bodies is in contact with the base of the bladder, near the outlet or neck.

Their under side, like the prostate gland, is in contact with the rectum. This circumstance will account for the influence which constipation is found to have over some of the diseases of the genitals.

Each vesicula is formed by the convolutions of a single tube twisted on itself, and which gives off several sac-like branches.

It is enclosed in a fibrous membrane which is capable of contraction, and, by such contraction, it forms itself into a small excretory duct under the middle portion of the prostate gland. It is also surrounded by a good deal of fat, and, by its convolutions, resembles a small intestine, winding in various directions.

These vesiculæ seminales are very important secretory organs, as their name implies, and are a continuation of two tubes rising from the testicles, which are called the *vasa deferentia*.

THE TESTES, of which nature has supplied two in all mammals, is the next organ to be described. They are two small glandular organs suspended from the abdomen by the spermatic cords, and enclosed in a tegumentary covering called the scrotum.

This scrotum or outer coat is the common protection to the testicles, consisting of a loose skin, capable of great distention,—as is often seen in disease of these glands,—and having a very moderate substratum of fat. It differs from the rest of the integuments of the body in this, that it continually changes its appearance, being sometimes much relaxed and pendulous, at others contracted and firm, assuming the last characteristic under the influence of cold, or during an orgasm.*

There is what is called the DARTOS, immediately under the scrotum, which has great contractile power;

^{*} As all men will notice, one testis is lower than the other, the left being the lowest. This is the provision which nature has made to render the testes perfectly mobile and proof against injury from compression.

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from this there is a septum or partition which divides the testes from each other.

The testes, then, are small, rounded, and oblong glands, about an inch and a-half in length, compressed at the sides and behind, and suspended in the cavity of the scrotum by the spermatic cord.

The anatomy of the testis, as will be seen, is of a complicated character, of a highly glandular composition, the organ being evidently intended, from its structure, to perform more than a common function in the system.

It contains about nine lobules, or bundles of seminiferous tubes, which are extremely convoluted, and contract into single tubes, each of which unites at right angles with ascending tubes, that form about half a dozen short tubes, which almost immediately become convoluted to an extraordinary degree, forming what is called the large globe of the epididymis.

The enormously convoluted tubes occupy a position at the upper portion of the back of the testicles, and, doubling on themselves, continue their course downwards to the lower portion of the organ, whence they form what is termed the small globe of the epididymis.

South estimates the whole number of tubuli seminiferi in each testis at 840, and their average length at two feet three inches. According to this calculation, the entire length of the seminiferous tubes would be about 1890 feet! This vast extent of tube in the testis is for the elimination and conservation of the seminal fluid. The SPERMATIC CORD is the medium of communication between the sources of nutrition in the abdomen and the testes, and is composed of arteries, veins, lymphatics, nerves, the excretory duct of the testicle, and the investing tunic or sheath. It commences at the internal abdominal ring (or opening in the inner walls of the abdomen), where the vessels of which it is composed, converge, forming one cord; and passes obliquely along the spermatic canal; the cord then escapes at the external abdominal ring (a subcutaneous opening lower down in the groin), and descends to the posterior part of the testicle.

The arteries are very important ones, and convey a large quantity of arterial blood to supply the demands of the testicles; the veins convey back the blood from which the materials of supply have been taken; the nerves convey the influences of sensation, and are connected with the brain and cerebro-spinal axis. They have also a special origin, which is called the spermatic plexus, which is immediately derived from the great aortic plexus.

The Spermatic Cord is the medium of communication between the testes and the interior of the abdomen; and is composed of arteries, veins, lymphatics, nerves, and the excretory duct of the testes.

The VAS DEFERENS, the duct referred to, "from its commencement, runs along the back part of the spermatic cord, entering the cavity of the abdomen at an opening designated the internal ring, and descends by the side and base of the bladder to its under part.

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It there joins the canal issuing from the vesiculæ seminales, and terminates by the combined formation of the ejaculatory duct; the internal opening is so minute that its whole length is capable of containing but a few drops of the secreted fluid of the testes. On arriving at the expanded portion, we observe that it may hold, in its ordinary state, six or eight times the quantity of fluid which would entirely fill the other portion of the tube, and under certain circumstances by its capability of expansion, is enabled to admit even a much larger amount."

I ought not to omit two small glands which, in comparison with the prostate, appear very insignificant, but which contribute their quota towards completing the constitution of the fecundating fluid. They are called "Cowper's Glands" from the name of their discoverer.

They are not larger than common peas, and are composed of convolutions of tubules which unite in one duct about an inch in length, entering the urethra at a short distance in front of the prostate. Nothing whatever is known of their functions, nevertheless, being there, they are undoubtedly essential to the integrity of the generative act.

These, then, are the chief divisions of the wonderful and complicated machinery constituting the organs of generation, and contributing simultaneously to the completion of the seminal functions.

It will have been seen how marvellously nature has provided for the reproductive process in the animal kingdom, and how delicate are the processes by which the germs of the human animal are eliminated from the blood.

THE SEMEN is the product for which this elaborate preparation is made, a fluid that is the ultimate effort of the organism; the most important secretion of the body, and which taxes the fountain of life more than any other.

The function of this fluid is to impregnate the ovum in the female, and is, as has been suggested by the anatomical arrangement of the several parts concerned, a mixed fluid drawn from the testicles, the prostate gland, and the vesiculæ seminales where it is stored.

The seminal fluid continues to undergo important changes from the moment that it leaves the secreting cells, to the arrival at the final resting place just mentioned.

"The principal part of this development consists in the formation of the peculiar bodies, named seminal filaments, spermatozoa, or spermatozoids; the complete development of which, in their full proportion of number, is not achieved till the semen has reached, or has for some time lain in, the vesiculæ seminales.

"Earlier, after its first secretion, the semen contains none of these bodies, but granules, and round corpuscles (seminal corpuscles) like large nuclei, enclosed with parent cells.

"Within each of these corpuscles or nuclei, a seminal filament is developed by a similar process in nearly all animals. Each corpuscle or nucleus is

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filled with granular matter: this is gradually converted into a spermatozoid, which is first coiled up and in contact with the inner surface of the wall of the corpuscle.

"Thus developed, the human seminal filaments consist of a long, slender, tapering portion, called the body or tail, to distinguish it from the head; an oval, or pyriform portion of larger diameter, flattened, and sometimes pointed.

"They are from $\frac{1}{500}$ th to $\frac{1}{600}$ th of an inch in length, the length of the head alone being from $\frac{1}{5000}$ th to $\frac{1}{5000}$ th of an inch, and its width about half as much. They present no trace of structure, or of dissimilar organs; a dark spot observed in the head being probably due to its being concave, like a blood corpuscle.

"They move about in the fluid like so many minute corpuscles, with each a ciliary process, lashing their tails and propelling their heads forward in various lines.

"Their movement, which is probably essentially, as well as apparently, similar to that of ciliary processes, appears nearly independent of external conditions, provided the natural density of the fluid is preserved; disturbing this condition, by either evaporating the semen, or diluting it, will stop the movement. It may continue within the body of the female for seven or eight days, and out of the body for at least twentyfour hours.

"The direction of the movement is quite uncertain, but, in general, the current that each excites, keeps it from the contact of others. The rate of motion, according to Valentin, is about one inch in thirteen minutes."

"Respecting the purpose of these seminal filaments, little that is certain can be said. Their occurrence in the impregnating fluid of nearly all classes of animals, proves their essentiality to the process of impregnation. They have been sometimes regarded as highly organised, and as, in some sense or other, the materials or organs out of which the new individual is begun. By others they are considered as a kind of parasitic animalculæ.

"But, probably, all such theories as these are erroneous. Their want of structure, and their development in cells, not by generation or succession, are inconsistent with the notion that they are distinct animals; neither is there evidence for believing that their entire substance is employed in the construction of the embryo.

"It is not safe to assume more than that they, like the blood-corpuscles, and the corpuscles of other secretions, elaborate the fluid in which they are placed, while themselves are being developed, and growing, and that they may be, therefore, regarded as a kind of floating gland corpuscle. And, probably, they add to this function that of assisting in the conveyance of the seminal fluid to the ovum, for they have been found, some time after copulation of dogs and rabbits, covering the surface of the ovum in even the furthest part of the Fallopian tubes (the tube along which the ovum passes from the ovary to the womb); and, wherever they are, they must carry with them some of the other

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constituents of the seminal fluid; so that they may be considered as conveyers, as well as elaborators, of that fluid.

"Whether their contact with the ovum be essential to its impregnation is not quite determined; it, probably, is so, for the spermatozoa have been found to penetrate into the interior of the ova."

"The seminal fluid is, probably, after a period, constantly secreted, though, except under excitement, very slowly in the tubules of the testicles. From these it passes along the vasa deferentia, or semen-bearing tubes, into the vesiculæ seminales, whence, if not expelled in emission, it may be discharged, as slowly as it enters there, either with the urine, which may remove minute quantities, mingled with the mucus of the bladder, and the secretion of the prostate; or from the urethra in the act of defecation."*

Another writer states :—" It has also this peculiarity, first ascertained in the year 1677, of being animated by an infinite number of creatures, visible by the microscope, of the kind denominated infusoria, and of different forms in different genera of animals.

"In man, these spermatic animalcules, or spermatozoa are oval, and have very fine tails. They are said to be found only in prolific semen, and therefore not in children, old men, or invalids, so that they are in some degree an adventitious criterion of its prolific maturity: we say adventitious, because we hope, after so many weighty arguments and observations, there is no necessity, at present, to remark that they have no

* Kirke's Physiology.

fecundating principle, and much less are they the germs of future offspring.

"About the latter end of the seventeenth century, the subject of seminal animalculæ arrested the attention of all Europe. Physiologists, naturalists, Popish priests, painters, opticians, &c., all eagerly joined in the pursuit of these remarkable animalculæ, and the lascivious Charles II. of England commanded them to be presented to him, swimming and frisking in their native fluid. Some of the curious could not find them. Other observers not only found them, but ascertained their length, and their bulk was computed to admit the existence of 216,000 in a sphere whose diameter was the breadth of a hair, and their rate of travelling nine inches in an hour.

"The animalculæ were seen in the semen of all animals, and what is remarkable, of nearly the same size and shape in the semen of the largest and of the smallest—in the semen of the sprat and of the whale.

"They could distinguish the male from the female; in the semen of the ram they beheld them moving forward in a troop, with great gravity, like a flock of sheep; and in the human semen, one observer stated that he actually saw one burst its skin, and issue forth a perfectly formed human being.

"The little creatures were said to swim in shoals towards a given point, turn lack, separate, meet again, spin round, and perform various other feats, proving themselves, if not the most delicate, at least the

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drollest beings that ever engaged the attention of philosophers." *

Such was the extraordinary mixture of absurdity with truth, in reference to the constitution of this remarkable fluid, that was startling Europe from its propriety, at the period when Hamme first made the discovery of the animalculæ in the animal semen.

There were many who would not accept the discovery of the animalculæ, believing it to be an imaginary one, but it was nevertheless true, and modern microscopists have finally determined their existence, although nothing more is known of their use in the animal economy.

The most celebrated of the microscopists that the profession has produced was Spallanzani, who determined, by completely independent observations, to settle the vexed question, and he came to conclusions which have been endorsed by all subsequent physiologists.

He began his long course of observations about the middle of the last century, and announced that in the semen there are, incontestibly, innumerable animalculæ, with oval bodies and tails tapering to a point. By these appendages, which they move from side to side, they are enabled to propel themselves forward.

In about twenty-three minutes after they are put under the microscope, their movements become languid, and in two or three hours they die, sinking to the bottom of the fluid.

* Dr. Elliotson.

The duration of their life, however, depends much upon the temperature of the weather. If the cold be considerable they soon become dormant, or die. After remaining dormant some time, an increase of temperature will rouse them into activity, even if they have been many hours benumbed.

They are destroyed by ice, snow, and rain water; by sulphur, tobacco, camphor, and electricity. They are of various sizes, and perfectly distinct from all species of animalculæ in vegetable infusions.

Later physiologists have confirmed the observations of Spallanzani as to the semen of various animals.

In the snail the animalculæ are fifty-four times larger than in the dog; in the mouse, half as large again as in the horse; and larger in some insects than in man. Leuwenhæck calculated that in the semen of a single fish there were thirty times as many animalcules as of human beings on the earth.

That the spermatozoa are the essential elements of the spermatic fluid, may be reasonably inferred from several considerations. There are some cases in which the "liquor seminis" is altogether absent, so that they constitute the sole element of the semen; whilst, on the other hand, they are never wanting in the semen of animals capable of procreation; but are absent or imperfectly developed, in the semen of hybrids, which are nearly, or entirely sterile.

Moreover, it may be considered as certain, that the absolute contact of the spermatozoa with the ovum is requisite for its fecundation; whilst, on the other hand, if the spermatozoa be carefully removed from

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the "liquor seminis" by filtration, the latter is entirely destitute of fertilizing power. (Carpenter.)

The fluid has been analysed, and found to be composed of the following ingredients :---Water, ninety per cent.; mucilage, six per cent.; phosphate of lime, three per cent.; soda, one per cent.

But this is as far as chemistry can go.

Those vital elements that constitute the principles and forces of development, elude for ever the analysis of the laboratory, and are hidden from recognition in the arcana of nature; hence the information which we receive from the chemist throws no light upon the laws of reproduction. The physiologists of Europe have exhausted their resources in the nature of this secretion, but nothing more has been added to the facts that had previously been collected.

The description given of it by the celebrated John Hunter is concise and clear. He describes it in the following words: "The semen first discharged from the living body, is of a bluish white colour, in consistence like cream, and similar to what is found in the vasa deferentia after death; while that which follows is somewhat like the common mucus of the nose, but less viscid. The semen becomes more fluid on exposure to the air, particularly that first thrown out, which is the very reverse of what happens to secretions in general. The smell of semen is mawkish and unpleasant, exactly resembling the farina of a Spanish chesnut, and to the taste, though at first insipid, it has so much pungency, as after some little time to stimulate and excite a degree of heat in the mouth."

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"Semen is not the elaborated fluid which we find in the vesiculæ seminales. The development of the spermatozoa in their full numbers and vigour is not completed till the semen has reached, or has for some time lain in, the vesiculæ seminales.

"Immediately after its first secretion, the semen contains none of these bodies, but only granules, and those round corpuscles which are known as seminal corpuscles, like large nuclei enclosed in parent cells. Within each of these corpuscles, or nuclei, a seminal filament is developed by a similar process in nearly all animals. Each corpuscle or nucleus is filled with granular matter; this is gradually converted into a spermatozoid, which is at first coiled up, and in contact with the inner surface of the wall of the corpuscle." (Kirkes.)

It is tolerably certain that the testicles do not go on secreting semen continually, but cease when there is no further occasion for their action. This seems very probable from the fact that the vas deferens is generally found empty in men who have been long removed from the society of women.

As the semen is secreted, I believe it is pushed forward into the vasa deferentia, and thence deposited in the vesiculæ seminales, and while there, mixed with the secretion of those organs. It is then ready for use at an instant's notice.

