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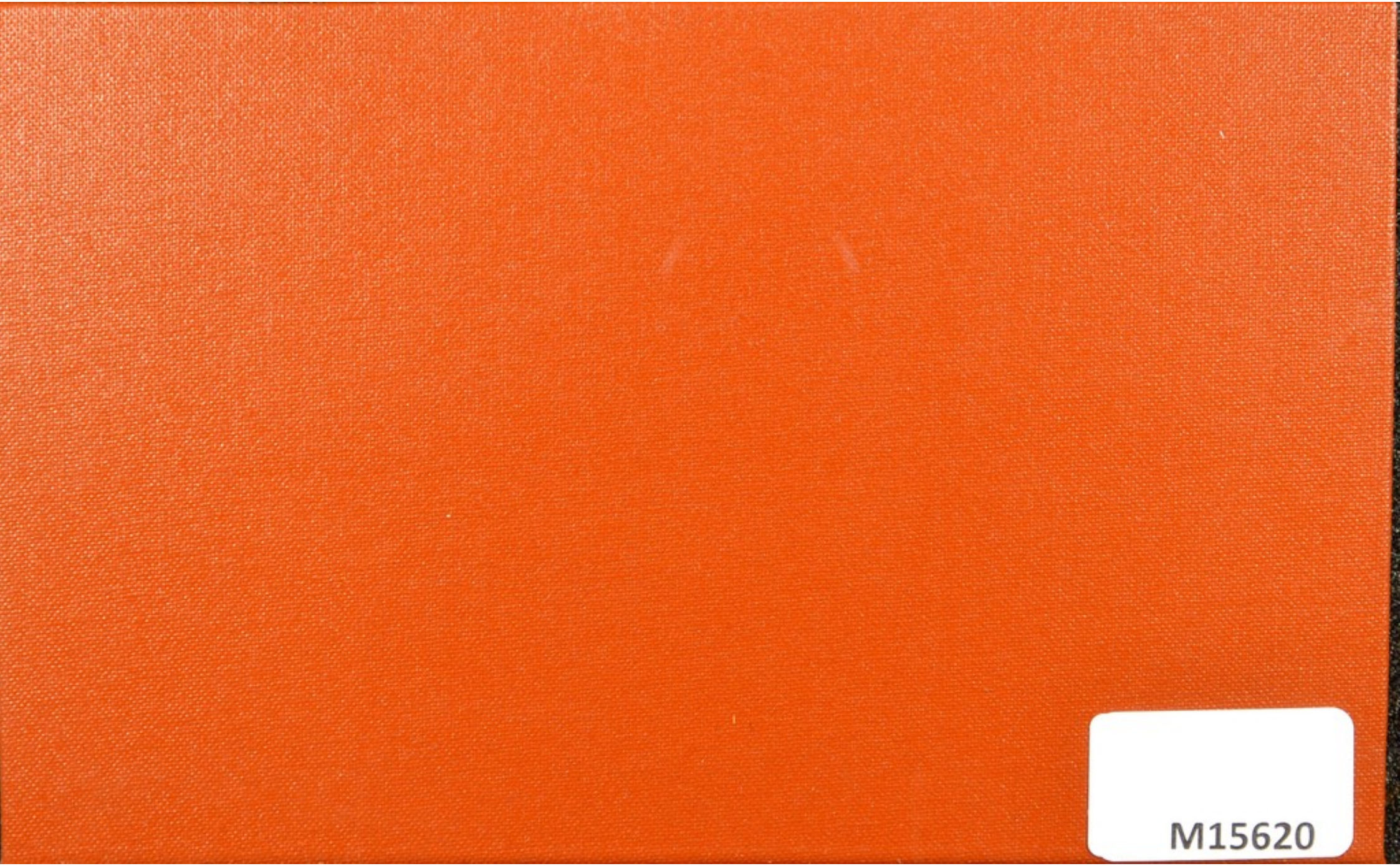
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Dr. John [illegible]

[187—?]

PREFACE.

THERE are very few authors who, in making their debût before the public, do not offer, by way of propitiation, some apology for their intrusion on its notice; and many of the most gifted men who have ever pointed a moral or adorned a tale, have felt themselves constrained to do homage at the shrine of public opinion, and woo that capricious indefinable entity for favours they were never destined to win. Some there are, whose overweening vanity leads them headlong into print, and who, paying the inevitable penalty of their temerity, are painfully reminded that "fools rush in where angels fear to tread." Others, of more modest mien and less ambitious flight, but of infinitely greater merit, and who may be aptly styled the industrious pioneers of knowledge, steering a middle course, and aiming only to be useful and instructive, in their turn find their only guerdon in an approving conscience, and in the conviction that they have endeavoured to fulfil the end for which they were created, in making men wiser than they were before; they too—ay, even the majesty of genius itself—must

bear the whips and scorns of public censorship, and writhe beneath the scathing comment of the merciless reviewer, or the probings and lacerations of the literary anatomist in search of a fault, who, if he wound in nothing else, is sure to mutilate his subject, and leave the curtain to fall in darkness visible on his performance, without even according our author's obsequies the rites of decent interment.

Well, this is a sad state of things, and says very little for our philanthropy ; but there is, after all, some consolation to be found in the fact, that in the individual, as in the mass of mankind, there is, in the midst of all his failings and shortcomings, enough of moral worth, energy, and courage, to brave the pelting of this pitiless tribunal, for the sake of truth, the love of our common humanity, and the promotion of knowledge, for the advancement of social happiness, and the benefit of mankind.

I may, perhaps, be pardoned for this little homily on authors in difficulty, as my own turn has come, and as I stand very much in need of the kind consideration of my readers, not only for the reasons I have just adduced, but because, in introducing to the public the subject of Spermatorrhœa, I trespass on the dominion of medical orthodoxy, hitherto so strictly preserved, and the sanctity of which would appear a high crime or misdemeanour for a moment to question.

I am fully aware, too, that I tread upon a very dangerous and a very thorny path, beset with difficulties of no ordinary magnitude, difficulties not inherent in the subject, not springing from the ordinary source whence difficulties arise, but from the morbid sentimentality, the *mauvaise honté* of society at large—the false delicacy and impure coyness with which such subjects are received by the public, who will not, for the soul of it, even for once, throw aside the veil of prudery which shrouds the subject in impenetrable mystery and utter darkness, and treat it as one deserving of that calm, dispassionate, and philosophical investigation, which all other subjects interesting to the well-being of man, and totally affecting the *mens sana in corpore sano*, are deemed worthy of being treated.

That this should be the state of public feeling, in relation to this matter, cannot but be deplored by all right-thinking men—by all who love truth for its own sake, and who would disdain to lend a hand to stifle in its birth, merely because the morbid state of society demands the sacrifice, a subject of such vital moment to the physical and, as a legitimate consequence, to the mental condition of our fellow-creatures.

For myself, as a very humble individual, I share largely in this regret; and I am free to confess, and to the shame of those who have as yet approached the subject be it said, that there is another cause which operates in retarding and obstructing the

free but decorous expression of opinion on the subject of spermatorrhœa, emanating from the fact, that it has been handled in a strain and manner wholly unfitting the occasion, and in language better suited to cloy the prurient appetites of the depraved who batten on such vile trash, than to raise it to the position of a subject worthy of physiological enquiry, which it shall be my humble aim, and I would fain hope not altogether unsuccessful task, to essay.

In this effort I am the more encouraged and sustained, when I reflect, that it is a consequence and not a cause of the state of society, of which I complain; for it follows indisputably, that so long as society repels your advances to discuss the matter in a firm and wholesome tone of thought and expression, so long will it remain in the grovelling condition in which we now find it. Yet discussed it will be, in spite of us; but it will be found rankling and festering in its own pollution on the shelves of the bookseller west of St. Clement Danes, and not in the library of the gentleman and the scholar.

And now let us ask ourselves, for a moment, why this should be; or why it should continue for one hour longer? Wherever we turn in our enquiry, we are furnished with unquestionable evidence of its purely artificial and unreal existence. Let us ask ourselves whether the exposition of a Venus de Medici or an Apollo Belvedère, nude and unveiled

though they may be, before the eyes of millions in the emporium of art all over the civilized world, corrupts the heart and ministers to the sensual gratification of the beholder, or whether those gentle strokes of art do not chasten the taste, elevate the thought, and wring even from the unwilling purist his admiration of the genius that could achieve such excellence, and so hold the mirror up to nature, as to make the soul itself breathe through inanimate marble? Or let us again, in our own happy land, lounge through our temples of art or our Palace of Crystal, watch the inward monitor as he peers through his own chosen beacon, or plays on the face of the delighted visitor, and you will perceive that, instead of a lustful gratification, you have a pure reflective pleasure abiding there in thoughtful repose; and this must ever be the case, for to the pure mind all things are pure, and even to the depraved there is so much beauty, so much poetry, so much human excellence before his eyes, as to banish the first promptings of indelicacy, to impart a pure enjoyment, and to discipline the mind in the exercise of a chastened reflection.

But, still more, let us appeal to the fact, that, throughout the length and breadth of the land we live in, are to be found, in the boudoirs of the fair matrons of England, such works as those of Buchan, of Graham, and of Reece, as household guides, upon the subject of domestic medicine. In

those works are freely and boldly discussed all the ills that flesh is heir to, and among them that upon which I propose to enter, and I believe it will not, it dare not, with a shadow of truth be said, that impurity as a result has ever found its way to the domestic hearth.

Having now said so much for the faith that is in me, and my title to a hearing under the restraints and conditions to which I have adverted, it is time I should give a prefatory remark or passing glance at the mode in which I mean to treat the subject of Spermatorrhœa. I mean to treat it as a disease of the blood, which, apart from the general interest with which the subject is invested, will, at all events, command the merit of novelty. Hitherto, for the reasons already adduced, it has not met with favour from the medical world; but it is a bitter reflection, that the penalty of such wilful apathy, such false and spurious delicacy, recoils with fearfully retributive vengeance, and eloquently points to the cancer that is eating into and corroding the very heart of society.

Let it be my humble task, then, to enter on a full, free, and becoming consideration of this malady, in a tone and language suitable to the occasion, to throw aside the veil which has so long shrouded this vital subject in obscurity, or consigned it to the ignominious keeping of the charlatan; and if I but succeed in paving the way

to the discussion of it by men more able and more competent than myself to do it the justice it deserves, and thereby, even in the least degree, contribute my mite to the measure of human happiness, I shall have my reward. For we must never forget the maxim of Duclos, "L'auteur d'un bienfait est celui qui en reçoit les plus doux fruits."

INTRODUCTION.

THE nature and treatment of Spermatorrhœa is a subject which has been almost entirely neglected by the medical profession of this country; and to the educated practitioner it is an uninviting one, more especially when we consider the fastidiousness of the English taste; and hence very few of our writers have deigned to notice this disease, or its alarming attendants. Indeed, in Dr. Bird's work on Urinary Deposits, although he admits spermatozoa to be frequently found in the urine, yet he considers Spermatorrhœa by no means deserving the importance attached to it, and adds—

"It certainly is not very consistent with our national character to dilate so freely on a subject that can be treated of only as the effects of the most degrading vice."

Hippocrates, in speaking of this disease, says—

"Dorsal consumption arises from the medulla. It affects chiefly newly married people and libertines. They are free from fever, and eat well;

but they *lose flesh.* If you question them, they say they feel a sensation as of ants descending from the head to the back. When they pass water or go to stool, they pass *much fluid semen,* and generation does not take place. They have discharges during their dreams, whether they sleep with a female or not. On walking or running—especially if ascending, they experience suffocation, debility, weight in the head, and noise in the ears."

It is thus evident that this original writer was not only aware of this disease, but even noted its peculiarities.

Rufus of Ephesus states that—

"Nocturnal emissions disorder men more than coitus, because, when a pollution happens to a man oppressed with sleep, and his powers asleep, it more oppresses and more affects that man."

Tissot, who practised at Lausanne, was the first who devoted a special work to the subject of abuse of the genital organs. He confines his observations to masturbation, the result of which he states to be—

"Total derangement of the stomach, weakness of the respiratory organs, whence frequently result coughs, always weakness of the voice, and a sense of suffocation on slight exertion, general relaxation of the nervous system, and great debility of the organs of generation, almost all experiencing only imperfect erections, inasmuch as the semen escapes as soon as the erection commences. Nocturnal emis-

sions are a terrible scourge to them, and often overwhelm even those whose organs are absolutely senseless when they are awake. When these patients have had nocturnal emissions, they find themselves the next day in a state of depression, discouragement, debility, *ennui*, misery, lassitude, with pain, especially in the loins, head, and eyes, rendering them truly miserable, and so changed as to be scarcely recognised."

In the year 1836, *Lallemand*, a surgeon of great reputation, published an elaborate essay on involuntary seminal discharges. He investigated the causes of this malady, pointed out its consequences, and discovered a mode of relief. By the application of the microscope, he showed how the presence of the disease might be detected in doubtful cases, how often it was present without the knowledge of the patient or medical attendant, and gave evidence that many affections of the nervous class, which are frequently misconstrued by the medical practitioner, depended *solely* on this cause.

Since this great writer, many essays and researches have appeared on Spermatorrhœa, but in none can I find any other than the views held by Lallemand, and to these nothing has been added; a proof of the culpable negligence manifested by the profession in the investigation of this malady, it being twenty-two years since Lallemand published his first work, from which period to the present no writer has advanced the subject further than done

by himself. We trust, however, we shall clearly demonstrate that this disease is *one of the blood*, and that by the treatment hereinafter prescribed admits of a positive and permanent cure, so far as human skill has been able to attest its beneficial effects.

AN ESSAY,

&c., &c.

BEFORE entering on the proof of the subject proposed, we may premise that we mean by the term Spermatorrhœa, an emission of spermatic fluid taking place without the will of the patient, and at such short intervals as to produce the local and constitutional symptoms to be spoken of presently. In addition to this, the fluid should contain spermatozoa.

The seminal fluid secreted by the testicle is one of those secretions in which a process of development is continued after its formation by the secreting cells, and its discharge from them into the tubes. The principal part of this development consists in the formation of the peculiar bodies named *Seminal filaments* or spermatozoa, the complete development of which, in their full proportion and number, is not achieved until the semen has reached or has for some time lain in the vesiculæ seminales. Early after its first secretion the semen

contains none of these bodies, but granules or corpuscles (seminal corpuscles), like large *nuclei*, enclosed within parent cells. Respecting the purpose served by 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 sometimes been regarded as highly organised, and, in some sense or other, the materials or organs out of which the new creature is begun. By others, they are considered as a kind of parasitic *animalcules*. That spermatozoa are essential elements of spermatic fluid has been reasonably inferred from several circumstances; such as their absence in hybrid animals, which are nearly or entirely sterile. Regarding the uses of the other constituents of semen, little that is certain can be said, and no sufficient account has yet been given; but, according to Donne, the spermatozoa will live in *blood*, milk, or mucous.

Having endeavoured to give a clear and definite idea of Spermatorrhœa, the symptoms of which we are about to describe, we now come to the demonstration of its nature and curability by the means proposed, and, in order to do so, we must recur to the blood, which is a compound of all the matters in a liquid state that constitute an animal body. When we examine with a microscope the compound flowing through its vessels in the tail of a tadpole or the web of a frog's foot, we see that it contains a

great number of small bodies called globules from their peculiar shape, and corpuscles from their size, which Lecanu has ascertained to be composed of three distinct substances—namely, albumen, film, and hœmatozoa, and the latter not to exceed one-thirtieth part of the whole body. These elliptical shaped bodies, hitherto named blood corpuscles, seem to possess motor power like an animated body. They certainly pass and appear to swim in the current of the *liquor sanguinis*, through the vasa vasorum, with different degrees of velocity. When viewed sideways, the body has the shape of a weaver's shuttle, with a dark line extending from a little below the head to the tail, with a transparent area on each side like the segment of a circle. These observations lead to the conclusion, that the small elliptical-shaped bodies in the blood are *animalculæ* of a peculiar kind, and instead of naming them *blood corpuscles* from the size, or blood globules from their shape, we have designated them

HŒMATOZOA.

The hœmatozoa are unquestionably organised, hence generated beings; and all generated bodies seem to be due to the special function of the sexual organs. In the *liquor sanguinis* no such organs can exist: nevertheless, the generation of

hœmatozoa in that fluid is not an impossibility, for we find that in a fecundated egg the vital entity, though invisible before the commencement of incubation, is perfectly organised from the earliest period of its existence. This entity is the result of sexual intercourse, and its oriferous abode merely conditional. With the aid of blood heat it shoots out a root to enable it to grow, and soon becomes an animal having hœmatozoa in its blood, exactly the same as those in the blood of the male parent. These hœmatozoa can ONLY be generated from the same cause, and in the same manner as the vital entity itself, of which they constitute an essential part; for in generation the *producing* cause is propagated with the produced *effect*, and this effect is as perfect in all its elements as the producing animal.

The hœmatozoa increase and decrease in number in a ratio with the growth and decay of the body; in the first decimal of years they are exactly doubled in number; in the second their numbers are nearly doubled again; and in the third (the most fertile period of life) they reach their maximum number; and in the fourth decimal they begin to decrease, when the downhill of life commences. From this statement it is obvious that the hœmatozoa must be frequently generating and dying: consequently have but a transitory existence; for all animalculæ that pass rapidly through their various stages of development live but a very

short time. But their generating power must be very great. It likewise appears that the blood must contain two matters—nutritious and excrementitious; and that so long as the excrementitious is duly emitted by the exhalant vessels, and the nutritious sustained by a regular supply from the thoracic duct, the hœmatozoa will be generated and preserved in sufficient numbers, and the blood will be in a condition to sustain the vital functions.

The hœmatozoa exist in the blood of all animals, and are different in form, structure, and size in different kinds of animals. When they are moving in single or double files the blood has little or no colour. This seems to imply that the blood has conditional as well as inherent properties. Their peculiar refractive and motor powers indicate that they have important electrical and physical properties. Their analysis proves that they contain iron; a metal which, through the mere arrangement and positions of its atoms, acquires electro-magnetic properties. They are the largest and only organised bodies in the blood, and are associated not only with its momentum, but with the most important functions of life, for it has been ascertained that the corpuscles (hœmatozoa), are greater in the blood of men than women, and that the proportion of water in the blood of women is greater than of men; and that heat applied to any side of a thermo-voltaic circuit, causes the galvanometer to

be strongly deflected by the heated side becoming electro-negative. These phenomena lead to a solution of the problem regarding the cause of sexual attraction, and likewise the issues of the married state.