It is owing, I believe, to its previous secretive elaboration, and storing up, that, under such slight mental or physical causes, emission occurs so readily. If it were not ready at a moment's call,

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much more excitement than that required to produce nocturnal emissions would be necessary to cause ejaculation.

In many animals this storing up cannot, and does not, occur, there being, in some, no vesiculæ seminales. But in most of these cases there are means for attaining the same end—the elaboration of the semen—as, for instance, the dilution of the vas deferentia. (Acton.)

In the horse, this portion of the duct is extremely thickened by the occurrence of numerous glandular cellules in its walls. Much the same condition is met with in the bull. In the elephant each vas deferens, when it arrives at this point, enlarges into a cavity of considerable size, which, it is evident, may readily, and no doubt does really, fulfil the function indicated by the words "vesiculæ seminales." (Pittard, Cyclop. of Anatomy and Physiology.)

I have before alluded to the circumstance of the vesiculæ seminales being the reservoirs of the fluid which the testes had secreted and sent along the vas deferens, and there appears to me no reason whatever to set aside that view.

Much discussion has at different periods taken place in reference to this question, some affirming that the fluid passes from the vas deferens into the canal of the urethra during copulation, but the majority of physiologists have come to the conclusion, that the only function of the vesiculæ seminales is to store the semen until required.

It is obvious, from all that has been written on the subject, that the real character of the secretion of the

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testes is not known, whatever may be the state of our knowledge in reference to the other secretions with which it is mingled on its way.

It is said that, with many men, semen is forced from the urethra during the act of straining at the watercloset; and, as it is certain that no amount of straining or urging could cause the secretion of the testes to be forced away during defecation, the fluid discharged must be the collected fluid in the vesiculæ, as it is precisely of the character of that which passes away during coition.

Dr. Elliotson said, "I believe that we are quite unacquainted with the pure secretion of the testes, and that far the greatest portion of an emission is secreted by the vesiculæ seminales, and prostate gland, and that, therefore, some persons may, by forcing down, occasion a discharge apparently identical with an emission, though not containing a particle of matter furnished by the testes."

Kirke, in his "Physiology," states, "that the vesiculæ seminales are reservoirs in which the seminal fluid may lie for a time previous to its discharge, is shown by their commonly containing the seminal filaments in larger abundance than any portion of the seminal ducts themselves do."

Much discussion has for many years been going on in reference to the functional character of the vesiculæ seminales. On both sides are to be found eminent anatomists and physiologists, and the controversy does not yet seem to be brought to a conclusion.

The leading authority for their independent function

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is the celebrated John Hunter,* and comparative anatomy appears in some cases at least to bear him out, inasmuch as in the elephant the duct for the conveyance of the vesical fluid, enters the urethra quite distinct from the vasa deferentia—the real passage of the fluid containing spermatozoa from the testes.

Amongst those who hold an opposite opinion, or at any rate maintain that the vesiculæ are receivers of seminal fluid from the vas deferens, as well as having an independent secretion of their own, are— Dr. Felix Roubaud, who has recently published a work on the functions of reproduction; Dr. Burdach, and M. Gosselin, whose researches were published in the *Archives Général de Medicine*, of 1853; also Richerand, a justly celebrated Physiologist. (Acton, Kölliker; Kirke, as seen above.)

"By what organ is the semen secreted? It might be supposed that no other reply could be given than— 'By the testicle.' Nevertheless, this is not the correct answer; as is proved by experiments on the lower animals, as well as by the facts observed in the human subject.

"Take an animal—a young dog for example,—tie the different ducts in two places, and cut them through between the ligatures. In this way the testicles will be completely isolated from the urethra. Still, the animal will be able to copulate with energy, and the

* Hunter, John: Observations on certain parts of the Animal Economy. Dr. Burdach: Traité de Physiologie, Richerand: Elements of Physiology, translated by Dr. Copeland. seminal ejaculation will be nearly as abundant as before the operation.

"A somewhat similar phenomenon is observed in the human subject. An individual contracts a gonorrhœa: this, to use a vulgar expression, falls into the scrotum *(tombes dans les bourses);* or, to speak more in the language of science, there supervene inflammation and consecutive induration sufficient to cause obliteration of the excretory ducts of the epididymis; yet this does not deprive the individual of venereal aptitude: he will be quite as able to copulate as before, and ejaculation will lose nothing in energy and power.

"Thus the seminal fluid has two sources. The larger portion comes from the vesiculæ seminales, and the other, and smaller portion, from the testicles. The portion, however, derived from the testicles is the most important, as it is that which contains the fecundating substance and the spermatozoa." (A. Trousseau: Lectures on Clinical Medicine, 1870.)

Opinion preponderates at present in the direction of the views last stated. I might enlarge considerably thereon, but the space allotted for the book will not permit, nor would it be of material utility to the general reader.

The prostate gland has an important function to perform in the processes of generation, but its precise character is not fully ascertained. It is supposed to secrete a fluid that is essential to the right composition of that which is designed for impregnation, but this secretion is only an auxiliary—although it may

be essential—as in the absence of the testes it is useless.

As castration destroys the power of procreation, it is clear that the fluid of the prostate cannot fecundate. The prostate fluid is in appearance like the white of egg.

The three fluids—the prostatic; that from some glands called Cowper's glands; and the secretion of the testes and vesiculæ seminales—are all necessary to the complete fecundation of the ovum of the female, although one, that of the testes, is by far the most important, containing as it does, the fecundating principle.

The generative powers are not impaired by the removal of one testicle; the fluid of one being sufficient to supply the vital essence to the fluids of the other organs. The Hottentots are said to sometimes deprive their sons of one testis when they are young, that they may run swiftly, believing that such privation will insure their fleetness.

The urethra of the male is the channel by which this compound fluid passes from the body, either for the purpose of impregnation, or in the form of abnormal excretion without the copulative act.

This latter condition is exceedingly common, and will in the next chapter be fully discussed in its medical and pathological aspects. The canal of the urethra is lined with mucus, which is of considerable importance in connection with the fluids just noticed.

The origin of the impulse which stimulates the co-ordination of the several parts towards the emission

of the seminal fluid in the act of copulation, is said to be in the cerebellum, or back brain.

The nervous influence thus directed, induces an increased flow of blood to the vascular tissues of the penis, and by giving it firmness, and increasing its bulk, renders it capable of conveying the fecundating fluid to the uterus of the female.

The emission of this important secretion of the animal organism is also excited by the amount of it existing in the vesiculæ seminales, and by the ordinary instincts of the sex. The course of the urine is then obstructed, and the ducts for the emission of the spermatic fluid thrown open, which by a spasmodic contraction eject their contents into the urethra, which also continues the ejaculatory contractions.

The whole system, in fact, is more or less engaged, sympathetically, in the act of emission, experiencing what approaches in some degree to a shock of an epileptiform character, after which a certain depression of spirits is felt.

I have given this brief sketch of the physiology of the organs of generation, in order that the reader may obtain an intelligent apprehension of the importance assigned by nature to the function under discussion the beautiful adaptation of means to an end.

The whole organism is engaged in the secretion of this ultimatum of functional effort—the semen —hence the necessity that man should conserve his powers, and see the reason for discretion in the control of this powerful impulse which leads to its expenditure.

"To the use of the sexual organs for the continuance of his race, man is prompted by a powerful instinctive desire, which he shares with the lower animals. This instinct, like the other propensities, is excited by other sensations; and these may either originate in the sexual organs themselves, or may be excited through the organs of special sense. Thus, in man, it is most powerfully aroused by impressions conveyed through the sight or touch, but in many other animals the auditory and olfactory organs communicate impressions which have an equal power, and it is not improbable that in certain morbidly excited states of feeling, the same may be the case with ourselves." (Dr. Carpenter's "Physiology.")

The epoch at which the great climacteric change in the body occurs, is called the period of puberty, the termination of the period of childhood, and the entrance upon that new condition on which the perpetuation of the species depends. The stage of childhood is that in which the preparatory processes of development are completed, and that of puberty, the one in which they burst forth into fructification. Then great systematic changes occur, which indicate the importance of the transition undergone. The sexual organs become complete in form as well as in function; the several portions of the body reach a higher condition of development. The hair appears on the face of the male; the voice changes, owing to an alteration in the larynx, which widens.

New ideas occupy the mind; new modes of thought occur. The youth is often startled by novel emotions, and phenomena, and, unless he be guided judiciously by his parents, he is likely to entertain false opinions of their purpose, and to yield undue obedience to their mandates. This danger may be obviated by a wise course of conduct on the part of those who are the natural guardians of the youth.

It is often the theme of complaint, that the young man plunges into the vortex of sexual pleasure at too early a period, and thus checks the progress of his physical development, demoralising himself, as well as throwing himself open to the inroads of dangerous and disgusting diseases.

There would not be such abundant reason for such complaint, if he were not left without guidance in the conflict with the dominant impulse of the organism, against which in many cases only the best informed, and those influenced by the strongest intellectual and moral suasion can successfully resist.

Nature is true to herself, but the habits and customs of our high civilization have a tendency to intensify the force of the passions, and to lead the youth into habits which will, if persisted in, deteriorate the intellectual and physical forces of manhood. This branch of the subject will, however, be more fully discussed in another chapter. It may be said by some that the existence of the function, at any given period, is the best possible argument for its gratification, on the ground that in the lower animals its operation is unrestrained whenever it is in activity. But this is scarcely a logical form of putting the case,

because the conditions in reference to the lower orders of creation and man are not parellel.

It is fair to presume that if nature had not endowed man with reason, which is the controlling power over all voluntary functional action, she would have so ordained that the sexual appetite should not be constant.

The higher mental endowment has rendered it unnecessary to place physical barriers to the copulative function, as it gives to man a more noble means of restraint by the power of ratiocination, and the knowledge of cause and effect. The reasoning faculty is intended to teach him the consequences of acts that do violence to his physical system.

It is in this superior endowment that man's preeminence and safety consist. The abeyance of his judgment to the force of animal impulse, is the prostration of his nobler status in the gradation of being, to the level of the quadruped, which acts in blind obedience, but does not think, being guided only by instinct.

It is not my intention to lead to the inference that the functions of procreation are to be looked upon as unworthy of consideration; on the other hand, I wish it to be understood, that they constitute the noblest elements of human happiness, and lead to the highest and holiest of all purposes, the continuation of the race. They may, however, by imperfect or perverted training, become the source of incalculable evils.

I urge that there should be a rational comprehension of the dangers arising out of the first

development of the function, and that young men should not be left, as they always are, ignorant of the value and importance of the functions with which nature has endowed them.

They do not, indeed, always or long remain in the dark, as to the character of the emotions they are the subject of. There are always vicious channels by which they receive incorrect and exaggerated instruction; hence the errors that follow.

The only way in which this danger can be obviated is, that as a part of a young man's education, physiology, in its elementary forms at least, should be a sine qua non.

Dr. Tanner, of the Royal College of Physicians, in his *Practice of Medicine*, refers to this question of imperfect knowledge as an evil, when treating upon spermatorrhœa.

"Youths who have never received a kindly warning, and who have been allowed to grow up without being taught even the rudiments of physiology, or the necessity for moral control, contract pernicious habits, before they are aware of the mischief they are inflicting on themselves. Exciting conversation, and the perusal of sensation novels, and newspaper reports of the proceedings in the Divorce Courts, early arouse the passions, and are productive of the most pernicious effects. To deny this, is simply to shut one's eyes to a grave evil; an evil which is so patent to those who have the control of young men, that only a short time since (I believe it was in the year 1864), an eloquent preacher delivered a sermon on this

subject, at one of our universities. But to students at college the warning often comes too late; for this bad habit is not unfrequently early, and easily, acquired, though it can be broken only with the greatest difficulty."

In connection with the subject of elementary education in physiology, I deem it necessary to make the following observations, bearing upon the so-called anatomical museums, which are so monstrously abused by many of the proprietors of such places.

There are substantial arguments in favour of such establishments, where they are under the supervision and management of judicious and scientific professional men, but only under such circumstances. As they have been flaunted before our eyes, in Melbourne, of late, by certain quacks of the Kahn type, the public and the profession have been unanimous in their condemnation of the exhibitions,—excepting, of course, in the one case, those whose love of pelf obliterated their self-respect, and in the other case, those in whose eyes all prurient subjects have special attractions.

Physiology is undoubtedly best taught by the aid of artistic representation of the sections of the human body, destined for the performance of certain functions, but the pathological illustrations of morbid anatomy have no business to be intruded upon public notice, and especially not in those forms which outrage public decency. The terms physiological, anatomical, anthropological, are no better, generally, than misused scientific terms, to disguise sensational exhibitions, which are purposely made in order to impose upon the weak and the ignorant.*

Any channel of knowledge which will contribute to the education of young men in the nature, use, and abuse of their several appetites and passions, is desirable, and ought by all means to be instituted by those who have the charge of the rising generation. Knowledge, properly communicated, is, in this sense, truly power, inasmuch as it enables the youth to discern at an early period, before time for mischief has been allowed, that there is a law of nature, the violation of which brings after it the most terrible penalties.

He is much more likely to resist the allurements and incentives of the depraved, when conversant with all the circumstances consequent on vicious indulgence, than he would be if left in total ignorance of them.

I am fully persuaded, by long experience, that the great majority of those who have become enslaved to certain sensual vices, would not have been so misled, had they at the outset known the danger surrounding such indulgence.

The neglect of this branch of education is beginning to arrest attention, and its introduction, on conservative grounds, is anxiously desired by the most intelligent parents.

It is no longer safe to interdict knowledge of the

* It is gratifying to all right-minded men, that, during the passage of this work through the press, the notorious Jordan and Beck exhibition in Bourke-street has been banished from public gaze.

functions of the animal economy, embracing the generative amongst the rest. The wisest in the profession, and out of it, believe, that if we are to arrest those baneful practices which blast the manhood of the rising generation, we must furnish them with the light which science has thrown upon the functional development of manhood, and upon the physical evils consequent of its abuse or perversion.

The instructors of youth are alone responsible for the manner in which the necessary instructions may be given. That it should be given is undeniable, or, others, utterly unfit, will soon initiate the youth into the mysteries of destructive indulgence, and sow still more depraved seed, where the teacher should have destroyed the germs of vicious fructification.

The medical man alone knows the serious consequences which result from the absence of proper information amongst men, as to the nature of the generative function. In manhood, he often sees the physical and mental prostration arising out of early improprieties, and cannot but regret, that such almost irreparable misery should be entailed upon so many men, simply from utter ignorance of the normal duties, and the restraints that Nature imposes in order to maintain the equilibrium of all her functions.

There are no excesses which tell with such fatal consequences upon the entire organism, and especially on the brain, as those pertaining to the functions of procreation.

By them is lost the quintessence of the vital fluids, the material, of all others the most precious, in relation to the body secreting it, and the most potent, in reference to its ultimate changes and destinies. It is not unusual for virility to be lost for ever by reason of the excesses alluded to, and a life misery induced, where, otherwise, there might have been happiness.