We think it scarcely admits of doubt that the most important bodies in the blood are the hœmatozoa, without which the blood, however zoic it may be, has no *generative* or *reproducing* power, and we therefore consider that these bodies become changed into spermatozoa when passing through the spermatic vessels *during coition.* In the animal economy every glandular organ and exhalant vessel is merely a *via,* which nature has provided and endowed with special properties for the removal of corresponding properties from the blood, and the blood can only give off a something existing in it. No gland can therefore generate bodies endowed with the power of growing and unfolding the same structures as the entire animal from the matter which it receives merely for conveyance to another vehicle. The structure of a gland and the fluids which pass through its excretory ducts bear no relation to one another. The *virility* of an animal depends upon the condition of the generative organs; but the latter may be extirpated without being destructive to life.

In coition, the condition of the testes, and the numerous convolutions of the spermatic arteries,

indicate that the momentum of the blood must be progressively diminished in its progress through them, and that the emitted matters must be duly separated from the blood before they pass into the seminal tubes. In these matters living organised bodies are seen to exist. The hœmatozoa and spermatozoa have the same form in the same animal, and both have different forms in different classes of animals. In man, both have an elliptical shape; *both* unfold the same phenomena. The only apparent difference between the two kinds of bodies seems to be due to the condition of their respective motor powers, which is less energetic and independent in the blood than in the seminal zoa; for the hœmatozoa cannot retain their vitality a moment after their removal from their respective vessels; whereas the spermatozoa can live and sustain their motor power for some time after their exposure to external influence. These observations fully prove that the hœmatozoa of the blood and spermatozoa of the semen are merely the primary and secondary stages of the same being.

But this conclusion, it may be urged, is apparently at variance with the structure of the testes; for the spermatic arteries, like the arteries in other parts of the body, terminate by anastomising with the corresponding veins, and forming a closed system of vessels. That the arteries have no demonstrable communication with the seminal tubes; conse-

quently, whatever passes from the arteries to the tubes is by exosmose and endosmose; that the matter in the vesiculæ seminales is colourless, and in its properties different from blood, and that hœmatozoa cannot pass from their containing vessels into those of a different kind, without carrying the colour of the blood along with them. To these objections we reply, that although no communication has yet been traced between the spermatic arteries and the seminal tubes, that circumstance does not prove its *non*-existence; that exosmose and endosmose are applicable to the phenomenon, generation; they imply the pre-existence of an embryo in the seminal vesicles, the vitality of which is a necessary condition; that exosmose and endosmose are peculiar actions; that in these actions the fluid matter undergoes no change; that the matter which passes from the spermatic arteries, and is received into the seminal tubes has special properties; that these properties could not be sustained if the emitted matter did not pass through tubes possessing corresponding endowments; that the functions of these connecting tubes depend upon sexual excitement; that when this occurs, the testicles are drawn up and squeezed against the external abdominal rings, and the momentum of the blood is, at the same time, increased; that in sexual intercourse, the seminal tubes must act upon the spermatic arteries in the same manner as the fallopian tubes upon ovaries,

for nature has but one law and one mode of action in all her operations; that in this condition, hœmatozoa are attracted by and conveyed to the seminal vesicles from the spermatic arteries, and in their passage, beyond all doubt, are changed into

SPERMATOZOA.

It is contrary to all analogy to assume that spermatozoa are generated in the vesiculæ of the testes, from a fluid conveyed to them by endosmose, merely because we have hitherto failed in demonstrating the connecting link between the spermatic arteries and the seminal tubes. We cannot trace the connecting link between the fimibria of the fallopian tubes and the ovaries; but we know by experiment that in coition they intimately embrace each other. But the assumption inverts cause and effect; for, in endosmose, the presence of spermatozoa in the seminal vessels is the antecedent condition: it does more than this, for it implies that a simple flimsy vesicle in the testes is endowed with the power of imbibing, changing, and converting a liquid compound into a body, having the primitive form and organization, and possessing, *in potentia*, all the constitutional properties and qualities of the parent animal without even the existence of sexual influence, which we know by experience is not the case. Do not the effects resulting from

the extirpation of the testes indicate that they attract and receive from the blood a something, the presence of which produces no inconvenience or injury to the animal economy? Does not the condition of the blood during the fertile period of life point out the nature of that something? In the generation of being, the blood can only part with a something formed in its pristine condition; that something is an organised body, and the ONLY organised bodies in the blood are the hœmatozoa.

Although the blood is a passive liquid, it is incessantly undergoing changes, many of which seem to be due to the functions of the hœmatozoa, but we cannot discover by experiment how these changes are produced. From what is stated by Denis upon the amount of the different constituents in the blood at different periods of life, it appears that the hœmatozoa do not produce any change on the relative qualities of salts, &c., in it, but they seem to have some influence over its other constituents, the albumen, fibrine, and water in particular: we have in the microscopical examination and chemical analysis of a great many samples of urine from patients afflicted with Spermatorrhœa, invariably detected fibrine, urea, uric acid, and bile being always accompanied with Spermatozoa, in a more or less diseased condition; and these circumstances justify the assumption that the hœmatozoa digest the albumen, &c., and reduce a

portion of the water in the blood which they imbibe to the elementary state, by electrolysis, hence supply digested albumen and other matters as well as oxygen and hydrogen to it, at the expense of the albumen, fibrine, and water it contains. The blood has no colour before the hœmatozoa arrive at a particular stage of development. We believe they at this stage secrete and emit an acid which combines with the hydrogen of the electrolyzed water of the blood and produces a red colour. This assumption is strengthened by what we see in the web of a frog's foot and by the following phenomena:—No fœtus *in utero* has the power of receiving or digesting food of any kind. Its stomach is functionless; nevertheless its intestines contain meconium; its gall-bladder, bile; and its urinary bladder, urine, in exact accordance with its nature. The nature of an animal's food produces no change in the constituents of its chyle, and chyle supplies the blood with all its proximate elements except ozone. The constituents of the blood are therefore identical in various kinds of animals. The same remarks are applicable to the vascular system, but notwithstanding this similarity in the blood constituents, and in the vascular systems, every kind of animal produces secretions different from every other kind, and the only difference in the blood of the different animals is in the form, structure, and size of their hœmatozoa.

According to these statements, which we contend are correct, all matters existing in blood, and not in chyle, except ozone, must be due to the functions of the hœmatozoa. As already stated, the blood is composed of two kinds of matter—nutritious and excrementitious; but its excess of water must dilute, changed by electrolysis, and to a certain extent modify every kind of excrementitious matter it contains, by inducing the different exhalant vessels and glands to attract, imbibe, and act as parts for its removal. These organs do not seem to secrete, as hitherto supposed, but to separate from the blood the matters which they emit; for when the kidneys are extirpated, urea is found in so large a proportion in the blood that its detection is accomplished with comparative ease, and this substance has never yet been observed in any great quantity in healthy blood. Urea is entirely an animal product, and the ONLY animals capable of producing it in the blood are the hœmatozoa; and we have thus a problem to the aching pains in the loins so frequently described by sufferers from this malady, but hitherto not sufficiently accounted for.

We shall classify this disease under three heads: *Nocturnal Pollutions*, *Diurnal Pollutions*, and *Imperfect Secretion* of Semen.

NOCTURNAL POLLUTIONS.

The involuntary emissions that take place during sleep are easily ascertained; but it is not always so easy to appreciate the degree of importance to be attached to them, because they are not all equally injurious. Lallemand says, "When nocturnal emissions are followed by a general feeling of comfort, the head becomes clear, the ideas more rapid, and the motions more nimble; there is more inclination to amusement and every kind of occupation." He admits nocturnal emissions do not often produce such good effects, and the excitement is too violent to last long. By degrees the organs become fatigued; and, consequently, being unstrengthened by regular exercise, they may at last fall into a state of atony, or the seminal vesicles may preserve the habit of contracting under the influence of slight or indirect excitement. The evacuations now produce effects quite opposite to those experienced in the beginning; there are on waking feelings of discontent, weight in the head, indolence, and disorder of the ideas, which ultimately become severe, and the health permanently disordered: these are the usual symptoms of the first stage brought on by self-abuse; but in some the loss

of semen soon produces serious affections, and the disease rapidly progresses. The emissions occur without pleasure and, indeed, without any peculiar sensation. They become thin and watery, and the excitement is kept up by the vesiculæ seminales, causing a total prostration of both mental and physical faculties.

It is generally believed that erotic dreams excite nightly discharges, and they are consequently considered very dangerous; but the lascivious images that present themselves during sleep arise from excitement in the genital organs in the same way as the erections and the contraction of the seminal vesicles; these phenomena coincide; they arise from the same cause, but one does not depend on the other.

Two kinds of these dreams may occur: the one arising from true spermatic plethora, and presenting pleasant images unmixed with any disagreeable sensation; the other, excited by irritation of the organs, and mingled with filthy or disgusting ideas. After a time, too, these dreams may degenerate into true nightmare, accompanied with terrible sensations and difficulty of respiration, and, in the midst of agitation, an emission takes place, unaccompanied by any lascivious idea or voluptuous sensation.

DIURNAL POLLUTIONS.

These are distinguished from nocturnal ones by their taking place during the waking state, and may be divided under two heads—those that occur during the voiding of urine, and during defecation.

The diurnal pollutions that take place during defecation are more easily discovered than those passing in the urine. Under certain exciting circumstances, an healthy individual may be subject to diurnal pollutions, but then they have no ill effects on the system, and nature soon repairs the loss. On the contrary, if they arise from long continued masturbation or badly treated Spermatorrhœa, they generally dwindle into a serious and intractable form of the disease before detection. The testicles are lax and pendulous, the seminal vessels inflamed, the evacuations weakening, constipation severe, and the urine becomes altered in its colour, deposit, and smell.

Seminal discharges, that take place during the emission of urine, are the most serious and obstinate of all, because they are most often and most easily repeated. They are also very obscure on account of the alteration the semen undergoes and of its mixture with the urine, which

generally, under the microscope, bear the following characters:—

In recent cases, we notice little granules rolling about at the bottom of the glass or vessel; these are of a variable size, semi-transparent, singularly spherical, and very similar to grains of tapioca. It is impossible to mistake these bodies for any of the urinary salts, because they appear before the urine is cold, and are soft, and they never adhere to the sides of the glass. On the other hand, neither the urethra, prostate gland, nor the bladder or kidneys furnish similar bodies, more especially when the urine is transparent. These granulations come from the vesiculæ seminales, and always attend this form of Spermatorrhœa. In cases which have lasted some time, granular bodies disappear from the bottom of the glass, and are seen in transparent urine as a thick flocculent homogenous white cloud in the form of multitudes of brilliant points, quite characteristic.* They are found neither in vesicle mucous nor in prostatic fluid, which are the only ones that could be mistaken for diurnal pollutions. The presence of these betoken spermatic discharges, which we have invaribly verified by the microscope. Spermatozoa, however, will not be found with them; they must be looked for in the lower strata of the

* We have seen a considerable number of cases of diurnal pollutions, and consider they are the most frequent form of this disease; hence the very little aid gained from the general treatment of those unable to diagnosticate this form of Spermatorrhœa.

fluid; these appearances will be most evident in the morning when the night has been restless, or in the daytime when nervous excitement has come on or the digestion is impaired. We have collected numbers of cases where patients have been treated for a variety of complaints, such as nervousness, palpitations, and indigestion, whilst labouring under diurnal pollutions; thus, masturbation sows the seeds of physical deterioration, and the evils early inflicted on the flesh fail not to grow up, and ultimately retaliate with interest on the spirit.

IMPERFECT SECRETION OF SEMEN—IMPOTENCE.

This is the most severe form of this disease, and appears under a variety of symptoms, sometimes attended with severe gastric irritation, and at others with inflammation of the vesiculæ seminales, bladder, and spermatic ducts; the penis is generally shrivelled up, cold, and erections incomplete. Sexual intercourse at this stage is considerably impaired, for the least excitement is sufficient to cause an emission of semen, which, on examination, will be found to be thin and watery, losing its healthy consistence and smell, and be deficient in spermatozoa; in addition, we find the general health suffering, the disposition to intellectual employment almost lost or greatly impaired. Exercise becomes a

toil, society is spurned, and the company of females is particularly avoided, which arises in a great measure from the patient thinking himself impotent, or having found the impossibility of an erection taking place when sexual intercourse has been attempted. At the same time that the sensation becomes weakened, erections are less complete and prolonged, ejaculation is more rapid—in fact, it becomes so precipitate, that in many instances intromission cannot take place—the act, in regard to duration, is almost reduced to nothing; and the same may be said of the other phenomena—it consists of a simple execution of defective semen, which is less abundant, transparent, without smell or taste, and incapable of fecundation. Other sufferers experience different symptoms, the penis shrinks towards the pubis, in consequence of the pain that extends from the neck of the bladder to the glands; the passage over a very irritable part of the canal causes spasmodic contractions, into which the sphincters and seminal vesicles soon enter; different sensations announce the occurrence of a pollution, sometimes it is a sense of heat at the margin of the anus, sometimes a shiver or general uneasiness, and occasionally a darting pain in the nipple. Those accustomed to these particular occurrences, well know that they will find a deposit of flocculent matter in the urine after experiencing them.

At a later period dysuria comes on, occasionally

attended with hœmaturia, and the semen may contain streaks of blood; the irritation may extend to the prostate or the margin of the anus, and a feeling of weight is felt in the perineum and rectum, accompanied with spasmodic constriction of the sphinctus, which produces constipation; the spermatic cords and testicles become sensitive, and require the support of a suspensory bandage.

IMPOTENCE is an absolute cause of infecundity, because it prevents the conditions necessary to fecundation from taking place; but, although the act of coitus may be accomplished, it does not follow that the person should always be able to perpetuate his species. Stricture of the urethra may prove an obstacle to the discharge of the seminal fluid, or the fluid may be directed towards the bladder or parietus of the urethra. By deviation of the orifices of the ejaculatory ducts the secretion may be altered in its nature; it may only contain imperfect spermatozoa; a man may, therefore, be unfruitful without being impotent: but, in all stages of spermatorrhœa, many causes occur to render coitus unfruitful: ejaculation is weak and precipitate, so that the seminal fluid cannot be thrown into the cavity of the uterus, for it is not sufficient, in order to fecundate, simply to spread the fluid on the vagina; it must be projected with sufficient force to pass through the orifices of the uterine neck. Besides, in these cases, the erections —even when they permit sexual intercourse—are

incomplete and of very short duration. Emission takes places without energy and very soon, so that, during such rapid acts, the uterus and fallopian tubes have not sufficient time necessary to carry the semen to its destination even when it passes the neck of the uterus.

Nor is this all; the semen itself undergoes great changes, to which, perhaps, the loss of the fecundating power is chiefly attributable. Microscopic researches have elucidated this formerly obscure subject. We have discovered, for instance, that the spermatozoa undergo changes similar to those of the fluid which serves as their vehicle; these changes are exceedingly important, and are owing to defective formation. Spermatozoa may be met with in a less thick and less opaque fluid than natural, for they are not produced by the same parts or in the same manner; but when the secretion is exceedingly thin and watery, the functions are so seriously affected that the spermatozoa are altered; they are less developed, less opaque, and less active than natural—indeed, they are so transparent that peculiar precautions are necessary in order to make sure of seeing them; their motions are weak, slow, and cease very soon; and they rapidly undergo decomposition.

All these characteristics show how much and how imperfectly they are organised.

It will, therefore, be seen that marriage, so far from having any tendency to relieve the sufferer

(as advanced by several authors), will probably aggravate the disease and render both miserable; although we have no doubt that in slight cases marriage, by regularly exercising the organs, will alone give them energy and tone. But when ought we to permit them? when recommend them? Man feels a desire for the esteem of his fellow-creatures, and particularly for that of the female whose protector he naturally is; it is in her society that he is proud of his physical power, of his intellectual superiority, and of his social position. But, above all things, he is anxious to prove to her his possession of the virile power, and those men who are the worst provided in this respect are generally the very ones most fearful of allowing their feebleness to appear. Now, in order to enjoy sexual intercourse, three acts must be combined:

1st. *Erection of the penis.*

2nd. *A due amount of well-formed semen in the vesiculæ seminales.*

3rd. *The power of ejaculation.*

The sufferer from every stage of spermatorrhœa is weakened in those actions which depend almost wholly upon the presence of duly organised semen in the vesiculæ seminales. In the first place stands, want of power of erection.

The continually flaccid state of the penis depends on many causes; amongst the most prominent is the deficiency of well-formed semen, which promotes the normal act of connection, by exciting a natural

irritation, which is conducted to the spinal cord, and, thence reflected, excites the successive and co-ordinate contractions of the muscular fibres of the vas deferentia and vesiculæ seminales, and of the bubo cavernosi and other muscles of the urethra, when forcible expulsion of semen takes place. It will be thus seen that the only cure for infecundity is in the formation of healthy semen.

It is unfortunately the case that newly married persons (healthy) give themselves up, without regarding the consequences, to the impetuosity of their temperament, and often indulge in connections that do not proceed from true passion, and are not based on the requirements of nature; the immediate results of these intercourses act as a powerful exhausting influence on the nervous system, prostrating, as it were, every energy, and nature sinks exhausted for a time; but then these are not permanently injurious, for she soon repairs her loss, the consequences readily disappear, and the organs become re-established. If, then, in an healthy individual, intercourse acts so powerfully, how much more so must it be to the sufferer from this malady, who finds that cohabitation may excite desires, but that erection will not take place? The virile organ will only assume a semi-erect state, and a little fluid may ooze out of the meatus, but connection is impossible. How pitiable must be the feelings of that man who, after a career of excess, has been injudicious enough to marry, when

the consciousness of his impotence flashes in full force upon his mind, and then he becomes aware of his inability to satisfy the claims of his bride!