Nature rebels against incontinency at all periods, but most conspicuously, and emphatically, when it is permitted, and practised, in the earlier years of sexual activity. Then, all the forces of life are required to build up, and mature, the perfect man; to fit him for his intellectual, social, and physical duties.

From the nature of the organs, and the functions they have to perform, as seen in the earlier portions of this chapter, it may be concluded how important it is that there should be perfect quiescence of the sexual function, until something like maturity of the mental and physical organisation is established. Indulgence in any excitability of this function, before that stage of development has arrived, will inevitably reduce the standard of both the mental and physical constitutions, which was impressed on the germ at its initial step.

In the language of Mr. Acton of London, "If a healthy, well-disposed boy has been properly educated, he possesses, by the time that he arrives at the age of fourteen, or sixteen, a frame approaching its full vigour.

"His conscience is unburdened, his intellect clear, his address frank and candid, his memory good, his spirits are buoyant, his complexion bright; every

function of the body is well performed, nor is any fatigue felt after moderate exertion.

"The youth evinces that elasticity of body, and that happy control of himself and his feelings, which are indicative of that robust health and absence of care, that should accompany youth.

"His whole time is given up to his studies and his amusements; and, as he feels his stature increase, and his intellect enlarge, he gladly prepares for his coming struggle with the world.

"The case is very different where a boy has been incontinent, especially in that most vicious of all ways, masturbation."

How often is this healthy state of things sacrificed, through bad examples that stimulate into premature activity those important functions which ought to be quiescent. It is often difficult for the youth to pass through the ordeal of a large boarding-school, without being inducted into those practices, alike fatal to the stability of mind and body, so pointedly set forth in Mr. Acton's sketch.

The probabilities are great that amongst a large number of pupils approaching puberty, there will be some whose sexual desires are prematurely active, and unduly stimulated; these thus acting as an example to others, who would otherwise have been quiescent.

Hence the imperative duties imposed upon teachers, and superintendents of large establishments, to be constantly vigilant, on the one hand; and, on the other, to afford the requisite physiological teaching, as the best and most intelligent defence against the dangers surrounding the boy.

In the language of one of our most valued writers on this subject I would say, "To parents and guardians I offer my equally earnest advice that they should make common cause with their charge, and by hearty sympathy, and frank explanations of the true nature of the case, aid them in maintaining a pure life.

"Much difference of opinion may exist on the conduct which parents and schoolmasters should pursue towards young boys in this matter, but there can be no question as to the injustice of allowing young men to remain in profound ignorance of all appertaining to sexual matters, except such as they may gather from experience; from vague and dirty conversation with each other, or with servants; or, from that equivocal and unscientific information to be obtained from divorce cases, and police reports.

"Perhaps few of my readers have considered the matter as I am now putting it, but they cannot fail to have observed the eagerness of young persons for this, worse than useless, kind of knowledge; and, at the risk of repeating myself, I again urge that it is not right that their not unnatural craving can only be gratified by such often erroneous and piecemeal details.

"For want of more authentic instruction, which might have served them for guidance in the right way, many have been led by curiosity, scarcely

vicious, perhaps, at first, to obtain information on sexual matters from the male and female veterans of "the town," or the obscene literature of such circles, as hand down their traditions from one century to another, with additions and exaggerations, until, amidst the mass of error, it is difficult to detect the grain of truth which always lurks in popular belief.

"When a youth has arrived at adolescence, I think he may fairly be put into possession of the information of what the sex-passion is—what the evils of its unchecked indulgence are—and what are the proper means to keep it within bounds."

It must be admitted that the boy encounters, when he reaches puberty, a new trial, which is an unquestionable danger, if he be left to himself. True is it that all youths are not so impelled to notice the change their constitutions have undergone, but the majority have powerful emotions at work within them, pointing out that a new function has come into activity.

Is the boy to be left in this stage without intellectual guidance? Is he to be instructed as to the nature and purpose of that change, in uncontrolled and prurient anthropological museums?

There can be but one answer to this, in the minds of all sensible parents and teachers. There may be some who will hesitate to admit the necessity for such physiological instruction as is referred to, but the observations of medical men in large practice teach

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too much to admit of any degree of hesitation. To avoid the evils of spermatorrhœa, which usually originate in boyhood, let knowledge be judiciously imparted to the youth, as he reaches the age in which his moral, mental, and physical forces are confronted with the new function of procreation.

I have thought it advisable to give this brief sketch of the physiological aspect of the question, as preliminary to the discussion of the special disorder called spermatorrhœa and its consequent sterility, arising out of the too early, and undue, exercise of the organs of generation.

It is incumbent on the medical practitioner to furnish such information as shall check the evils under consideration, as well as to sketch their growth, and consequences. From him alone can come the first authoritative teachings on the laws and functions of animal life; hence the augmented influence which his dicta ought to have in deterring men from the abuse of their appetites and desires, whether assimilative or procreative.

As man is prompted to use his sexual organs for the continuance of his race, and, as the instinctive desires associated with them are the strongest in his nature, excited both subjectively and objectively, it is necessary for the benefit and safeguard of human society, that the knowledge how to use judiciously, and conservatively, these vital functions, should be widely circulated. There is no direction

in which ignorance is more dangerous than in this.

Note.—It has been observed that Spermatorrheea is rather common in persons who have an unusually long prepuce. In such cases the sebaceous secretion accumulates round the gland, which it irritates; and it can be understood that, when these conditions exist in persons predisposed to Spermatorrheea, ejaculations may occur as readily as they occur in the same persons when they have the least contact with a woman.—(Trousseau's Lectures, Sydenham Society.)

CHAPTER II.

SPERMATORRHEA IN ITS MEDICAL ASPECT.

THE nature and causes of Spermatorrhœa, and its terrible effects -True and false Spermatorrhœa-The terrorism of Charlatanry-Legitimate medical assistance and quackery-The detestable practices of Spermatorroeic impostors-Indifference of some competent physicians-Involuntary emissions generally the effect of frequent nocturnal pollution-Erotic dreams arising from the same cause-Effect on the nervous system-Symptoms of Spermatorrhoea-The habit of masturbation. how contracted — Its enervating influence — Its extent-Difficulties in dealing with it-Necessity for sound scientific information at public schools-The gradual consequences of the habit-Irritation of the bladder-Baneful influence of the vice on the organs themselves-Effect on the mind-Mental depression and debility-Cases of Spermatorrhœa and their treatment-All urethral discharges not perilous-Spermatozoa in urine-Epilepsy a condition of nervous disturbance allied to sexual indulgence, and capable of being produced by excess -Hypochondria-Mental aberration-Insanity-Statistics-Treatment.

As it has been my aim to prepare the young man for the considerations of the dangers connected with the abuse of the sexual functions, by instructing him as to the physiology of the organs concerned, so I shall now render as intelligible as possible the physical consequences of that abuse.

In doing so, I shall have to deal with that form of incontinence which is not exemplified in union with the opposite sex, but that which is practised in solitude, and is known under the name of masturbation.

This species of incontinence arises primarily, of course, from the new stimulus of the nascent generative functions, accompanied, almost universally, with profound ignorance of the extent to which the function may be indulged. It is usually yielded to in one way or the other, under the impression that its existence is the rational, and natural, excuse for its employment, but by far the most frequent form of gratification is that secret one, known under the name just stated.

Before I enter upon the notice of the several kinds of incontinence, I shall dwell upon the disease which in medical nomenclature is called "spermatorrhœa," or which means, in plain English. an abnormal emission of the seminal fluid.

This, then, is the first to be considered, and I may premise by saying, that of all the diseases to which man is liable, there are few which induce so much, and such acute, mental anxiety as this. It embitters all the victim's social relations, and subjects him to the harrowing reflection that he is the object of the taunts and jeers of those about him. He shuns society because he dreads it, and feels himself emasculated, fit only for solitude and remorse.

"He is terrified in all sorts of ways by philanthropists, often ill-advised by physicians; and preyed upon, in the most shameless manner, by quacks. Patients suffering from this terrible calamity are, in fact, deserving of the greatest sympathy, and it is really time that some explanation of their misfortunes, accompanied by consolation, should be afforded by the medical profession." (Dr. Pickford.)

Spermatorrhœa has come to be a by-word amongst men when they find themselves subject to any simple flux from the urethra, and they are apt to consider every fluid besides urine, which flows or trickles from the urethra, as a drain upon this most vital secretion, and, accordingly, experience alarm of more or less intensity, as their minds have been impressed by the current literature on this class of diseases.

That is true spermatorrhœa, when the fluid, passing from the urethra, contains the animalcules spermatozoa, and it may arise from a variety of causes, when the organs are in any degree debilitated.

It is to be lamented that there has been so much unnecessary exaggeration indulged in with reference to this question of spermatorrhœa.

On the one side, we have had, in the leading cities of Europe, and here also, such persons as the Le Merts, Kahns, Jordans, Perrys & Co., &c., who have transformed every creation of the hypochondriac, or *malade imaginaire*, into a case of spermatorrhœa; and every instance of debility, even a disturbance of the digestive organs, has been tortured, for the purpose of extortion, into a loss of the spermatic fluid, with its concomitant dangers. Any dyspeptic or nervous person, if he should be unfortunate enough to be captivated by the specious advertisements of these charlatans, is immediately informed that his ailment is owing to his having lost a large

amount of semen, and he is alarmed by the oracular enunciation that he is the victim of a fatal spermatorrhœa, that is hastening him to the grave.

The extent to which this vile terrorism has been carried, has been the means, I much regret, of causing a most unreasonable rebound in the other direction.

Some writers, in the profession, out of profound disgust and abhorrence, at the filthy and criminal practices of these spermatorrhœic impostors, have, in the heat of their detestation, gone so far as to say that there is no such thing as spermatorrhœa.

This is, however, a great mistake, and it can scarcely be justified by even the stupendous evil that has called it forth. The great lights in the profession, whose ability, status, and correctness of observation are beyond dispute, are unanimous in ranking spermatorrhœa amongst the most troublesome and distressing diseases which we have to treat.

Our literature has, however, of late, been much enriched by able treatises on this disease, in which it is discussed with judgment and enlightenment, and in which, also, the nefarious dealings of the Le Mert class are fully exposed. The writings referred to are eloquent warnings to the public to avoid, by all means, and to disregard the advertisements and socalled museums of, these fraudulent impostors.

The profession admits that much of this evil is to be attributed to its neglect of this class of diseases, but now the fullest amends possible are being made by the ardour with which it is investigating them, and the earnestness with which it endeavours to protect the public against the frauds of those quacks who have so long preyed upon them. The extravagant terrorism of the Jordan tribe is being dispelled, and people are taught to place more confidence in the legitimate, and positive, assistance which they will always receive from honourable men in the profession.

There is often, of course, ample reason for anxiety in reference to the concomitants of Spermatorrhœa, as will be seen in the following pages; but only in a comparative degree, inasmuch as, by judicious treatment and patience, its most serious aspects may be mitigated, if not entirely removed.

An able writer, in his monograph on Spermatorrhœa, remarks, "I think it is a reproach to our profession that this subject has been permitted-in a measure by our own indifference-to pass into the hands of the unscrupulous pretenders, whose suggestive publications are amongst the crying evils of our time. Because the subject is thought to be disagreeable, and in a certain degree disreputable, competent physicians are loath to be concerned in it. The same unnecessary fastidiousness causes the treatment of this malady to be avoided in private practice; and the most unfortunate patients, thus precluded from obtaining intelligent advice, fall into the hands of advertising specialists, who excite their worst apprehensions for a mercenary purpose. For this reason, and to obviate the sad consequences which result from spermatorrhœa, it is our duty to exert our best efforts on behalf of those afflicted with this

malady. We should endeavour to attain to correct views of its pathology, and apply our knowledge to its cure—if for no other reason—for the good of our species."*

"By involuntary seminal emissions, or Spermatorrhœa, we understand those losses or evacuations of seminal fluid which either take place without any, or with inadequate, erotic excitement. In the normal state of a properly constituted person, the emission of seminal fluid requires not only that the venereal orgasm should be carried to a very high degree, but also that a series of acts should be repeated for a longer or shorter time; there is required the mechanical act of copulation, or the use of some other analogous means. Amorous desires, be they ever so keen, occurring even in the strongest and most continent persons, do not in general cause spontaneous ejaculation of semen; nor is ejaculation brought about by mere contact with the object of desire. When ejaculation occurs independent of the erotic excitement generally required, there is an involuntary loss of semen. Almost always, if not always, Spermatorrhœa, properly so called, begins with nocturnal pollutions. They have, in the first instance, been the result of erotic dreams: they recur frequently; through habit, the frequency increases to such an extent that they take place not only once every night, but several times in the same night." (Trousseau's Lectures: The New Sydenham Society.)

* R. Bartholow, M.D.

The erotic dreams, spoken of by this distinguished physician, in most cases arise from the disturbance caused in the nervous system by self-pollution. So detrimental to the integrity of the nervous system is that vice, that it invariably produces the extreme irritability of the genital plexuses which results in the frequent, and eventual constant, nocturnal emission referred to.

In the cases of those who are subject to spermatorrhœa, both young and old, there is generally an enervated and emasculated condition of body, which gives them a peculiar expression, familiar to the practised eye.

There is also, in some, the indication of a profound melancholy, from the remorse which accompanies the disorder. The patient becomes hypochondriacal, and not without reason very often; hence, his imagination leads him to create images of future wretchedness, that destroy his peace of mind, and fill him with the most alarming forebodings.

SYMPTOMS.—There are several modes in which spermatorrhœa is made manifest. They may be divided into two classes, those which occur in the daytime, and those which take place at night.

With reference to the first of these conditions it may be safely affirmed that they are of frequent occurrence, and are attended with serious consequences, which indicate that the constitution has undergone some serious injury.

The flow from the urethra in some persons during the day, is considerable, and tells lamentably upon

their vitality, and physical vigour. Much depends in these cases upon the constitution and temperament of the subject; those of a nervous and sanguine temperament suffering most, as their minds are prone to dwell a good deal upon the sexual instinct.

With many such persons, frequent temporary excitement will inevitably induce a moderate discharge from the urethra at certain intervals, on account of the engorgement of the vesiculæ seminales. It is not by any means infrequent for the friction of the trowsers alone to cause, in an exciteable subject, whose organs are in a state of plethora, a copious flow, during the day, of semen, or prostatic fluid.

This condition of things requires prompt, and effective, measures to be taken, as it indicates either great debility of the organs, or an abnormal amount of nervous stimuli. The advice and treatment of an experienced surgeon should, in such a case, be obtained without delay.

Not long ago, a merchant of considerable standing in one of these colonies, called upon me to consult me about this very disorder. He informed me that he was constantly pestered with excitement of the genitals, but had not erections except occasionally; he endeavoured to describe his ailment as systemic, feeling the influence all over him, and an indescribable uneasiness in the back of the brain. He was desponding about his health, because of the loss of fluid from the urethra, which he noticed daily. He complained that when the discharge was most copious

he felt listless, melancholy, and quite unfit for business. I examined the discharge with the microscope several times, when opportunity offered, and I nearly always found spermatozoa. The penis was flaccid, and feeble.