In general, the moral susceptibilities increase with the weakness, and those persons who are naturally hasty become more impatient and restless; they are exacting and unjust, whilst the most trifling circumstances draw from them complaints and reproaches. When these symptoms occur after marriage, they produce an unexpected change in the character of the husband, which contributes even more than impotence to the domestic unhappiness; frequent marks of ill-humour, bitter words, and dissensions soon succeed indifference, rendering home truly wretched; such persons experience a sense of languor, discouragement, and melancholy, which impart a peculiar stamp to their character, and entirely unfit them for the active duties of life, and in many instances induce the unhappy sufferer to commit suicide; for when all the blandishments of life are gone—when health has fled, and pleasure bade its last adieu—it is then that the sufferer feels himself lost to all earthly enjoyments. He is furnished with no argument against self-destruction, except the contemplation of the pain attending the act, the stain that may attach to reputation or survivors, and the horror of annihilation corresponding with the instinctive fear of death implanted in the breast of every living creature; these being overcome, he determines to

put an end at the same time to his sufferings and his existence; and it is under such circumstances that more than one so mated has committed suicide. But until man has contracted those indissoluble ties, impotence the most complete does not compromise the fortune and happiness of any one; and it is precisely because marriage is the most sacred bond for individuals, as well as the most important for society, that it is rational as well as moral not to contract it without the certainty that it is proper.

SEMINAL FLUID.

Having given the general symptoms of Spermatorrhœa, we now proceed to consider the means by which the actual presence of semen in the urine may unequivocally be demonstrated.

Seminal fluid is formed in the body of the testicles from the *blood* supplied to the part by the spermatic arteries; it is of rather thick consistence, of bluish-white colour, and possesses a peculiar smell. It is said to be alkaline, with a degree of pungency.

It is composed of—

Water	90 parts.
Animal mucilage . . .	6 „
Phosphate lime	3 „
Soda	1 „

These component parts enter strongly into the

composition of the blood; and, in a healthy state, this fluid contains a proportion of animalculæ (as already stated) called spermatozoa, upon which depends the power of procreation. They are not unfrequently found in the semen of persons of advanced age; and hence the reason why we so often see old men, marrying with young females, have large families; their blood generates spermatozoa, which is nearly or always absent in the semen of those suffering from spermatorrhœa.

For the purposes of microscopic observation, a good and powerful achromatic instrument is absolutely necessary, and, as the spermatic animals can only be seen by means of transmitted light, the glass on which the fluid is to be examined should be covered by another extremely thin layer of glass, manufactured for this purpose, which should be perfectly transparent.

However thin the layer of fluid may be, it is impossible to comprehend its whole thickness at once, and it is therefore necessary to frequently alter the focus, in order to be certain that nothing escapes observation. This is especially important in the examination of a drop of fluid from diurnal pollutions, as there are frequently only three or four spermatozoa contained in it. In cases of disease they are exceedingly transparent, which renders it necessary to be extremely cautious in those microscopical observations of the urine, in which spermatozoa may have escaped for years without suspicion.

Hœmatozoa, and consequently spermatozoa, increase and decrease in a ratio with the growth and decay of the body; in the first decimal of years they are exactly doubled in number; in the second they are doubled again, unless at this period the patient suffers from spermatorrhœa, when they decrease rapidly, and continue to do so as long as the body remains in a diseased state; in the third, which is the most fertile period of life, they reach their maximum number; and in the fourth decimal they begin to decrease, when the downhill of life commences; and in the sixth and seventh they cease altogether.

In order to be enabled to discern spermatozoa quickly in cases of disease, it is absolutely necessary that they should be well studied in health, which is so seldom done by the general practitioner, that we have met with many who were utterly incompetent even to venture an opinion on the subject.

We have, in the recent examination of twenty samples, found in seventeen these animalculæ. They are less numerous in proportion as the patient had suffered long, and in cases of a chronic character we have generally from their transparency experienced great difficulty in their detection.

In some cases, after examining the urine for a considerable period, we have only suddenly discovered them, and in two or three cases at the moment when we were about to abandon the examination, and this fact has fully convinced us

of the great importance attached to the selection of a good instrument and exactness in bringing it to a proper focus; in cases where the urine is sometimes cloudy and at others clear, with a deposit of lithates, I have invariably detected spermatozoa; and in all cases where we have any reason to believe that semen is passed in the urine, it would require to be examined a second time should the first fail to establish the certainty of their presence. Few medical men in general practice have time to devote to such experiments, and for those who cannot, the author will be most happy to examine any sample submitted to him.

The following is a table of urinary deposits with their tests, which will greatly assist those who subject the urine to microscopical and chemical investigation :—

Lithates.

1. Deposit dirty white, yellow, red, or pink.
2. Urine of acid reaction.
3. Clarified by heat and alkalies.
4. Dissolved by nitric acid with effervescence.

Phosphates.

1. Urine alkaline, sometimes feebly acid or neutral when just voided.

2. Sediments soluble in acids, with effervescence.

3. Unaffected by heat and alkalies.

4. Phosphate lime, white, amorphous, unaffected by caustic potash; urine opaque and of high density.

5. Triple phosphate, soluble in acetic acid; urine clear and of normal density.

Oxalate Lime.

1. Urine usually neutral, at times acid.

2. Not sedimentary, but somewhat opalescent, and of pale citron or greenish hue.

3. Insoluble in acetic and warm diluted nitric acid.

4. Crystals suspended in the urine seen under the microscope.

Albumen.

1. Urine opalescent, often sedimentary, of low density, varying in tint.

2. Coagulable by heat (157° F.) and nitric acid.

3. Epithelial scales, mucous and blood discs, fibrinous casts of the urineferous tubes, and saline sediments seen under the microscope.

4. Precipitates of lithates and lithic acid by acids, redissolved by a gentle heat (70° F.): are equally well produced by muriatic and nitric acids: albumen is coagulable much more readily by the latter than by the former re-agent.

Pus.

1. "Forms a greenish yellow, creamy, and sometimes pulverulent deposit, closely resembling the phosphates, becoming mucoid and very tenacious on the addition of caustic potash."—*Babington.*

2. Coagulable by heat and nitric acid, indicating the presence of albumen as a constituent of pus.

Mucus.

1. Urine muddy, alkaline, fœtid, speedily putrefying.

2. Mucus coagulated by acetic acid, but not affected by heat or nitric acid, as is pus, nor are oil globules present.

3. Fusible phosphates, and usually in abundance, especially phosphate; lime seen very clearly under the microscope when crystallised.

Bile.

1. Colouring matter insoluble in water, but soluble in caustic potash.

2. Stains linen permanently reddish brown.

3. A green tint by muriatic and sulphuric acids.

4. Nitric acid produces a greenish tinge, soon passing to red, violet, and pink.

5. By the above tests, the colouring matter of the bile can be distinguished from vegetable colouring matters derived from food or medicine, such as logwood, rhubarb, &c., as also from colouring matters generated in disease and eliminated with the urine.

Blood.

1. Blood corpuscles seen under the microscope; if redundant, renders the urine coagulable.

2. A bright red colour, sometimes produced by the addition of common salt.

Urea.

1. Urine of high specific gravity, usually clear, and free from sediments.

2. Crystals of nitrate urea formed by the addition of an equal bulk of nitric acid, and exposed to the cold urea is frequently found in the urine of patients afflicted with Spermatorrhœa.

MENTAL AND PHYSICAL DEBILITY.

We mention the above merely as symptomatic affections, originating in disordered functions of the generative organs; and while they remain *merely sympathetic*, which they generally are, they require no other method of cure than that necessary for the removal of the disorder upon which they depend; but when the symptoms run high, it becomes our duty to alleviate them, and for this purpose a careful investigation is absolutely necessary in order to trace their origin, ascertain their seat, and prescribe the proper remedies for their cure.

Any organ that is OVER-EXERTED in its function is sooner or later weakened; nay, the remark applies to the whole machine. Nothing is more common to see men of originally good constitutions broken up prematurely by inordinate labour, whether of body or mind. The DEBILITY thus induced, whether of a part or of the whole system, is invariably accompanied by IRRITABILITY. The FORMER has been recognised in all ages as the parent of the LATTER. In this way a *morbid sensibility* may become established, from Spermatorrhœa, or any other cause, in the digestive organs; and then the nervous system, acquiring this

sensibility or irritability, will act as a poison on the system, often deranging the mental and disordering the corporeal functions, and induce a host of affections, the source, seat, and nature of which, in nine cases out of ten, are entirely overlooked, because the morbid phenomena present themselves anywhere and everywhere, except in the spot from whence they have their origin. But it may be asked, what are the proofs that various disorders, mental and corporeal, have their origin in generative irritation? We answer, that the proofs will be found in the practice of every medical practitioner. We ask for no assent to propositions or assertions unless they are founded upon fact; for we have seen so many cases proving incontestably the truth of these positions, that we are convinced that the majority of those complaints, considered purely mental, such as irritability and irascibility of temper, gloomy melancholy, timidity, irresolution, and despondency, might be greatly remedied, if not ENTIRELY REMOVED; and we consider that an immense boon of happiness may be conferred on many valuable members of society, whose lives are rendered wretched by morbid sensitiveness of the mind, having its unsuspected source in morbid sensibility of other *over-strained* organs of the body, which affect principally the nervous system and the liver; and the gastric fluid, *so much under the influence of the nerves*, becomes impaired, the hepatic secretion vitiated; and it is thus

indigestion is induced, and the nervous system still acquires a higher degree of intensity by the sources of irritation which are thus generated, multiplied, and reflected from one organ to another; and we have no hesitation in affirming that the maladies now under consideration, the description of which would exhaust volumes in their detail, are infinitely more prevalent, more distressing, and more obstinate than the *causes* from which they arise. How often do we hear sufferers such as these, complain that they cannot digest even the plainest food without great and daily torment; and how and why is this? Because the nerves of the digestive organs, participating in the general irritability, susceptibility, or sensibility of the whole nervous system, cannot bear the presence of food which an healthy stomach could turn with ease into the blandest nourishment. To remove this irritability and sooth the morbid sensibility of the stomach and bowels (not by *tonics*, which are too frequently resorted to, but which cannot be too severely condemned), has been the principle of the author's practice, and, he is happy to say, with the most pleasing results. And in concluding this chapter we would observe that it is but a faint outline of the subject, and only so much thereof as bears upon the disease we are now considering, the more full details of which are reserved for another and (it is to be hoped) more elaborate essay.