He informed me that in his boyhood, and even in early manhood, he had indulged in masturbation, and attributed his present weakness to that cause.

There could be no doubt about the correctness of his opinion as to the cause; I therefore proceeded to treat him in accordance with the diagnosis founded thereon. I recommended cold sitz-baths daily; exercise in the shape of rowing, early rising, and tonic medicines, with careful dieting.

A few months of treatment after this manner eventuated in his complete recovery, and entrance into the marriage state, which has not been alloyed by any return of the disorder from which he had previously suffered.

"Diurnal pollutions," says Lallemand, "are, other things being equal, much more difficult to cure than nocturnal emissions, and seminal emissions which attend the simple passage of the urine are more serious, and more obstinate than those which take place during the effort of straining during defecation. In a word, experience proves that the severity of Spermatorrhœa is proportioned to the ease with which it takes place, and common sense would predict such a result."

Another form of emission is during defecation, or emptying of the bowels. The loss of semen during

the performance of this function is owing generally to the existence of constipation. The urging consequent on confinement of the bowels, is almost sure in most men to be the means of forcing semen from the vesiculæ seminales, and prostatic fluid from the prostate gland.

With some men each defecation, if accompanied with straining, will cause the loss of seminal fluid, and account in full for that depression, and *malaise* which they feel. This is observed in the fact that constipation has a more distressing influence on men than it has on women, who can tolerate prolonged constipation better than men. The hardened fœces in men, pressing upon the vesiculæ seminales and prostate gland, drive forward their contents, which pass out by the urethra.

The reader will be able, by means of the physiological sketch given in the former chapter, to understand how readily such discharges as are described may be caused by straining at stool.

When this mischief is detected at an early period, there is no difficulty in disposing of it, but by long continuance it is liable to induce a chronic emission, and present considerable obstacles to remedial operations. The patient should promptly seek professional advice from some reputable member of the profession.

Micturition is another function during which the spermatic fluid is often found to escape. The urine in its normal and healthy state should be clear and limpid, free from any admixture of visible mucus, or other dense secretion, and only giving evidence

of existing mucus, after cooling and condensation, and then the sediment should only appear in the form of a cloud at the bottom of the *urinaire*, the supernatant fluid being perfectly clear.

But it frequently happens that the first and last portions of micturition are thick, and present the apparent characteristics of seminal fluid. Should this discharge be slight only, no alarm need exist; but should it be considerable, then, it becomes necessary to obtain competent medical aid, in order to its removal.

Sometimes during the existence of stricture, the excessive straining, in order to void water, is such as to cause considerable discharge of prostatic fluid, and it is very frequently mixed with spermatic fluid or that which has been stored in the vesiculæ seminales. On submitting this fluid to microscopic examination it will be found, generally, to contain spermatozoa. The health of patients suffers materially while this drain is going on, and all the symptoms peculiar to the excessive loss of so important a secretion are apparent.

Another period of involuntary emission is at night, during sleep. This may, and often does, occur, to the most continent of men, being a safety valve to the overloaded seminal vessels. A portion of the superfluous fluid lodged in the vesiculæ seminales passes off during dreams which may be induced by excessive secretion.

There is, however, a condition of nocturnal loss, which is of a more serious nature, by reason of the

extent to which it occurs, and the immense drain from the system.

This is deserving of special consideration, as it indicates great debility, and hypercesthesia of the genital nerves, requiring specific treatment.

In a normal state, or when a man is in robust health, the nocturnal emissions will seldom occur; but where the organs have been weakened by the vice which I shall shortly describe, then it becomes frequent, and fraught with danger to the constitution generally.

It is also produced by direction of the thoughts upon the generative function, and by lying on the back. These circumstances produce dreams of a lascivious nature, during which the loss is sustained.

Having referred briefly to the several forms in which the loss of seminal fluid takes place, I shall now proceed to treat of the main cause of such loss, and the painful phenomena which ensue.

This cause is unfortunately found to exist much too frequently amongst the old as well as the young, but more especially with the latter. It is pre-eminently the vice of secrecy, requiring solitude for its indulgence, and hiding also from the observation of even the nearest friend.

No class is exempt from its corrupting and enervating influence; no sanctity of position or calling is proof against its temptations; but everywhere, more or less, it overwhelms the judgment and enslaves the will. It is one of the most pernicious habits that can possibly be indulged in, sapping—as it does—the

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strength both of mind and body, reducing the most vigorous intellect to the feebleness of old age; and the most athletic frame to a condition of helplessness.

This wretched habit is called *masturbation* or *manustupratio*, which means the production of emission of seminal fluid by friction and manipulation of the virile organ; or any process, not the natural excitement of sexual intercourse with the opposite sex, which produces a flow of that important secretion. It is, however, usually practised with the hand, and it is surprising at how early an age this vice commences, requiring at all times the vigilance of parents, to interdict any approach to the indulgence.

The common field is the public school, where boys induct each other into many improper practices, and this amongst them.

It is probable that in some of the best schools the teachers are as vigilant as they can be, but, from the confessions of the consulting-room, it is evident that, in defiance of this surveillance, the habit is practised.

There are, on the other hand, some establishments where it prevails to a serious extent.

From information which has reached me from time to time, I am inclined to believe that the vice is more frequent here amongst youths than in England. Mr. Acton, in his able treatise on this subject, points out how very wide-spread is the evil in the public and private schools of England, and gives some letters confirmatory of that view. I shall transcribe one of them on account of its emphatic expression in reference to the habits of boys at school.

"DEAR MR. ACTON,—It is indeed a difficult subject to treat wisely and usefully, but I fully believe you are right in saying that it ought to be faced; and though it is very questionable how far any publication should be placed in the hands of youth, yet good service is done if you supply parents and instructors with such information as shall enable them to speak to individual boys, according to their discretion, with a competent knowledge of those physical facts, on which their admonitions are based.

"You are not far wrong in your facts, if I may judge from my experience of three great public schools, and several private ones. . . . I think those judge erroneously who select the public schools as the chief seat of this evil. My own experience is the other way. I used to see it practised shamelessly at a large private school I was at; and alas! it was known and taught even at a little one, of boys all below ten years old, where I was before that. At _____, on the other hand, which I consider far the purest of the three public schools I have been connected with, all open or avowed practice of the vice was sternly repressed by the force of public opinion. . . . At any rate it is very important, as I said at first, that parents and tutors should be fortified with a knowledge far greater than they generally possess on these subjects, &c.

"Believe me, yours very truly,

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In this long and admirable letter there is much more of a pertinent character which I have omitted, but I have quoted sufficient to point out to the reader the importance of the question I am discussing.

There is also in the same work a letter from a member of one of the English Universities, who was formerly at a large public school, who, in speaking of the habit of masturbation, so common at the schools, says, "good sound scientific information is what, in my opinion, is required *at schools*, both public and private.

"It might be advisable for the masters to lend a medical work, such as your own (Mr. Acton's), to the senior boys, in order that they might see that the ill effects of the practice were not fancies of the masters, but they were well known by surgeons and other medical men."

My own opinion is in accordance with the views expressed by the latter gentleman. The elder students at schools would, if instructed as to the dangers of the vice, act as controllers over the conduct of the juniors, and by this means the practice might be completely stamped out.

It would not be necessary to enter into precise teachings in reference to the functions of the generative organs, but sufficient might be judiciously communicated to fortify the youth against the examples of others, and the impulses of his own nature. I therefore advise parents who have sons arriving at the age of puberty, and the heads of schools, to take the subject into consideration. The advice I tender is dictated by the knowledge which the consulting room furnishes, and which cannot be learned elsewhere.

Even with the medical man, "it is difficult to obtain much reliable information on so painful a subject. Its unfortunate victims, so long as they retain the capacity to give any information at all, can hardly be induced to make the confession; and few authors who could avoid the task have ventured even to speculate on a vice so *wide-spread* and *so deplorable*!" (Acton.)

Having said all that I deem it advisable to say to those who have the management of boys, I shall now proceed to notice the gradual consequences of the habit of masturbation.

At first, there is not much disorder manifest, but after it has been indulged in for a short time, an uneasiness occurs in the urethra, and, if that be examined, it appears rather inflamed; there is also sympathetic irritation of the bladder, and a frequent desire to make water is felt.

This function of micturition is, indeed, almost always increased by the habit just mentioned. There is also a sense of weight in the prostate, perineum, and rectum, and pains are often complained of in the testes. The sleep is disturbed by dreams of an erotic nature, and, during them, there is always emission of the seminal fluid. During the earlier period of indulgence, the excitement both in the waking and sleeping states is of a somewhat pleasurable character; but as the vice is continued, this result is not always attainable, the nervous sensibility being seriously blunted. The losses during sleep soon fail to give pleasure to the dream.

While alluding to the baneful influence of the vice upon the organs themselves, I am reminded of an instance related by Richeraud, of a shepherd, who, after the organ had ceased to respond to the usual manipulation, irritated the urethra by means of a small piece of stick which he introduced, and rubbed against the mucous membrane. This also, in time, failed him; he then commenced to introduce a sharp penknife, and continued this practice until his urethra was slit up as far as the scrotum.

This case points out as clearly as anything can do, the inveterate hold which the habit takes on some persons when once begun; and ought to be useful as an incentive to vigilance on the part of parents, and teachers.

There is soon confusion of mind in the patient: the change for the worse in his mental activity is apparent to himself as well as to others; he cannot apply himself with that satisfaction to himself, to which he had been accustomed. He cannot read or study to any purpose, and, if he should be foolish enough to still enslave himself to the habit, mental application becomes an impossibility. There is heaviness of the head, and vertigo, which is frequently noticed when walking; the patient slightly reeling suddenly to the right or left, but only momentarily. This last symptom is not present in all who practice the vice under consideration, but it is very troublesome to some.

They also suffer from wakefulness, not being able to sleep at all in the early hours, and should they be fortunate enough to go to sleep at first, they wake in two or three hours, and scarcely sleep again, until it is too late to yield to it.

One of the most common of their symptoms is sadness, or great depression of spirits, which haunts them perpetually, and casts a gloom over all social intercourse, so that they soon endeavour to avoid, rather than court it. This may be indeed looked upon as one of the most prominent symptoms, for I find it almost always present, changing the most joyous and jovial of companions, into a misanthrope, and misogynist.

The great expenditure of nervous force during unnatural excitation, tells seriously on the whole body, and especially so on that portion called the nervous system, and produces weakness, languor, and mental feebleness, which continue for a considerable time afterwards.

It cannot be questioned that the chief injury of a primary character, which is done to the organism by masturbation, is the expenditure of nervous force, by the undue stimulus of the cerebro-spinal axis.

The debility and depression, which is felt by those who commit excesses of the kind alluded to, arise, not only from the actual loss of secretion, but also from the shock—of an epileptiform kind, which the organism sustains under each excitation.

The drain upon the system in other respects, is not, however, to be overlooked, inasmuch as it is, of itself, often sufficient to tell most seriously upon the animal vigour, by reason of the loss of organic matter. The prostate gland in particular pours out an abundant secretion of mucus, containing a very large proportion of phosphate of lime, both granular and in solution.

In certain conditions of disease where obstruction takes place, sufficient to prevent the secretion from being forced out from the tubes, the familiar prostatic calculi are deposited.

These calculi, under several analyses, have been shown to consist generally, of nearly pure phosphate of lime, with the addition of only a small proportion of mucus, and fat corpuscles. In the old also, when the activity of the gland is insufficient for the extrusion of the contents of the follicles, calculi are formed in them, by the continual addition of successive layers of the earthy deposit.

It will thus be seen, how much organic matter of the greatest value to the organism is secreted and excreted by this gland, and how serious to the stability of the system, any excessive, and unnatural, drain must be. It is doubtless from the loss of phosphorus —so important a constituent in the brain and nerve tissues—that the sense of vital depression proceeds, in those who are addicted to inordinate sexual excitement. Hence the expenditure of nervous power that accompanies all sexual orgasm.

The same fluid often passes away in an undue degree, and without the normal excitation, when the organs have been debilitated by masturbation. It is therefore important to take notice of it, when it is found to escape from debility of the gland, and its ducts.

The loss of fluid is the palpable phenomena which attracts the attention of the patient, and he should, if his health be in any degree below par—obtain the necessary information on the matter, from any honourable member of the profession, in whose skill he may have reason for confiding his case.

From such a source he will learn the true nature of the ailment, and whether the consequences of his habit have assumed, or are likely to assume, any particular gravity. He may rest assured that his alarm, if he have any, will not be augmented, and used for the purpose of extortion.

On several occasions I have experienced considerable difficulty in convincing a patient that his fears were unnecessarily excited; and some of my medical *confrères* have met with the same obstinacy, on the part of patients who have had seminal losses, and who took it for granted that their lives were jeopardized thereby. It requires great tact indeed sometimes to persuade a patient, that he has not got a wasting and dangerous spermatorrhœa, and sometimes all that can be said fails completely in removing the impression.

The following case I have selected out of the many which daily occur in my practice. The patient, who was well formed, about twenty-seven years of age, and in fair health; perhaps a little more anxiouslooking than most people, called upon me about six months ago. He soon informed me that he had spermatorrhœa, and from his minute description of the phenomena, which he supposed to be present in his case, I discovered that he had well read the abominable prurient productions of the Jordan party. He stated that he had masturbated during his boyhood, and even until he had passed his twentieth year.

Since then he professed to have abandoned the practice, but had continued to lose seminal fluid at stool, and at night when asleep.

This occurrence had at length caused him to think very seriously about its consequences to his health, and he obtained one of the tracts before alluded to, because he could not get one of a respectable character, treating upon his peculiar ailment. He read it in order to learn what would probably follow the losses which he suffered from.

The perusal of the trash that he had thus relied on for information, so alarmed him, that he became fully persuaded that he had irretrievably ruined his constitution; and he would at once have hastened to the jaws of the viper which had fascinated him, had not a certain amount of diffidence restrained him. He, however, called upon me; hence the conversation referred to.

On examining his urine, which was so carefully taken as to obtain, almost separately, some of the prostatic fluid, I could not find any spermatozoa.

The information which I gave him, that there was no reason for alarm, had the effect of shaking his confidence in me at once. He therefore expressed himself as not satisfied with my diagnosis, and prognosis, and endeavoured to persuade me that I must be mistaken.

I requested him to call the following day; he did so, when I again examined his urine, and a portion of mucus which left the urethra at the close of micturition. In neither of these did I find spermatozoa, but I came to the conclusion that there was prostatic fluid, mixed with mucus of the bladder. It was manifest that he had chronic catarrh of that organ.

I again told him that I held the same opinion as on the previous day, and did not anticipate the serious results he looked forward to, viz., that he would be unable to marry. I told him that a little judicious treat-

ment, and attention to certain hygienic rules, would be effectual in restoring him to perfect health in a short time. This opinion he was not willing to accept as final. He afterwards applied to a well-known firm in Melbourne, who fanned his alarm, and emptied his purse.