TREATMENT.

There are almost as many remedies for the removal of disease as there are medical practitioners; and in all ages, remedies have been assumed to possess virtues capable of curing the most fatal diseases; but, unfortunately, the cure of Spermatorrhœa has been of a far more theoretical than practical character; indeed, we are convinced, from the number of cases that have come under our notice, that it is impossible for any ultimate or permanent cessation of its symptoms to be gained except by its treatment *through the blood* and in the plan proposed.

We make this assertion fearlessly, and speak nothing more than what our experience has taught us; the soundings of the subject we have taken without consultation with others, except so far as to point out their inconsistencies, and in suggesting a remedy for this disease, confer a benefit on the unfortunately hitherto hopeless sufferer; for from the many cases that have come under our notice, we have found none in whom a permanent cure had been effected; some had gained temporary relief, others had been aggravated, and many to a fearful extent. The various symptoms that accompany Spermatorrhœa may be alleviated by the aid of

tonics, astringents, opiates, &c.; but in the majority of cases, the surgeon, from mistaking them—and the quack from ignorance—adopts a wrong mode of treatment, that tends to seriously affect the sufferer's condition by inducing an imperceptible escape of semen in the urine.

We have shown that the hœmatozoa increase and decrease in ratio with the growth and decay of the body; hence the pale and melancholy expression of countenance discernable in most sufferers, and the pimples of the face, which is one of the most frequent symptoms of the first stage of Spermatorrhœa; the hœmatozoa being drained from the blood by the waste of semen, renders it thin and scanty, having a tendency to weaken and relax the muscular system, which creates a derangement of the whole nervous system, and produces considerable depression.

In the treatment of disease, the means which seem most conducive to health should be promptly administered. These means are multifarious, but in selecting them judgment, founded on experience, is an essential qualification. There are many remedies possessing similar specific properties which may be selected for that purpose; the nature of the remedy must necessarily depend on that of the disease, and the urgency of the symptoms; one of them may be found not only more certain in its operations, but likewise more beneficial in its results, that one ought to be preferred to all others;

such a remedy for this especial purpose is the *chlorate of potassa*, which has been prescribed by us with the most satisfactory results.

As we ascribe this disease to depend upon a deficiency in the blood at variance with its integrity as a whole, as evinced in the state of the secretions, our endeavours should be directed to the replacement of that deficiency; and for that purpose we suggest a medicine for the treatment of this disease, which, by its decisive action on the *blood*, is in accordance with the laws of nature.

Our object must be threefold to treat this disease with any certainty of cure:

1. *To produce pure and healthy blood, generating hæmatozoa in abundance, which, by its action on the vesiculæ seminales, would induce sexual desires and spermatozoa.*

2. *To lessen the general irritability of the generative organs, stopping excessive urinal secretions, likewise any escape of semen.*

3. *To restore the system to a healthy condition.*

To accomplish these, we have now to draw the attention of the profession to a medicine which we believe has never been employed in this class of diseases, but which we apprehend, from our experience, will be found a very valuable remedy, and it seems to us to be most applicable; its powerful effects in purifying the blood, imparting oxygen thereto, and in generating its vital

principle, having been fully and incontestably proved, striking at once to the root of this malady, in the formation of hœmatozoa in the blood and spermatozoa in the semen; and by the application of local remedies in mitigation of the symptoms, the cessation in due time of nocturnal and diurnal pollutions is accomplished.

Chlorate potassa is a powerful and purifying salt, and its direct agency is upon the circulation (proofs of which must be very evident to every medical practitioner when their attention is called to its beneficial effects in producing granulations to sloughing sores, although *administered internally*). It likewise operates, in some degree, on the generative system, especially in allaying the irritability of the generative organs and relieving the active symptoms, and has, when administered judiciously, succeeded after all other remedies had failed.

As a remedial agent the chlorate potassa operates as a stimulant tonic, imparting oxygen to the system from the decomposition of salt in the body; increasing the digestive powers of the stomach; stimulating the intestines; by being dissolved in the gastric juice, it is taken up by the absorbents, and enters the blood—exerting a kind of specific influence upon the urethra and surrounding structures, and produces a degree of general excitement or exhilaration in the system; the circulation is quickened—the face shows an increase of colour—

the countenance becomes more animated—the disease more fluent—and the intellectual system becomes better adapted for deep thought or other mental operations; and if the treatment is continued for three or four months (the urine being examined from time to time in order to detect the improvement taking place at the *seat* of disease) the patient will experience a marked and surprising change for the better; or we will acknowledge all our observations are mere creatures of the imagination. The class of remedies frequently given, and upon which reliance is placed for the alleviation of this disease, comprise stimulants, tonics, and sedatives; in fact, the only remedies, if such they may be called, have been iron or quinine. The former is a mineral not readily absorbed, for it remains in the stomach and intestines many days after it is swallowed; and be it recollected that, after continuing its use for a few weeks, we frequently find excitement of the vascular system, particularly the brain; and we believe that it leaves an irritating mineral in the system, and is calculated to accelerate and confirm the malady it is intended to remove. Quinine is objectionable from its tendency to produce constipation, and hence increases the morbid sensibility of the nervous system, and when the irritability has not been reduced by soothing medicines does more harm than good. It is unnecessary to notice the various sedative remedies that are given in the treatment of this disease: opium holds the

highest rank; but it must ever be borne in mind that it alleviates pain only at the expense of the secretions.

It is useless, as indeed it would be endless, to enter into an examination of the farrago of bitters, tonics, and stomachics, and other medicines which have been recommended, and are daily employed for the purpose of mitigating the symptoms of this disease; all indications which they are capable of fulfilling, may be fulfilled, in our opinion, by the treatment we propose.

But as we have taken great pains to explain the *nature* of this class of disease, and the *objects* which it is desirable to obtain, so it would be waste of time to dwell on the minor means of effecting these objects. They will suggest themselves to every medical practitioner, and none but medical practitioners should attempt the treatment of this disease, which requires the utmost skill to manage. The dietetic regimen, indeed, may be put in force by any invalid, perhaps advantageously, under the guidance of the rules we have laid down; but let him be cautious how he meddles with the medical management of his own case; and the patient should never be placed under medicine until the urine has been properly and minutely analysed, its composition at that time being carefully noted, and then we have a guide to the improvement that may have taken place at any future examination. We may here observe, as a

further proof of what we have stated in reference to the curative properties of the chlorate of potassa, its action upon the blood, and more especially the generative organs, that in several cases where the remedy had been continued for three or four months it was readily detected in large quantities in the urine.

No doubt the *chlorate of potassa* will have its peculiarities of constitution to contend with, and we know full well the fallacies of medicine to hold this up as a specific for the removal of every stage of this disease; but we think that we can safely recommend it as an infinitely superior remedy to any hitherto adopted for so complicated a malady, and the symptoms of which may, in all cases, be greatly remedied if not *entirely* removed thereby.

In addition to medical treatment, strict attention must be paid to diet, exercise, and habits, and few words on each will be necessary.

DIET.

Hippocrates recommends milk in abundance for forty days; so long as this milk diet shall continue, he adds, administer barley-water in the evening, and forbid all solid food afterwards; give soft food, in small quantities at first, and fatten the patient as much as possible.

With this we do not agree; for in all cases, where

indigestion is not complained of, we recommend a generous diet, taking care to avoid stimulants, and likewise to properly masticate the food. Animal food is the best, as it produces richer chyle, imparts more vital energy to the blood, and promotes the generation of hœmatozoa. We have found that raw egg beaten up in new milk, and taken every morning, has proved highly beneficial in allaying the irritation of the genital organs, by favouring an abundant secretion of unstimulating urine ; it also has the advantage of furnishing the digestive organs with nutriment suited to their weakened powers.