For some time I heard nothing of him, until three months ago, when he again called upon me in a much worse state, and regretted his indiscretion in not having listened to the counsel I had given. Cold baths, tonics, a generous diet, and plenty of exercise soon restored him to health.

This is but a slight illustration of the dread which spermatorrhœa inspires in some men, and the monomania which takes possession of them. There is a remarkable case which came under the notice of the late Sir Astley Cooper.

It was of a gentleman of excitable temperament, who had become the victim of self-abuse in early life, and had brought on debility of the organs of generation, so that there was an almost continuous discharge from the urethra. All the methods of treatment having failed in relieving him, the idea of a complete eradication of his disease, by the removal of the supposed source of the morbid phenomena, namely, the testicles, occurred to his mind.

After a good deal of persuasion, he induced Sir Astley Cooper to undertake this operation, and the left testicle was accordingly removed. The patient was, however, deceived in his hope, and in a letter to his medical attendant he said, "After the cessation of the inflammatory action, the disease did not appear to be in the least altered by the operation."

Being disappointed as to the result of this heroic method of treatment, he submitted, under another surgeon, to the milder operation of cauterization of the urethra. This was repeated several times. The employment of the caustic plan was not followed by any alleviation of his symptoms.

"Keeping his mind constantly directed to the subject, this gentleman became persuaded in the idea, that by sacrificing the remaining testicle, he would certainly be relieved from a malady most irksome to him, and ill-requiring the advantages of a questionable virility.

"Much opposition was offered to this proposition by the surgeon whom he consulted, but without changing his determination, and his urgent request was complied with, under my observation.

"It was imagined that this operation must naturally prove successful, and, for a few weeks, during the time that the irritation occasioned by the wound remained, it appeared to be so.

"After that time the spermatorrhœa reappeared, apparently with the same degree of activity as before; erections, and emissions, both nocturnal and diurnal, returned, but the ejected fluid was evidently less in quantity, and altered in its quality, being thinner, and containing no spermatozoa.

"The patient's health now became more impaired than before; he experienced great debility; suffered very much from depression of spirits, and his mind lost its capability of concentration.

"He then took it into his head that the prostate gland was at fault, and insisted on its being either removed, or treated surgically in some way, by which its hyper-irritation might be reduced. This course was taken. Setons were introduced, and counterirritation of an active nature, continued to the manifest benefit of the patient." (Dr. M. Wilson.)

This case is instructive in more than one direction. In the first place it points out clearly the terror which seizes some patients, who discover that they are subject to seminal losses. It accounts for the extreme facility with which the Kahns, Perrys and Co., Le Merts, and Jordans can impose on the fears and credulity of their victims.

When men will sacrifice their testes, and reduce themselves to the condition of eunuchs, the alarm has reached its culmination, and they will obsequiously obey any demand made upon their exchequers.

This fact also leads to the conclusion that a presumed spermatorrhœa may exist, without all the organs of the generative function contributing thereto.

In true spermatorrhœa we may doubtless expect to find the spermatozoa, but there are emissions of a debilitating and exhausting character, also passing under that name, which are not accompanied by these animalculæ.

All physiologists have assigned the testicles as the source of their development, though some assume that they are not perfect in form until they have passed into the vas deferens, or communicating tubes between the testes, and the urethra. They are not found in

prostatic fluid, per se; nor are they always present in the vesiculæ seminales, which are now by some physiologists supposed to secrete a fluid of their own. There is evidently an entirely independent action of the several organs, constituting the generative combination.

There is undoubtedly required a perfect co-ordination of all the organs for the generative act in coition, but in reference to accidental seminal losses, there may be only one or two in diseased activity. The prostate gland especially may be the chief source of the discharge complained of.

This gland alone may, by its excessive secretion, be the source of much inconvenience. As was before stated, the enormous loss of phosphorus in the prostatic fluid, is sufficient of itself to induce that general systemic nervous and physical debility, which is usually supposed to be dependent entirely on the loss of spermatozoa.

I could fill a hundred pages with similar cases to those given above, showing the dread which seminal losses, small in degree, inspire in the minds of many persons, and how these persons require patience and firmness in the surgeon to allay the unnecessary alarm. Hypersensibility of the glans penis, and the urethra, will often be found to be at the bottom of the troubles which these persons endure, and this hypercesthesia can soon be remedied.

Such an exalted condition of the nerves of the parts alluded to, leads to erotic ideas, which haunt the sufferer night and day and produce the discharges

with, or without erection, which so alarm him. There is also this unfortunate circumstance connected with it, viz., that when once spermatorrhœa is established, it progresses independently, and seldom, if ever, admits of spontaneous recovery.

It is not to be supposed that all urethral discharges that may be witnessed at micturition, and during defecation, are perilous, or that they contain spermatozoa.

To assert this would be to imitate the unreasoning, and fraudulent, assertions of the Kahn clique. This is the very *point d'appui* of these men: the error of Lallemand, which they have seized on to use for dishonourable ends.

Many men have seminal discharges, who experience no inconvenience whatever in their general health; and, as a rule, we cannot find in these discharges any animalcules. They are usually prostatic, or from the vesiculæ seminales, and but in small quantity.

General alarm has, however, been spread broadcast by the filthy and mendacious pamphlets that have overrun Europe, and the colonies; hence the fears of those who become aware of any loss from the urethra, although not accompanied by any apparent physical disturbance.

It cannot be denied that spermatozoa may be found sometimes in the urine, and in mucous discharges from the urethra, as it is indisputable that the microscope occasionally reveals them, but my intention in writing the last paragraph is to allay unnecessary alarm.

No evidence of spermatozoa being present should be admitted, save that of the revelations of a good microscope, of not less than 300 diameters. Professor Flint, of Philadelphia, when writing on this subject in his "Practice of Medicine," says, "In the most of these cases the fluid is either the *Liquor Prostaticus*, or a secretion from the vesiculæ seminales. The microscope affords the only reliable mode of determining that the fluid is seminal."

Dr. Hassall, of London, when writing on "the Urine in Health and Disease," says, "Care must be taken not to confound the discharge of urethral gleet with the seminal fluid: the distinction is easy, since the former is distinguished by the absence of infusoria; by the presence of scaly epithilium; and by the escape being in general continuous. Sometimes the gleety discharge occurs only after sexual excitement, and lasts but for a short time, when, of course. its character is more apt to be mistaken. The prostatic fluid might also be mistaken for semen, but in this the spermatozoa would also be absent and in addition the microscope would reveal in it the presence of the prostatic cylinders, and, perhaps, also, of the peculiar lamellated concretions of phosphate of lime, which are found in the prostate in such numbers. Like the mucus from ordinary gleet, that from the prostate may also be continuous, but more frequently it appears only after violent efforts at defecation, when a small quantity of matter may be expressed, forming only a drop or two, of a thick, stringy, and transparent fluid, which appears at the orifice of the urethra."

Lallemand, whose celebrated work on this subject has, notwithstanding its excellence in many respects, done a great deal of mischief; overpaints the phenomena of spermatorrhœa; and recommends treatment that is eminently dangerous; still it describes the actual symptoms of abnormal excitation, and other excesses with great clearness.

He says, "If excesses are carried far enough, or last long enough, the excitement augments, and the first symptoms of irritation manifest themselves. Heat in the canal commences, particularly during the act of making water; the urine is more abundant than usual, and the desire to pass it is more frequent, accompanied with a tickling which is sometimes agreeable; the meatus is more injected than usual, and the intensity of pleasure is diminished.

"At a later period, dysuria comes on, occasionally attended with hœmaturia; ejaculation takes place with a rapidity that goes on increasing; the semen sometimes contains streaks of blood, and at other times it is altogether bloody. The irritation extends to the prostate, or the margin of the anus, and a feeling of weight is felt in the perineum and rectum, accompanied with a spasmodic constriction of the sphincter, producing constipation. The spermatic cords, and the testicles become painful, and sensitive to the least pressure, and require the support of the suspensory bandage.

"At the same time the sensation becomes weakened; erections are less complete and prolonged; ejaculation is more rapid; it becomes, in fact, so precipitate, that intromission cannot take place. The act, in regard to

its duration is reduced, almost to nothing, and the same may be said of other phenomena. The fluid consists of a *simple excretion of semen*; which is not abundant, but is watery, transparent, without smell, and incapable of fecundation."

"Little by little, the phenomena of excitement which precede the orgasm diminish, and at last completely disappear, the emission then occurs without dreams, without erection, without pleasure, and even without any particular sensation; in fact, the patients are not aware that emission has taken place, except by the stains which they observe on the linen when they awake. At the same time the seminal fluid loses by degrees its consistence, its colour, its smell, and even the spermatozoa, and resembles prostatic fluid."

Such is the progress which the disorder makes, unless controlled by the resolves of the patient, and the requisite hygienic and surgical treatment.

The description of Lallemand is in many cases true to the letter, and exhibits, with singular correctness, the gradual development of those phenomena that indicate the general prostration of the organism. The dread which such a stage naturally inspires, is often allowed to exist where there is much less cause for it; even where the discharges are of very little consequence, and where medical counsel would at once conduce to their suppression.

These remarks are not intended to throw men off their guard, and lead them to neglect entirely the discoveries they may make as to their urethral discharges.

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They are to do away with undue alarm, but it is equally advisable that proper information should be sought, and if necessary, treatment employed to avoid more serious stages being reached.

They who suffer from supposed spermatorrhœa, are very numerous, and the symptoms vary much in their character.

We have, on the one hand, the pale, cadaverous, and nervous, man, whose system is exhausted by constant emissions.

On the other, we have the plethoric and phlegmatic individual, who scarcely suffers any inconvenience from his nocturnal discharges.

Between these limits there is every variety of shade, requiring peculiar management; some needing only careful hygienic treatment; others requiring the gravest consideration on the part of the medical man.

Dr. Tanner, in his celebrated "Practice of Medicine," states that the more frequent and uniform phenomena attending spermatorrhœa as a consequence of masturbation are, "mental depression, a desire for a dreamy kind of existence, rather than a wish to follow any active occupation; the digestive organs become disordered, as is indicated by flatulence and constipation; the sense of hearing, as well as of sight, becomes dulled; there is loss of memory, and an inability to fix the attention; while attacks of palpitation, giddiness, shortness of breath, headache, and neuralgia, are far from uncommon. In extreme cases, I believe, the final result may be epilepsy, phthisis, insanity, and impotence." Dr. Tanner goes on to say, "I could prove that these views are not imaginary, by the recital of cases which have fallen under my own observation. But I have met with none where there has been a more striking appearance of cause and effect than in the following:—

"For several years I have attended a family of four persons-two brothers, and two sisters; all were single, and would now (1865) be above thirty-five years of age. Both the brothers were brought up to the Church. One of them died a few months ago from phthisis, the other is an inmate of a private lunatic asylum. One of the sisters is a confirmed invalid, always suffering from some form of hysteria, or from neuralgia, or from great mental and physical prostration. She lives alone, and persists in doing so. These three members of this family have not only confessed to practising masturbation, but have regarded it as the origin of all their troubles. The second sister enjoys tolerably good health, though she has a fibrous tumour of the uterus, of which I can say nothing."

The largest class of persons who consult the surgeon, in reference to what they deem to be spermatorrhœa, are those who suffer from deranged and morbid sensibility of the nervous system, with more or less mental and physical depression, associated with a variety of anomalous symptoms, that are sufficiently prominent to give anxiety, all of which the patient attributes to voluntary, or involuntary, seminal emissions.

There is a general consciousness that their sufferings are to be attributed to the baneful habit of selfabuse, for they cannot but be sensible of the actual connection between the phenomena, and the cause to which they attribute them.

There are certain physical indications that incontestibly point out the relationship between the previous habits, and the present condition. These have been clearly set forth above, and are infallible indications of the pernicious practice from which they proceed.

A case occurred about a year ago, which is apposite to the observations just made. A gentleman called upon me with his son, who was about eighteen years of age, requesting me to take him under my care, as he feared that a rapid decline in the boy's general health had taken place, which might be of serious moment.

On the youth presenting himself, I at once saw reasons for suspecting the nature of the disorder I should have to treat, although the father did not in the least suspect the cause of his son's ailment.

The boy was much emaciated; his throat was painful, and the tonsils were much swollen. His appetite was bad; his bowels were constipated, and his sleep disturbed. He was soon fatigued when walking, and had no inclination for any exertion whatever, either mentally or physically. His nights were disturbed with dreams, he suffered from palpitation, and he had to get out of bed every night for the purpose of micturition.

On questioning him privately, I learned that he had been in the habit, for two years, of masturbating, which practice he had been taught at school, and that he was still addicted to the habit.

He told me that he found on waking in the morning, there were signs of seminal waste having taken place during his sleep, and he supposed that it also occurred involuntarily during the day.

The poor boy soon became convinced, that all his physical sufferings arose from the bad habit in which he had unfortunately indulged so long, without being aware of the evils that would follow; and at once stated that he would cease to practise it.

His chief anxiety was that his parents should not be made acquainted with his vice, of which he appeared to be heartily ashamed. With this desire I acquiesced, on condition that he at once finally abandoned it; that he abided rigorously by my instructions, and carried out to the letter the hygienic arrangements determined on.

I instructed his parents to place him on a hard mattrass at night; to call him every morning at daylight; to see that he took a cold bath on rising. I advised him to take a walk before breakfast, weather permitting. A generous diet was prescribed, with suitable medicines, of which Phosphorous, Strychnine, and Lime, were prominent constituents. A cold sitz bath was ordered to be taken every night before going to bed.

The result of this physical treatment, and moral suasion, was, that, in the course of three or four months, this poor emaciated victim of masturbation

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became strong, and vigorous, both mentally, and physically.

Another instance was that of a schoolmaster, and (what is called) scripture-reader, who waited upon me in 1868, to consult me about what he distinctly announced to be spermatorrhœa. He was so weak that he felt quite unfit for his daily duties; he was sleepy, and inert in the extreme, and felt that all mental exertion was distressing to him.

He had for years been guilty of the habit of masturbation, or self-abuse, and it had so weakened his genital organs, that night and day he had, what he called, spermatic discharges from the urethra. I was enabled to examine some of this fluid, and, by the aid of a very powerful Ross's microscope, found some spermatozoa, but very few. In the majority of the examinations which I made I found no spermatozoa, but I concluded that the discharge was prostatic chiefly, as he evidently suffered from irritation, if not congestion of the gland. The patient was much emaciated, and evidently extremely nervous about his health, and future prospects.

He seemed to view life in the most gloomy aspect, and was gradually drifting into a state of mind which must have led to self-destruction, or insanity. By encouragement, and active hygienic treatment with suitable medicines, and by change of scene for three months, he was able to master the habit, and regain his health.

The nervous system was, in this case, evidently much disordered, and, from the frequent excitation

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of the genitals, the entire cerebro-spinal system was in a state of hyperæsthesia; reminding one of the condition described by Handfield Jones in his "Functional Diseases," where he says, "It seems a well-ascertained fact that the nervous tissue, both in the centres, and in the peripheral extensions, becomes more excitable and mobile, in proportion as its power becomes weaker. The motor nerve is more readily thrown into action though the impulse it communicates is weak, and cannot be long sustained. The sensory nerve is alive to the least impression, and becomes, in certain cases, gifted with almost preternatural acuteness. The brain is highly impressible, but incapable of any continuous effort; and headache is easily induced."