As a rule, patients may take in moderation what they fancy, with the exception of pork, veal, and salt meats, being careful not to overload the stomach ; wines and spirits, except under peculiar circumstances, must be abstained from—being stimulant, they are injurious; a little stout or pale ale, however, provided it is good, often assists the weak and delicate, and the habits of many of the healthy are so confirmed to the use of these beverages, that it would scarcely be advisable to at once abandon them.

The dyspeptic sufferer from this malady must judge somewhat for himself respecting the diet which seems best to suit him ; presuming, for instance, he commences with a good beef-steak for his dinner, and takes one tablespoonful of pale brandy in a glass of cold water, if he feels as com-

fortable at the end of two, four, six, eight, or ten hours after this repast as he did before, he had better continue the same; but if a few hours after his dinner he feels a sense of distension in the stomach and bowels, or any symptoms of indigestion, flatulence, distension, heartburn, and a sensation of a "load" at the stomach, if he feels a languor of body or a cloudiness of the mind, if he has a restless night, if he experiences a depression of spirits or irritability of temper next morning, his repast has been too much, or improper in kind, and he must reduce and simplify till he comes to that quantity and quality of food and drink for dinner which will produce little or no alteration in his feelings, whether of exhilaration *immediately* after dinner, or of discomfort some *hours* subsequent. Speaking generally, the patient may commence the trial with from four to eight ounces of plain and tender animal food, with stale bread and a moderate proportion of vegetables. The meals should be regularly taken, and no supper or food after six o'clock.

EXERCISE.

Exercise is an indispensable condition to health; it increases respiration, and promotes oxygenation of the blood; this gives vigour to the system, and excites the action of the absorbents. Of the

different kinds of exercise, the pastimes of the field are most conducive to health, for while they give abundant exercise to the body, they afford wholesome diversion to the mind and purifying food to the lungs. Gymnastics are an admirable mode of exercise, and should be practised by all sufferers from this malady. The following exercise is extremely beneficial, and one which we strongly recommend to all our patients; take a weight in each hand—pieces of lead will be very convenient for the purpose, weighing from two to eight pounds each, depending on the strength of the patient using them; then standing erect, bend the knees, and elevate the arms, then suddenly resume the erect position again with the arms bent down, chest forward, and shoulders back. A repetition of this from fifty to three hundred times will quicken the circulation, send the blood downwards, and impart to the whole body a vigorous glow, often accomplishing in a few minutes greater benefit than an hour's walking. Other attitudes or positions of the body may be assumed or changed at pleasure. This should be practised *early* in the morning and in pure air; otherwise it will be useless, and a considerable quantity of vitiated air is forced into the blood.

Van Swieten correctly remarks, that for want of exercise the stomach and bowels become internally coated with tough phlegm, but that by increased respiration and alternate action of the

abdominal muscles these viscera are shaken, pressed, and scrubbed, as it were, by attrition, so as to be effectually cleansed, and in no disease should regular and well-attended exercise be more carefully followed than in this.

If the individual's circumstances will permit him to engage in any pursuit that may occupy his attention, it will prove one of the most powerful means of counteracting the original cause of many of his sufferings. Unfortunately, there are but very few whose circumstances will permit them to embark in any new pursuit, yet it is in the power of all to engage in a *systematic* exercise of the body in some mode or other, if they will only summon resolution to make the experiment; the languor and listlessness attendant on this disorder are great obstacles to this plan, but the importance of it cannot be too strongly urged upon them.

The debility and exhaustion that supervene on the most trifling exertion, deter most people from persevering, and, therefore, bodily exercise should be commenced on a scale equivalent to the strength of the individual, and gradually increased. It is wonderful what may be accomplished by perseverance.

The author has had patients under his care, who could scarcely ascend a flight of stairs without palpitation and breathlessness, and yet in one month they have acquired the power of running

with scarcely any acceleration of the pulse or respiration. If the exercise can be taken in the open air and early in the morning, it will have a very beneficial influence, and the *quantum* may be gradually increased to the strength of the person taking it.

BATHING.

Of all the means we have found necessary as an auxiliary, and beneficial in the removal of this affection and the restoration of health, none are more important or should occupy a more prominent place than bathing or cleansing the skin. The benefit to be derived by all classes from personal ablution is of universal interest, and highly esteemed in ancient record. The physical strength and vigorous constitution of the Greeks and Romans are justly attributed as much to their habits of bathing as to their regular exercise.

It must be remarked generally, in reference to cold bathing, that the head should touch the water first, as the blood naturally recedes from that part of the body which first comes in contact with the cold. The water, on touching the surface of the body, gives a shock to the whole system, and the blood is forced from the superficial to the deep-seated vessels; and on leaving the water, provided the bather has been in a moderate time, a reaction

of the blood takes place from the centre to the surface; this kind of circulation is very healthy, and in it consists the great benefit of the cold bath.

Warm baths are of far greater importance than is generally supposed. They may be taken with advantage both summer and winter, and while the body is at any degree of temperature. They are not in any degree, when used in moderation, debilitating; but, on the contrary, are attended with health and vigour. The warm bath has a powerful effect in exciting the circulation of the blood, and in promoting perspiration and other natural secretions, thereby effectually arresting many incipient diseases. The bath, in one form or other, is highly efficacious in this disease. In connexion with the bath, for any partial ablution common salt may be advantageously used; it dissolves in water, and prevents any risk of taking cold; it is also a powerful tonic, and general invigorator of the system.

If bathing is not practicable, the skin should be well sponged and rubbed down with a flesh brush at least once a day; and under this treatment the mind, by the sympathy existing between it and the body, becomes strengthened, and free from all kinds of depression, nervousness, and other symptoms.

We certainly must impress upon those who place themselves under our care the necessity of

adhering as closely as possible to the rules we have laid down. In cases of high nervous excitement, exercise, pure air, bathing, and *regular habits* are decidedly important and valuable auxiliaries in conjunction with the treatment we have suggested, which we believe will be found successful in resuscitating both mental and physical debility to a far greater extent than has been achieved by any other remedy yet discovered.

THE EFFECTS OF THE MIND, AND ITS INFLUENCE OVER THE OPERATION OF MEDICINES.

The power of the mind over the body is so distinct and operative that, under the influence of mental culture, not only individuals, but tribes, show forth its effects in the ennobling change that takes place in the corporeal frame, and the very features of the countenance. The exercise of the mind has an influence over nutrition; if an idea be directed to a certain organ or object, the secretion is immediately increased, milk in the mother, and saliva in the gourmand. Under grief or passion, which disturbs the functions of the stomach, diminishes the energy of the nervous system, lessens the force of the circulation, impedes the secretions, and induces organic disease, the colour of the hair will change, and the liver become so

much disturbed that jaundice may ensue. These are results we daily witness. Fear paralyzes the muscular powers of the body, and gives rise to great despondency of mind, which so often modifies the influence of medicines in the treatment for this disease as to render the most judicious remedies useless for a time.

If the patient then will recollect the complicated nature of the mind itself, how its operations are conducted by a congeries of powers acting and reacting one upon another; how the idea of *right*, conceived by the understanding, and performed by the will, requires the impetus of passion to urge it into action, thereby to overcome fear of others and distrust of self; how feeling, again, acute and sensible, receives its impressions and dictates its course; and how the understanding comes in to analyze its impressions, and compare them with a proper standard of truth and practicability—how all these operations are daily going on exhausting the nervous energy; there will be no difficulty in perceiving the folly of throwing the whole force of culture on one set of powers alone —of leaving the entire of our mental operations to our feelings. For these duties some are unprepared, and the outraged brain communicates its irritability to the *generative* and other organs of the body; and thus disease is aggravated, and new forms arise, which but for this would never have existed. It remains for the practitioner to

determine how much of the despondency and distrust accompanying this malady proceeds from mental causes. We have had many cases in which there has been no actual escape of semen in the urine, no emissions, and none of the symptoms of complicated spermatorrhœa; yet the sufferer "*fancied*" he was diseased, and the effect of this impression on the mind has spread through the whole nervous system, reacting again on the brain, from which it sprang, producing in many instances the most disastrous results.

It is very important in the treatment of this disorder to counterpoise the passions, and inspire, cultivate, and stimulate hope, the faith of recovery; for confidence acts as a tonic to the whole animal frame. Faith is a valuable auxiliary even to the most efficient remedy, and there is no disease in which its effects are more powerfully exemplified than in this; for, however well adapted a medicine may be to fulfil the indications for which it is prescribed, if the patient has no confidence, all that will result from its use will be disappointment; whereas faith will render the medicines much more powerful, encourage a spirit of *perseverance*, and be very beneficial in averting the painful, and too often fatal, effects of this disease.

We will now describe the symptoms of cases that have been under this treatment, and would observe that in each, the symptoms were *well* developed, and therefore they will be found a

practical illustration of the benefit to be derived therefrom.