"The cases of spermatorrhœa vary much in importance. They occupy all possible intermediate gradations between the pale and emaciated subject, who suffers from continuous nightly pollutions and severe gastric and cardiac symptoms, and the plethoric subject, whose weekly nocturnal loss is an expression of a necessity of his sexual nature." *

Should the vice of masturbation commence early in life, and be practised with persistency, it is likely to produce permanent injury to the mind, by interfering to a serious degree with the development of the brain.

Amongst those who suffer most in this are the nervous temperaments, or those in whom the nervous apparatus is more active and more easily influenced, than the muscular, and digestive.

* R. Bartholow, A.M., M.D., on Spermatorrhoea.

Observation proves that the effects of the bad habit are often extremely serious, leading to mental feebleness, which, in after years, is never fully overcome. This cerebral misfortune is, perhaps, the most alarming and irretrievable result of the practice of masturbation so common in early life.

As I before observed, the cerebral complications are not so much dependent upon excessive loss of the seminal fluids, as upon the nervous shocks sustained by the organism, at a time when it is not able to sustain them, without serious deterioration of its powers and functions.

Full maturity and robust health are the conditions under which alone the semi-epileptiform shock of the seminal organs can be borne without more or less injury.

This, therefore, is the point of danger. The boy should be informed that this nervous intensification is a drain upon his vital resources which may be serious in the extreme, and, perhaps, may ultimately produce epilepsy; that, at any rate, the probability is considerable that it will stamp the constitution with a nervous debility that will embitter life in all its relations.

That the epileptiform fit is not an unusual accompaniment of the sexual orgasm is established beyond contradiction, as many persons are known to experience it in a modified degree during the completion of sexual congress.

The great Napoleon is said to have been especially subject to it at that time, and general practice fur-

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nishes instances which sufficiently attest that it is a condition of nervous disturbance allied to sexual indulgence, and capable of being produced by excess in that direction. In my own practice I have met with several cases where I have been satisfied that masturbation was the chief, if not the sole cause, for the accession of that very troublesome disorder.

I admit that the existence of spermatorrhœa from masturbation is not always accompanied by the mental phenomena just alluded to, but this depends much upon the nature of the constitution.

It happens usually that those youths who are least robust, and whose nervous system is the most sensitive to every form of stimuli, are the most prone to selfabuse. With these, the symptoms assume the form of indistinctness of vision, dilatation of the pupils, accompanied by incipient amaurosis, or loss of sight; feebleness of the voice; defective hearing; and confusion of ideas; with hebetude of mind.

According to Romberg, "patients suffering from spermatorrhœa are liable to hypochondriasis, and other cerebral affections."

There can, therefore, be no doubt concerning the serious cerebral disturbances which sometimes accompany spermatorrhœa; hence the description of them cannot be fairly attributed to a desire to make the worst of the matter, and represent phenomena that do not occur.

We have the highest authorities in the profession affirming, that there are many cerebral symptoms of serious pathological import, which are directly attri-

butable to the conditions out of which the ordinary phenomena of spermatorrhœa arise.

There are some writers, undoubtedly, who still express their dissent from the conclusions generally expressed by the majority, but they are not numerous. The revelations of lunatic asylums in Europe sufficiently attest the fact that many owe their mental aberration to the abuse of the functions of the organs of generation, by self-pollution.

Most practical surgeons now acknowledge the complaint known as spermatorrhœa, to be the result of injury to the reproductive system. Many a surgeon who a few years ago would have denied the relationship of the two affections, now admits that the diseases of generative functions produce constitutional disturbance of more or less importance.

Cases have occurred in which I have been obliged, from the mischief already done, to withhold any expression of confidence in a favourable prognosis. These cases are happily very rare.

It sometimes happens that the nervous system of the patient is so unstrung, that no hope can be held out of complete restoration; and no one knows so well as the medical practitioner in large practice, how painful it is to give, in these cases, such information to the already depressed patient.

It is to be regretted that information of a reliable kind does not reach the patient earlier, that he might, in self-defence, abandon a practice which strikes at the basis of mental and physical vigour. We may remove many of the consequences of the pernicious

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practice alluded to, but we cannot always recuperate the exhausted sources of nervous force.

A writer of eminence on questions of this nature thus writes on this point :— "But however confident we may be in giving a favourable prognosis, relative to the appearance of special, and local symptoms, in cases of spermatorrhœa, we must be very cautious, when the nervous system has been once impaired, in promising perfect and speedy restoration of the natural sensations or feelings; or more than a very partial return to the buoyant state of health the patient enjoyed before.

"We can guarantee, even in severe cases, a comfortable state of existence, but the patient must not expect that the haggard countenance, and broken health will at once leave him.

"His nervous system receives a shock from which it takes time to recover. The spinal cord has been seriously impaired; the great sympathetic system has been called into frequent and inordinate action, which it is unable to bear. These are lesions which nature takes time to repair, if they can be repaired at all.

"Travel; amusing and intellectual employment; with cheerful society, and the comforts which easy pecuniary circumstances give, do certainly sometimes effect greater cures than at first I ever dared to prognosticate." (Acton.)

It has often appeared to me surprising, that men, when necessarily sensible of the evils they bring upon themselves, should not take alarm at an early period, and at once cease to cut away from under them the

supports of nervous and physical stability. Nature soon issues her warning, but is evidently unheeded, even when mental ruin is threatened.

The following case illustrates this state of things. It is one in which the cerebral integrity was manifestly imperilled, and the patient had been long conscious of the growth of his malady.

A young man of about 28 years of age entered my consulting-room in November, 1868, presenting the following appearances :—He was tall and thin, of the leucophlegmatic temperament, with light brown hair, and pale countenance, his beard being scant and ill developed.

His manner was so eccentric, that I at once considered him a subject of partial dementia. There was a haggard and anxious expression about the countenance, which gave a remarkably painful aspect to it. His eye was unsteady, and the pupil a good deal dilated.

He complained that he was much troubled with dizziness when walking, and could scarcely avoid falling. I learned from a relative, who accompanied him, that he varied very much in his conduct and conversation, sometimes being exceedingly taciturn, and at others troublesomely loquacious. He sometimes appeared to wander in his ideas, and scarcely knew what he was talking about.

I ascertained that he had been for a long time a confirmed masturbator. He appeared also to have suffered, as a consequence, from the very worst forms of spermatorrhœa.

I caused him to micturate, and carefully watched the flow of urine; I observed that there were at the commencement and the termination of the micturition indications of the flow of considerable spermatic fluid, and, accordingly, caught some of it in a glass.

On examination, I found that it was not simply prostatic fluid, as I expected it would be, but that the vesiculæ seminales supplied a fair proportion, as the fluid contained an unusual number of spermatozoa. As I said before, I have not always found spermatozoa in the discharge of persons said to be suffering from spermatorrhœa; in this case, however, they were very numerous, and the amount of prostatic fluid was very large.

I gathered from him, for he did not attempt to conceal anything, that the habit of self-pollution with him was of almost daily occurrence, and that he was unable to bear the least excitement without emission; also, that the bare idea of sexual intercourse induced the same thing. The consequence of all this was that the man's reason was being dethroned, and his entire physical nature prostrated.

I, at once, saw that nothing but the closest attention, and most determined concurrence on the part of the patient with me, in the hygienic and medicinal measures which I should adopt, could save him from the lunatic asylum, and, after fully obtaining that concurrence, I ordered cold bathing twice a day; two hours daily of driving exercise; the prohibition of solitude; a cold sitz bath on going to bed, with early rising at daylight; and regular, and generous, dieting.

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This, with appropriate medicines, such as iron, quinine, phosphorus, and lime, soon brought about a change for the better.

He abandoned the vice which had hitherto enslaved him, and reached a fair condition of health, sufficient to warrant marriage; but he never could regain the original mental and physical standard with which nature had endowed him at his birth.

The following statistics will in some degree point out the dangers to the nervous system by self-pollutions:— "In the Central Ohio Lunatic Asylum 221 cases of insanity in twenty-seven years were referred to this cause.

In the report of Dr. O. M. Langdon, Superintendent of Longview, for the year 1865, we find reported 68 cases of insanity produced by this vice, in a collection of 1,181 cases of insanity from all causes.

We have already given the opinion of Romberg on this point.

Mr. Holmes Coote, in a discussion which followed Dr. Drysdale's paper on the "Medical Aspects of Prostitution," read before the Harveian Society of London, remarked, that "he still entertained the opinion that there were worse evils appertaining to human weakness than prostitution. He had opportunities of witnessing the fact, that among the young there was no cause of insanity more common than indulging in habits which he would not further particularise, but which were known to result in the most complete bodily and mental prostration." (British Medical Journal, February 17, 1866.) Dr. Copland, in the exhaustive section on Insanity in his "Medical Dictionary," speaks of insanity as one of the results of masturbation, or the secret vice of which I am now treating, showing that "whatever greatly exhausts organic nervous power, both predisposes to, and directly occasions insanity."

Many, however, of those causes which thus affect nervous energy, favour congestion in the brain, and occasion disease of other vital organs, thereby 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 civilisation.

"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, extasis, 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 complicates 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 intellect, debases the moral affections, and altogether degrades the individual in the scale of social existence, even when manifest insanity does not arise from it."

M. Esquirol, in his large work on "Mental Maladies," gives in his tables the number of those cases of insanity which came under his notice from masturbation, as fifty-two during seven years.

With the evidence thus far advanced, and which might be considerably augmented, did space permit; or were it indeed necessary, there can no longer be any doubt about the dangerous character of the habit under consideration, and the exhausting nature of spermatorrhœa, when established by that habit.

Nor can anything more distinctly proclaim the absolute necessity that those who are the victims of such conditions, should avoid the snares laid for them by quacks, and impostors, in the vicious and prurient pamphlets and advertisements that daily meet their gaze.

Such resorts as these point out, should be strenuously avoided, from the fact that nothing but shame, chagrin, and increased bodily suffering, can, by any means, be the result of application to such persons.

How painful are the revelations made by the sufferers and dupes, who were decoyed into the filthy museum that recently disgraced Bourke-street. How they lament over the loss of money, and the disap-

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pointment that inevitably awaited them, in the utter inability of the arch impostor to help them.

These circumstances should be a warning to the miserable victim of spermatorrhœa to confide in the *regular practitioner*, who will be to him of real assistance; and a safe, sympathizing guide out of the painful situation into which folly has led him.

I advise all who suffer from spermatorrhœa to avoid the seductions of the Jordans, Perrys and Co., *et hoc genus omne*, and to rely with confidence on their own medical attendants, in the respectable ranks of the profession.

These colonies have many gentlemen, following the honourable calling of general practitioner, who are fully capable of rendering efficient aid in the worst cases of spermatorrhœa, and its attendant diseases; so that the thousands of sufferers from these ailments are themselves to blame if they any longer submit to the deceptions, and extortions, of the class to which I have alluded.

"The cases of insanity arising from self-pollution, and spermatorrhœa, are diagnosticated by reference to the history of the case. Insanity does not so frequently occur in the case of spermatorrhœa, as hypochondria, and a form of trembling delirium, similar to that produced by chronic poisoning. The dulness of the mental faculties, and the organs of special sense, which occur in spermatorrhœa, is hardly found so associated in cerebral diseases arising from other causes.

"The objective signs in the former should not be omitted from consideration. Many cases of mastur-

bation, and spermatorrhœa, have a cerebral origin. Under these circumstances it is difficult to determine which is curative."—(Dr. Bartholow.)

Romberg considers hypochondriasis from spermatorrhœa more common than paraplegia, or paralysis of the lower half of the body.

"The hypochondriasis of spermatorrhœa is to be distinguished from that arising from other causes, by the evident derangement of the nervous system which has preceded or accompanied it, by the subjective phenomena of the patient, by the evident weakness and debility of the muscular, digestive, and circulating systems, and probably also by the admissions of the patient. In hypochondriasis arising under ordinary conditions, the patient is generally well nourished, his digestion active, and all his sensations are referred to some special organ, which is assumed by him to be in a condition of disease."

It is not generally very difficult to arrive at a correct diagnosis of Spermatorrhœa, even when the patient is silent, or disposed to throw the surgeon off his guard.

It frequently happens that the patient leaves the medical attendant unaided, to discover what is the cause of the symptoms which indicate failing health, or disordered function; hence we are left entirely to the objective phenomena before us, out of which to gather the information we desire. Examinations of seminal losses in the urine, by the microscope, will generally determine the question, as when great debility and morbid excitation of the sexual ducts has

been induced by masturbation, the vesiculæ seminales will discharge even under the reflex influence of micturition.

There are also the phenomena of facial expression, and the peculiar furtive, uneasy, suspicious, manner of the patient, which generally suggest the practice to which he has been addicted.

The nervous phenomena are pre-eminently those to be relied upon in this disease, and should be especially considered in forming the diagnosis.

In most cases, however, the patient confides sufficiently in the medical man, to furnish ample information as to the history of his disorder, and often the surgeon has to be on his guard lest he should be misled into forming a hasty opinion by reason of the nature of his ailment. The means of diagnosis in Spermatorrhœa rest upon the objective, and subjective symptoms of that state.

"The malady seldom depends merely upon the derangement of a single organ; the several parts of the generative apparatus usually participate in a general irritation, and constitute the disease. In a state of health the genital organs exert a combined and dependent action on each other, but when they become diseased, are capable of exercising a separate influence in the aggravation of particular symptoms." (Marris Wilson, M.D.)

As will have been noticed during the perusal of the preceding pages, there are several organs more or less involved in what is called spermatorrhœa. The degree of the disorder depends upon the extent of their

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abnormal excitation, and the special character of those most affected.

A concise summary of these variations is given by Dr. Mason Good, which clearly indicates the importance of the disease known under the general term spermatorrhœa, and suggests important considerations in forming a diagnosis upon the abnormal secretions, arising out of either extreme nervous excitement, or the converse.

The following is Dr. Good's classification. He divides spermatorrhœa into two classes, the first, that resulting from what he terms "Spermatorrhœa sthenica," *i.e.*, with preternatural vital energy. The second, "Spermatorrhœa asthenica," or that arising from debility.

	STRUCTURE.	FUNCTION.
Testes	Orchitis	Excessive secretion; relative
		deficiency of spermatozoa
Vesiculæ seminale	s Vesiculitis	Excessive secretion; with in- spissation
Prostate gland	Prostatitis	Excessive secretion; increased amount of salts
Urethra	Urethritis	Excessive secretion of mucus
SPERMATORRHŒA ASTHENICA.		
	STRUCTURE.	FUNCTION.
Testes	. Atrophy	Impotence. Watery secretion ; absence of spermatozoa
Vesculæ seminales	Irritability	Watery secretion
Prostate Gland Chronic irritation Diminished secretion and salts; deposit of calculi		
Urethra	. Ulceration	Purulent discharge

SPERMATORRHŒA STHENICA.