"T. P., a young man about eighteen, possessed a strong constitution and active mind, when he commenced this destructive practice, which he followed for sixteen months, and at the expiration of that time it was renounced. Its effects soon became apparent, he became pale and thin, and passed, without any apparent cause, from an extravagant gaiety to a profound melancholy; pimples appeared on the face occasionally, but very seldom, suffered from an emission, but could not indulge in sexual intercourse. He became by degrees a living decay, and showed indifference to misfortune and disgust at pleasure. Several eminent surgeons were consulted, amongst whom were Professor Syme, of Edinburgh, and Sir Benjamin Brodie, of London, who both agreed in considering his affection to be nervous hypochondria. They advised change of scene, open air, light diet, bathing, &c.; all of which were at once adopted, and appeared to effect such beneficial results, that a rapid cure was expected. In this, however, his friends were doomed to disappointment; for ultimately he became as it were lost to all that was passing around him. He would sit for hours over a book, desk, or fire, little caring to move, bnt absorbed in thoughtful abstractions. He continued in this state about nine months, when the author was consulted by his

friends concerning him. On examination, nothing was elicited from him which could enable us to arrive at a satisfactory conclusion ; but on seeing the dull expression of the eye, the relaxed and irritated condition of the generative organs, we interrogated him respecting masturbation ; when he made a passive admission that he had practised it for a short time,—a fact which he had most carefully concealed from those who had previously prescribed for him,—but he was of opinion that it had produced no injurious effects. On careful examination of the urine, however, we soon discovered the cause of all this local, constitutional, and mental disorder, for spermatozoa was detected in abundance, accompanied with pus, and a very small portion of phosphate lime; the urine was thick and muddy, and contained at times a red sandy deposit ; showing that there was great local disorder of the secreting organs, and that an escape of semen was going on in the urine; and the conclusion arrived at was, that he was afflicted with diurnal pollutions, and he was treated accordingly with chlorate potassa, refrigerant lotions, and blue pill, under which he rapidly improved, and after four months' treatment the urine was again examined, when it presented the usual characteristic signs of health. His mental faculties became more fully developed as the pollutions ceased, and he is now in the enjoyment of perfect health, happy, and a respected member of society."

Remarks.

This case shows how frequent, important, and difficult of detection, are involuntary seminal discharges, and to what deplorable errors of treatment they daily give raise. It likewise proves the importance of microscopic examination, and chemical analysis, in detection of these discharges.

Involuntary Seminal Discharges produced by Masturbation.

R. H., a young gentleman about twenty-four years old, applied to me in September. He had practised masturbation for two years; his symptoms were relaxation of the testicles, penis shrunk, pimples on the face, sallowness of countenance, urine sometimes muddy, at others a thick glutinous mass would be seen at the bottom when cold, and on examination spermatozoa were readily detected.

Treatment.

Ext. poppy every morning; Dover's powder every other night; salts every third morning for the first week, after which time chlorate potassa three times a day; milk and raw eggs every

morning; glass of wine at eleven o'clock; to bathe the generative organs every night and morning, and take early gymnastic exercise. This treatment was followed for six weeks, when the emissions gradually ceased, and on examining the urine no spermatozoa were present. A desire had arisen for sexual intercourse, which I allowed to be indulged in; and, after a further continuation of the treatment, with slight variations as the symptoms of the case became less complicated, for a few weeks, a complete and permanent cure was effected.

Remarks.

This was one of the most simple forms of Spermatorrhœa, and yet the patient had been under three surgeons; by one he was treated with iron, by another quinine and nitre, and by the third astringent remedies, the use of which cannot be too severely reprehended in this disease; but all had signally failed in removing the affection.

Spermatorrhœa of Fifteen Years' Duration, with occasional Seminal Emissions.

Henry H., a grocer, consulted the author, complaining of severe pains in the back, &c., brought

on by early excess; on examination the whole nervous system appeared to be affected with acute sensibility. He suffered from severe debility, pains in the bladder, and an occasional seminal emission, about once a fortnight. He had been in this condition for many years, but recently felt himself growing weaker; and, at times, the heart showed symptoms of spasmodic affection. All desire for sexual intercourse was gone, and sometimes an oozing would take place from the penis. The urine was dark, no sediment, and the analysis proved that it contained a considerable excess of phosphate lime. There were no spermatozoa in the urine; but on examining the matter which had escaped in the morning from the penis, and which was secured on a piece of glass for that purpose, spermatozoa were absent, but other constitutents of semen present, leaving no doubt as to the nature of such discharge. General appearance of the patient was languor and exhaustion, with a dullness about the eyes.

Treatment.

Thirty grains of carbonate soda every night and morning; five grains blue pill every morning. This preparatory treatment was continued for ten days, when chlorate potassa was commenced in small doses, and gradually increased. Ten days after its commencement the urine was subjected

to an analysis, but no spermatozoa were detected. The treatment was persevered in; and after nine months an improvement became apparent (and chlorate potassa was detected in abundance in the urine, showing its absorption in the system), the pains in the limbs had entirely ceased, the elasticity and vigour of the body were renewed—all nervous feelings had abated; and in twelve months from commencing treatment the cure was accomplished.

Remarks.

This case presented many unfavourable symptoms, and affords a striking but most satisfactory illustration of the advantages derived from the treatment suggested. We have here a patient whose symptoms were of a chronic character, who had been afflicted for many years, who had tried many medical men, and whose case had been pronounced hopeless; yet immediately the chlorate potassa is admitted into the system in sufficient quantities as to be detected in the urine, a gradual cessation of the symptoms is felt, and the morbid sensibility of the nervous system becomes entirely removed, imparting considerable serenity to the mental faculties, and imparting a pleasure and general feeling of "comfort," as described by him, to which he had for many previous years been an utter stranger. In November the urine was again examined, and was found to be entirely devoid of

spermatozoa, mucous prostatic fluid, or an excess of urinal salts.

Seminal Discharges produced through three Years' Excess.

A Lieutenant of Her Majesty's Ship *Caradoc*, about twenty-five years of age, short, stoutly formed, and of sanguine temperament, placed himself under this treatment.

His symptoms (as stated by letter) were great relaxation of the generative organs, frequent emissions followed with lassitude, and pains in various parts of the body. The bowels were confined, and he frequently complained of a creeping sensation along the spinal cord. The urine was of light colour, strong smell, and contained, when cold, an abundance of thick flocculent deposit; and under the microscope, spermatozoa were clearly detected, and the analysis demonstrated the presence of sufficient quantity of phosphate lime to produce the constitutional debility.

Treatment.

Rub the back with an embrocation, composed of spt. camphor and olive oil; take a small dose of castor oil for six successive mornings, and then

commence the chlorate potassa. He continued this treatment two months, when a beneficial change was established, and in seven months a cure was effected.

Remarks.

In this case we had general irritability of the system, in addition to great debility, which I have no doubt became aggravated by the treatment of those he had been under, who mistook the nature of his complaint, and to this may be attributed the little success attending their treatment. The effects of the chlorate potassa were most conclusive, the patient's general appearance greatly improved, and his ideas and necessities altered in proportion as his functions were re-established.

EXTREME NERVOUSNESS SUPPOSED TO HAVE BEEN INDUCED BY TEN YEARS' SOJOURN IN INDIA.

A retired captain consulted the author by letter, complaining of general debility, exhaustion, and occasional pains in the back. In early life he had given way to youthful indiscretion, but was under an impression that it was productive of no injurious effects. On examining the urine we detected spermatozoa with urea and uric acid, which in-

duced me to suspect the nature of his disease; the testicles were relaxed, and on attempting intercourse the erection of the penis would subside. After continuing the chlorate potassa (with occasional intermissions) for three months, the patient described himself in his letter "as a new man," free from despondency and aching pains, and in excellent health, and in conclusion says, "I am grateful for your extreme kindness in restoring me to health, and shall endeavour to impress upon others the importance of trying those measures which have been so eminently successful in my case."

SECONDARY SYMPTOMS CURED WITH CHLORATE POTASSA.

We believe that this medicine is an infinitely more efficacious and far more secure remedy than the ordinary ones for the cure of these afflicting maladies, which not only grow with our growth, but strengthen with our weakness, and obtain victory in our decay. We have applied this treatment to a most severe test in the case of a child ten years old, whose face, head, back, legs, and other parts of the body were covered with syphilitic ulcerations; and it is worthy of observation that no expense had been spared in this case, the

parents being well circumstanced, in order to effect a cure, but without any success. The best possible advice that could be obtained was procured, and every treatment recommended pursued, but the only result was a *temporary* cessation of the symptoms; and after the medicines had been continued for some time their effects became nugatory, for the ulcerations again returned. It would be useless to enumerate the various treatments, both external and internal, that were adopted; but we may safely say that no *admitted* medicine was overlooked until, at last, the case was given up as hopeless, and the only prospect held out was that the "child would grow away from his disorder." It was placed, as a last resource, under the author's care; and he feels proud to write that, after ten months' perseverance with chlorate potassa, which was commenced on a very low scale, and at times discontinued for a week, the child was perfectly restored, and every symptom of a syphilitic character has left him, and he continues to the present time in the *most excellent health;* a living proof, with many others, that in some cases chlorate potassa is a far more efficacious remedy than mercury, arsenic, silver, or iron, not only for spermatorrhœa, but, we sincerely believe, for that most malignant malady, syphilis; for it is quite possible that chlorate potassa may possess powers beyond what our experience may demonstrate, for we have noted nothing down beyond our own know-

ledge, and which are the results *solely* of our own practice and observation; and from them we are enabled to state that it has peculiar efficacy in these maladies when *carefully* and *judiciously* administered, and therefore consider it worthy of further notice.

FINIS.

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