It is obvious that these several phases of spermatorrhœa require SPECIAL TREATMENT, and suggest the

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folly of trusting their management to the pretentious charlatan, and to ignorant quacks, who parade their nostrums in the daily journals.

The disorder so clearly defined in its several stages, by Dr. Good, is too serious in its character, and its consequences, to be carelessly dealt with, and demands great attention on the part of the surgeon, as well as much acumen in the investigation.

"The diagnosis is often difficult; the prognosis in some cases unfavourable. The pathology of the disease is serious in all its advanced forms, hence the question, in every stage, calls forth the highest faculties of the surgeon, or physician, and often taxes the powers of his art to their limit.

Even the first, or sthenic condition, if continued, "would lay the foundation for the destruction of the organs themselves, and so much of the general system as might be brought by sympathy under the same influence.

"The muscles become wasted; the quantity of blood diminished; it loses its red globules, producing pallor of the countenance, and a general anœmic condition, while the digestive organs, and their secretory glands, undergo a gradual but total derangement.

"These conditions usually come on slowly, and without the demonstration of any sudden symptoms. Should they continue long, the vital power will be exhausted, and the constitution laid open to the intrusion of still more acute, and serious, disorders."

The following graphic description of the symptoms accompanying Spermatorrhea, by the celebrated

Trousseau, in his recent "Lectures on Clinical Medicine," at the Hôtel-Dieu, Paris, is so excellent, that it will be read with great interest by those who, in any degree, suffer from the disease under consideration.

He states—"The victim of Spermatorrhœa falls into a state of extreme wasting. He loses colour, the complexion becomes pale, and the skin acquires a yellowish leaden hue. His eyes become encircled with a blue ring, hollow, dull, and expressionless. He is easily injured by reduction of the external temperature; and he progressively loses his moral and physical energy.

"It is an extraordinary fact, and one which, according to Lallemand, is a pathognomonic phenomenon of Spermatorrhœa, that, in conjunction with this feebleness—even when it exists to an extreme degree—the patient has an unconquerable desire to move, and, even when hardly able to stir, is impelled by physical restlessness to seek constantly to go from place to place.

"Palpitation of the heart, and an accelerated, small, feeble pulse give evidence of disordered sanguification. The sensorial functions are variously modified. A form of anæsthesia exists, which, from its mobility, may be compared to that observed in hysterical and hypochondriacal patients: sometimes in the hands, sometimes in the chest, sometimes in the abdomen; and sometimes in the integument of other parts of the body, the tactile sensibility is obtuse in a surface more or less extensive, and for a longer or shorter period.

They complain of very transitory sensations of heat, burning or cold; they compare them to sensations caused by a current of electricity, by cold air, or by tepid water.

"At last the special senses participate in the general disorder of the system. Disorders of the sense of sight arise. Complete amaurosis may occur, beginning with amblyopia, or diplopia, though cases of this description are rare. The impaired vision is accompanied by extreme sensibility to light, and a more or less remarkable dilatation of the pupils. The sense of hearing loses its delicacy and precision: it becomes exceedingly sensitive: there is buzzing, ringing and singing in the ears, symptoms which sometimes proceed to such a length as to constitute complete deafness. The senses of taste and smell may also be perverted.

"Pains in the head and vertigo, symptoms which constitute part of the concomitant train of phenomena of Spermatorrhœa, are most palpable when the patients have difficult digestion, when they have attempted somewhat sustained mental exertion, or when they have passed sleepless nights.

"Their sleep is generally light and but little restorative; as the involuntary seminal emissions take place most frequently during the night, they are more exhausted than before they fell asleep. At an advanced stage of the disease there may be complete insomnia; when it is so, the patients pass the night in a state of great excitement, covering and uncovering themselves, getting up or lying down, changing their position

every moment without ever finding one more convenient.

"When sleep does come at last, it is troubled by painful nightmare. These distressing nights leave behind them extreme fatigue; and during the whole day, the patients remain in a sort of brutish stupidity of which they are conscious, a circumstance which explains the mental depression, hopelessness, and melancholy which make them seek to fly from every kind of society.

"The patients undergo a great moral change. Wholly engrossed with their own state of health, they are indifferent to the circumstances by which those around them may be affected: they are exceedingly pusillanimous, irascible, and as insupportable to others as to themselves. Their memory becomes weak; and this enfeebling of the memory, combined with a certain degree of paralysis of the tongue, combined also with feebleness of voice, and hesitating speech, makes it difficult for them to express their ideas, the elaboration of which, moreover, is less active and less precise.

"Finally, the disturbance of the intellectual faculties may proceed to such an extent as to constitute insanity. The insanity may be temporary, and remaining entirely subordinate to its cause, may be recovered from, when recovery from the spermatorrhœa takes place; but it may also be persistent, continuing long after the complete cessation of the spermatorrhœa which caused its evolution. Lallemand clearly indicated this capital fact, and observed that the most common forms of

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insanity which occur as consequences of spermatorrhœa are hypochondriasis, melancholia, and lypsomania, complicated sometimes with a tendency to commit suicide."--(*The New Sydenham Society*, 1870.)

I have now said all that can be said in the space allotted to this small monograph on this branch of the subject, and have endeavoured as succinctly, and as plainly, as possible, to point out the dangers associated with the several forms of spermatorrhœa, as well as the necessity for care on the part of the patient, in his selection of those who have to advise him in the conduct of his case.

The sketches which have been drawn of the more serious phenomena of spermatorrhœa are chiefly from the pens of others, who are of higher authority than myself, and who have, probably, had larger opportunities for observation. They are, however, by no means overwrought; but are faithful portraitures of the immense evils arising from spermatorrhœa.

CHAPTER III.

SPERMATORRHEA IN ITS LEGAL ASPECT.

IMPOTENCE and the Divorce Court—Public exposures and newspaper reports—Reasons for secrecy on public grounds—No remedy by divorce in cases of impotence, where public exposure stands in the way—Genital unfitness a valid reason for the revocation of the marital contract—True impotence very rare—Impotence induced by self-indulgence amenable, in most cases, to treatment—Malformation, hernia, stricture, obesity, varicocele—Disorganization of the testes—Male and female sterility—Difference between sterility and impotence.

In entering upon the legal aspect of the question, I do not propose to treat it in anything like an exhaustive manner, as the space allotted to this short brochure will not permit my doing so. I shall, therefore, only briefly refer to the more prominent features of the case.

The legal aspect of the general question is replete with interest, and has a far wider range of influence in society, and on the ethics of married life than is generally supposed.

Few cases of impotence figure in the courts of law of this country, simply from the glaring publicity which such investigations obtain. They are, however, more frequent on the Continent of Europe, because of the superiority of the methods of investigation.

In my experience I find that such genital deficiencies as would warrant a divorce, are by no means uncommon, and suggest the query to our jurists whether the

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law as it now stands, be adequate to the requirements of the case, and be so administered as to be available to a very large number of persons, who need its assistance, to release them from unfortunate, and painful, conditions, which the marriage contract has brought to light, and which it perpetuates.

It becomes a question of grave consideration to the public whether the proceedings of the Divorce Court should not be conducted with closed doors. No good purpose is attained by the present publicity, which does but feed the prurient and indelicate appetite of the public, and which has not one redeeming quality to sustain it.

The glaring exposure of the details of connubial differences, which the present system of investigation permits in our Courts of Law, is offensive to public taste; is demoralising to the parties concerned; and, what is by far the worst feature in it, deters the really deserving victims of marital unfitness, from parading their sufferings, with their delicate, but no less important, causes, before the impudent stare of the vulgar eye.

Many persons are wearing out a miserable existence by reason of physical defects which were unknown until the irrevocable contract had been signed, and consummation found to be impossible. A law is manifestly unsound which offers release from such a deplorable condition, on no other terms than public exposure.

It is idle to assert that publicity is an inevitable concomitant of our free institutions, and that for this reason the doors of the Divorce Court cannot be closed.

It is the function of the Judge, at any time when he shall think fit, to exclude the public from a certain class of investigations; and this power is used with great propriety, but not by any means so often as public taste demands.

If, in such criminal cases as I refer to, it is considered necessary and expedient to avoid publicity, how much more is it desirable to do so, where there is not only the absence of the criminal element, but there is the additional reason, to save innocent and suffering men and women, from the agony which exposure of their sorrows would bring upon them, and which they cannot confront.

So far as the process of law is concerned, the presence or absence of the curious in the galleries of the Court-house can have no influence whatever. The integrity of judicial inquiry, cannot by any possibility, be prejudiced by, what is with us called, closed doors which does not necessarily exclude the press.

The analysis of many cases would, indeed, be more thorough, and exhaustive, where the restraint consequent on publicity was not operating; and the feelings of the applicants would be protected.

The public announcement of a judicial decision is all that such cases require, and the records of the Court would necessarily remain as the point of appeal.

The columns of the newspaper are manifestly not the vehicle best suited to deal with such matters in their details. It may be of little consequence, practically, whether the ordinary reasons for a suit in the

Divorce Court should be made public; whether the fact of adultery should be bruited abroad. On private grounds, there are no reasons for secrecy; on public grounds, there may be.

But, in reference to the cases to which I especially refer, viz., where there is no criminality, and where physical deficiency alone is the ground of action, I am of opinion that the publicity of open investigation is not only a hindrance to the application of the law, but a wrong to those whose cases manifestly ought not to be made common property.

It is self-evident that for cases of impotence, as a plea for divorce, there is actually no remedy as matters now stand, for, within my own knowledge, there are instances where the soundest reason exists for separation \hat{a} vinculo, \hat{a} thoro, but where public exposure stands in the way of the parties concerned seeking the dissolution of the marriage tie.

There are several forms of physical unfitness which ought to be dealt with by the Divorce Court, and certainly would be, if the sufferers could be sure, that their failings would only come under the cognizance of the requisite judicial functionaries.

I am induced to make the preceding observations from the knowledge which has reached me of the many cases where impotence, and consequent sterility, have embittered the conjugal relationships of very excellent persons, whose delicacy of feeling shrinks at the divulgings of the law courts, but who would, under more favourable circumstances, obtain the release which nature, and common sense, dictate.

It can scarcely be disputed that genital unfitness, in either the man or the woman, is a valid reason for a revocation of the marital contract. To deny that it is such is to ignore the claims of many unfortunate persons, whose lives are embittered by perpetual disappointment, and darkened by blasted hopes.

I have, fortunately, in a few instances in my practice, been able to arrest the initial steps towards the Divorce Court, by giving encouragement to the patient who had unfortunately been surprised by the discovery that he was, after marriage, unable, by reason of previous abuse of his sexual functions, to consummate the marital relationship.

Some of the cases to which I refer were of the most painful kind, producing mental suffering of great poignancy, and family feuds of serious moment. The affections were lacerated, and the hopes of the noblest association blighted.

This deficiency, impotency, or physical incompetency, is often associated with spermatorrhœa. "True impotence," says Lallemand, "consists in want of power in connection, not once, but habitually; not only with courtesans, but with those we most love; not under unfavourable circumstances, but during long periods of time, say five, fifteen, or twenty years, when married to lovely and handsome women, whose devotion to their husbands has never been questioned." (Vol. ii., page 242.)

This form of impotence is fortunately rare, *i.e.*, the kind which defies all medical treatment, and resists every effort of a hygienic character.

There are circumstances of malformation which induce impotency and sterility, but these are not so frequent as the casualties arising out of masturbation, and spermatorrhœa.

The impotency which is so very common, and which presents itself almost daily in the consulting-room, is that which has been induced directly by self-indulgence, and which is, in most cases, amenable to treatment, so that by abstinence and persistent hygienic regulations, the functions of the debilitated organs may be restored. There are instances, however, where medical aid is unavailing, where the nervous force of the genital region is finally exhausted.

It is generally admitted that spermatorrhœa, caused by masturbation, is one of the prominent causes of impotency; and experience has led me to endorse that opinion. Nineteen out of twenty of the cases which have come under my notice, owe their existence to that vice.

The constant and unnatural stimulus of the virile organ reduces the nervous power, and destroys that delicate sensibility, which is essential to the functional harmony of the associated organs.

There are, doubtless, many other circumstances which induce sterility and impotence, such as nondescent of the testicles; hernia, and the wearing of trusses; stricture of the urethra; obesity; varicocele; as well as a shrivelled condition of the penis.

Lallemand mentions "an unusual and unnatural development of the prepuce, depending, probably, on

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the unusually small size of the penis. The rudimentary state of the erectile tissue, as well as of the testicles, necessarily allows of but little energy in the functions of those fundamental parts of the generative apparatus." (vol. ii., p. 158.)

There may also be inflammation of the vesiculæ seminales, or congestion and obstruction of the seminal ducts, leading into the urethra. Indeed, the causes which lead to impotence and sterility are manifold, requiring careful observation and judicious treatment.

It is scarcely possible to separate sterility from impotence, in the sense usually adopted, so closely are they allied; when treating one it is necessary to deal with the other.

Impotence and sterility, in respect of both sexes, have been differently arranged by writers, into absolute and relative; constitutional and local; direct and indirect; permanent and temporary; and by Dr. Beck, in his "Medical Jurisprudence," into absolute, curable, and accidental. M. Delorme arranged impotence into—1. That depending upon lesions of the sexual organs (as in syphilis and mechanical injury); 2. That proceeding from disorder or interruption of seminal emissions; and 3. That caused by defect of the faculty of erection. Dr. Beatty adopted the division of, 1. Organic; 2. Functional; 3. Moral.

The functional, and the organic, are the only divisions I shall refer to; as space will not permit the consideration of the moral phase, on which the French writers lay so much stress.

As I have before stated, functional impotence is the most common, and in the great majority of cases arises out of the excessive stimulation of the organs of generation in early life, and especially by the disastrous practice of masturbation. The excitement of the organs by this practice is far more injurious than that which occurs in natural excitation in union with the opposite sex, even should the latter be excessive.

The effect upon the muscular and other tissues of these organs is to weaken them, and lessen their tone, so that they are not susceptible to the influences which ought normally to bring their functions into activity. All the secretions are materially injured in quality also by this habit of self-pollution. The seminal and prostatic fluids are then thin and scanty, not possessing that vital influence, which is so characteristic of them in health.

As might be expected, the entire organism sympathises with this depression of the genital functions, the nervous system bearing the chief strain, from the loss of fluids, which, in an especial degree, may be termed vital.

Hence, there is that absence of consent, or coordination in the several organs concerned in the generative act, which is necessary for the completion of the copulative functions, thus constituting impotence.

Dr. Paris states "the variety of impotence depending upon a want of consent between the male organs of generation, or that in which erection takes place without discharge, or in which this latter occurs too

quickly, and after imperfect erection, to be most commonly the consequence of the cause just named —musturbation.

"In such cases, the evacuation consists generally of the prostatic fluid. General debility, from imperfect or unwholesome nourishment, may weaken the procreative energy, or render the desire less frequent; but it rarely destroys it altogether, or even for a time.

"Severe diseases, intense application to study or to abstract inquiries and pursuits, have a still more remarkable effect in impairing, or temporarily destroying, the generative functions.

"In some cases, prolonged disuse of the function is followed by wasting of the testes, and permanent impotence is the result. These organs, like others of the economy, are strengthened by moderate use and weakened by abuse."

Dr. Copland states that "impotency may depend upon organic lesion of the testes; upon scirrhus, fungoid disease, or scrofula of these organs. But, unless the whole structure of both organs be changed, the faculty of procreation may be entirely, or permanently, lost. Uncommon smallness of these organs may occasion only temporary impotency; for this state may depend upon delayed evolution, or arise from the wasting consequent upon disease."

Dr. M. Wilson mentions the case of a person twentysix years of age, in whom the penis and testes remained the same size as in childhood. He married at this age, and at twenty-eight the organs had reached their full size.

"When with smallness there are flaccidity and softness conjoined, impotency is complete, and even permanent. In a case of this kind, in a strong young man, sometime under my care, no benefit resulted from treatment.

"Severe bruises of the testes may be followed by wasting, or disorganization of them. Dr. J. G. Smith alludes to this mode of making eunuchs, and states that it sometimes failed. I believe that most of the instances in which impotency has been produced by riding, have been owing to bruises, or injury of these organs, or to the pressure to which they have been subject."

"Wasting of the testes may, however, arise without any very obvious cause. In an extreme case, about which I was consulted, I was unable to ascertain its source.

"It occurred in a robust and muscular young man, who would not admit that he had ever had resource to excessive, or vicious indulgence, or that he had been unusually continent, until his inclination ceased with the decay of the organs.

"Fodéré says that impotence from this cause was a common disease among the labourers in the canal at Arles; and Larrey said that it was not uncommon among the French troops on their return from Egypt."*

I have given this quotation from the celebrated authority mentioned to show how many sources of sterility in man there are, and I might state several

* Copland's Dictionary of Medicine.

others, such as malformation, and organic defects, which it is not my purpose here to discuss, as I aim chiefly at describing that sterility which results from over excitation of the organs of generation.

The feebleness consequent on masturbation gives rise to many diseases of the genitals, which by alteration in the conditions of the several structures, render normal functional operations impossible.

Many are the instances on record, where imbecility has marred the tranquillity of conjugal association, and plunged the husband and wife into the painful glare of public curiosity.

In these unhappy cases the feelings are wounded, and the mortification inflicted, generally at the instigation of relatives, who have, by the confidential communication of one of the parties, become aware of the functional defect.

These cases, like many others, are the dismal echoes of past indulgence, and stand as warnings to those, not yet so far deprived, of the dangers which await the follies of self-abuse or masturbation.

Such facts as these demand from the profession earnest consideration, for, although there are some cases of impotence and sterility from functional abuse, yet the large majority could, by skilful treatment, be cured, and the evils of permanent impotency avoided.

It has been admitted that in some of the actions which have been instituted in the European Divorce Court, depending on genital deficiency, the emasculated defendants had wasted their money, time, and health, in the hands of the unscrupulous band of

charlatans who followed the leading of the notorious Kahn, instead of confiding their misfortunes to the legitimate practitioners.

"Sterility in man is a condition of morbid change, under which the elements of fecundation are imperfectly developed, as the result of disease in the functional structures from which they are secreted, and, consequently, a deficiency in vitalizing principle, on which the reproductive faculty depends; or it may arise from the destructive effects occasioned by malsecretion in the passages through which it has to progress." (Wilson.)

There is scarcely room to doubt that although there may be in the male, capacity for successful coition, there is actual sterility in the secretions, from the defective nature of their constitution. This deterioration may be induced by the abuse of the organs. Instances are on record in which women who have readily been impregnated by the first husband, have not been by the second, and *vice versa*.

In these cases it is fair to suppose that the secretions of the male were so defective in composition, as to warrant their being classed as sterile. The power of fecundation being lost, either in the male or female, sterility is the only term that can consistently be employed. Hence the usual application of the term to the defective fecundating power in the female, can scarcely be considered correct.

It is true that the sterile condition is much more frequent in the female sex, so far as our present know-'edge reaches, than in the male, but it is equally true

that the female may have no genital defect in the way of gestation, the male alone being absolutely at fault in the constitution of the fluids necessary to impregnation.

The subject of male sterility has been examined and written upon by many physiologists and physicians, ever since early in the 17th century. The early writers all admitted that sterility could exist in the male as well as the female, but most of the later writers have denied this.

Prominently amongst those who have lately written on the subject is Dr. Roubaud,* of Paris, and he has promulgated the opinion that the failure of the act of impregnation in the male should not exclusively be called impotence, and in the female, sterility. I am of opinion, with him, that there may be male as well as female sterility.

Roubaud says:—"The function of reproduction consists, in the two sexes, of acts so distinct, that for the performance of one, the will is obliged to intervene, while the will remains entirely passive in the accomplishment of the other. The first is an animal function, or one of relation ; the second is an organic or internal function, as Bichat would have said. After the connection of male and female, for the execution of which the will must operate, everything in the reproductive act takes place beyond our influence, and generation is effected without our consciousness.

* Dr. Felix Roubaud, Traité de l'Impuissance et de la Sterilité chez l'Homme et chez la Femme. Paris, 1855.

"Does not this intervention of the will, without referring to the sentiment of pleasure, which accompanies the act of connection, serve to distinguish between two acts of the same function, and does it not thus become legitimate to establish a line of demarcation between pathological conditions, which offer an impediment to the accomplishment either of one or of the other? I have always thought so, and I consider that the word 'Impotence' ought to be applied to every morbid state which, in man or in woman, opposes itself to the physiological union of the two sexes; that is to say, to coitus; and that the word 'Sterility' should be reserved for every morbid condition which, either in one or the other sex, hinders the reproduction of the species.

"There are thus, according to these considerations, which I believe to be correct:—Impotence in man; impotence in woman: sterility in man; sterility in woman."

The conclusions of Dr. Roubaud are, in my opinion, the correct ones, being such as I have always held, not being able to discern why sterility should not be an incident to the male fluids, as well as of the female secretions.

The fact appears to me that it applies with greater force, and aptitude to the male, than to the female, since the true fecundating principle comes from the male. The female may, by the abnormal or unhealthy condition of the vaginal and uterine secretions, destroy the fecundating germ of the male semen, but she cannot commence gestation without it. Hence, to

exclude the term *Sterility* from the male function is unphilosophical, and inexact.

There may be, as no doubt there often are, constitutional causes of impotency which are not discovered, until the claims of the conjugal contract are made.

There are individuals in whom the sexual instinct is dormant, if not entirely inert, even where the organs themselves are all present. These individuals are permanently impotent, and yet they hesitate not to contract alliances with the opposite sex.

An instance came under my observation, in which a gentleman formed a matrimonial alliance for reasons best known to himself, in whom virility was entirely wanting, and it appeared, from his own confession, that he was quite unconscious of the defect, supposing that marriage would develop it. Sterility may, under ordinary circumstances, be remedied, being only temporary; but, in this case, there was no apparent prospect of restoration. Tonics, and vigorous hygiene were adopted, but without avail. The circumstance reached the ear of the lady's parents, who caused her to return home. He continued to be impotent.

I did not learn that judicial separation had taken place; it is probable that it did not, as the exposure consequent on the publicity of the Divorce Court would, I feel assured, deter both parties from making an appeal to such a tribunal. Separation, nevertheless, continued.

There are in these colonies similar cases which demand redress, but there is at present little hope of its being obtained. This constitutional defect in the

male is occasionally found of the character called by Dr. Beck, absolute; and then defies all medical treatment.

The great majority, however, are the curable, which require a longer or a shorter time to restore the vigour of the genital functions. It is the constitutional form of impotence, and sterility which arises from disorder of the cerebellum and spinal column, that generally defies the assiduity and skill of the physician.

The close connection between impotence and sterility is admitted by Dr. Copland, in a quotation given in the Preface.

Several points of importance in that quotation are deserving of notice. Amongst them may be selected the two upon which I have throughout this monograph, laid considerable stress, viz., the fact of sterility in the male, as well as in the female, and the importance of some means being adopted, to convince the people that in these diseases, as in all others, their true refuge is in the regular practitioner, and not in the advertising charlatan.

The latter, from the pen of so high an authority, commends itself to the notice of all medical men, and should have the effect of inducing them to make more prominent, by some means or other, of a legitimate character, their acquaintance with, and their knowledge of, the treatment of these diseases.

The course taken by the profession in England is such as is already bearing the desired fruit, inasmuch as the intelligent portion of the public are turning their backs on the hitherto favoured charlatans, and

are placing confidence in the legitimate general practitioners.

The other point of interest is the consideration of impotence and sterility, as both liable to exist in the male sex.

Other authorities might be adduced to sustain the opinion that man may be sterile as well as woman, and that the defect should be sought for in the male, as well as in the opposite sex.

It has been, and is still, the custom to accuse the female solely of sterility, but this tendency is based on an entirely false conception of the physiology of the generative functions.

Circumstances have come under my own observation, where it was manifest to myself, that the sterility was in the male, and not in the female; hence, whether sterility may or may not be a question to be submitted to a legal tribunal, it is important that the real facts of the case in reference to the capacity of each sex should be ascertained. It may occur that temporary sterility may exist in the male, and be capable of removal, but not be suspected, simply because the accusation rests unfairly on the female.

The weight of authority is now on the side of the question which affirms that sterility is possible in the male as well as in the female; hence the consideration of such a contingency comes plainly within the functions of the surgeon.

This branch of the question is likely to occupy more attention in future than it formerly did, and will doubtless have so much more light thrown upon it by

physiological and pathological investigation, that many difficulties bearing upon the legal aspect of the case will be overcome.

The limits of this monograph are already overstepped, or I could say much more in elucidation of the opinions advanced, and could furnish from the highest authorities quotations of great weight, which would sustain me in the importance which I attach to this much neglected question.

SEXUAL irregularities and disorders in the female—Self-abuse more frequent amongst girls than boys—Nervous disorders attributable to secret vices—Irritation and hypertrophy of the clitoris—Means for its radical cure, by the destruction of the sensibility of the clitoris—Effect of this baneful habit on the womb—Self-abuse amongst even married women—Treatment—Peculiar influences of the habit, and its effects.

I HAVE, in the body of the work confined myself to the sexual irregularities of the male, but it is necessary also to glance—if I do nothing more—at similar improprieties and disorders in the female.

As Dr. Copland remarks, the habit of self-abuse is even more frequent amongst girls than amongst boys, and this is a point to which I call the attention of those who have the care of girls, whether schoolmistresses or mothers.

The vast variety of nervous disorders to which young girls are subject is to be attributed in a great degree to the practice of the secret vice of selfexcitation.

It is often extremely difficult to get at the facts of the case, so completely is it surrounded in English society by the barriers that prevent approach for its detection. In France and on the Continent generally,

there is not quite such difficulty. Point-blank questions are permitted, and there is not the same diffidence in admitting the facts, hence, there is a much more ready access to the physiology and pathology of the habit.

Although I have frequently so much difficulty in getting at the truth, still where I have been able to extract it, I have found that all the catalogue of headaches, neuralgias, hysterics, and menstrual irregularities, were directly attributable to this practice of self-abuse.

From these cases I have been able to make a tolerably correct diagnosis in others, and account for most of the symptoms present, although I could not elicit the confession that I indirectly sought in reference to the vice presumed to exist. The comparative analysis has been, however, very often sufficient to convince me that the sufferer had indulged in the imprudent course referred to.

The habit—arising out of irritation and hypertrophy of the clitoris*—when once formed in the female, is

* "Enlargement of the clitoris, sometimes accompanied by a degree of induration approaching that of cartilage, at others by a relaxed flabby state of its tissues, and always attended by a high abnormal irritability, is a condition of more frequent occurrence, I believe, than most medical men suspect, and is, for the most part, brought on by self-abuse. The deplorable effects of this baneful habit, both in the physical and mental health, have been less considered in the case of females than of men, and yet they are of equal gravity, and probably as prevalent. Its radical cure, moreover, is fortunately in our hands, for we can readily destroy the sensibility of the clitoris, and its capability for irritation. Longcontinued irritation of the clitoris figures among the causes of sterility, for besides its constitutional effects, it acts locally on the

known to be continued even in married life. Instances of it have come under my notice, as well as that of others.

One case occurs to me as strikingly illustrative, in which a gentleman consulted me as to his wife, who, although she had given birth to one child, objected emphatically to physical union, although he knew that she indulged in what he considered the monomania of self-abuse, which habit he had reason to believe she had indulged in ever since leaving school.

She suffered much from ovaritis, and from neuralgia of the womb, for which I treated her, also from an almost continual headache.

The husband consulted me in order to obtain my opinion, whether there was any remedy for the painful circumstances which embittered his life.

I informed him that nothing but an entire abandonment of the habit could either restore her health, or induce the consideration for her husband which he desired. How to obtain this was the chief difficulty.

I instructed him how to address himself to the exigencies of the case, and left it to the influence of time and opportunity.

A few months afterwards the lady herself called upon me, and at once, without any interrogation,

functions of the womb much in the same way, we may presume, as excessive venery.

"The necessity for the excision or amputation of the clitoris, when much enlarged, has been recognised by surgeons generally; but I would go further and say, that this operation should be resorted to in all cases where that organ is found in an abnormal state."—(Bake Brown, F.R.C.S., Surgical Diseases of Women.)

plunged in media res, and gave me a distinct and concise history of her infatuation, from the time of her acquiring the habit referred to at school.

She had become aware of the dangers consequent upon its continuance, and had determined, although it was confirmed and powerful, to abandon it. She also wished to be aided by suitable medical advice. By careful hygienic treatment, and appropriate medication, she was enabled to accomplish her purpose; her health was restored, and the marital relations became satisfactory to both parties.

I have given this case, because of its value as a marked and unusual illustration of the ascendancy which the vice of self-pollution gains over the female as well as the male.

I could adduce more, containing characteristic circumstances of a most singular nature, but a popular work is scarcely the proper channel for disclosing them. They would, however—if it were prudent to insert them—be valuable guides for detecting the several modes of abuse indulged in at schools.

I cannot, however, do more than throw out hints to parents and schoolmistresses to be always watchful against a most serious practice, that is—according to the most eminent authorities—very common amongst the girls who are reaching puberty.

One of its peculiar influences is, that it often acts as a deterrent rather than an incentive to marriage, and females addicted to the habit have stated to me, as well as to other practitioners with whom I have

conversed on the subject, that they have no inclination whatever for marriage.

It appears to be destructive—at least in some cases —of the higher impulses and emotions of woman, and so completely enslaves, that she can with difficulty shake it off, even when she has taken upon herself the duties and responsibilities of married life.

The uniform statement of those who indulge in this habit is, that they suffer much from debility. They all admit that "it is very weakening."

Disorders of the head and uterus are the most common ailments which follow, and they are generally very intractable, so long as the practice is indulged in; hence the consequences are sufficient to warn the patient and her friends that it must be abandoned.

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