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Contributors

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ON

INVOLUNTARY

SEMINAL DISCHARGES.

BY M. LALLEMAND,

PROFESSOR OF THE FACULTY OF MEDICINE OF MONTPELIER.

Ἡ δὲ τέχνη μαχερὴ . . . ἡ δὲ πειρα σφαλερὴ,
ἡ δὲ κρίσις χαλεπὴ . . .
(Ἱπποκράτους ἀφορ. τμήμα πρῶτον. Α.)

TRANSLATED FROM THE FRENCH

BY WILLIAM WOOD, M. D.

OF PORTLAND, MAINE.

PHILADELPHIA:

PUBLISHED BY A. WALDIE, 46 CARPENTER STREET.

1839.

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AUTHOR'S PREFACE.

I have collected, within thirteen or fourteen years, more than one hundred and fifty cases of *Involuntary Seminal Losses*, grave enough to produce serious derangement of the health, and even to cause death.¹

The most of these patients applied to me for *cerebral affections*, that had been supposed to exist for a greater or less length of time. Thus, by a singular caprice, it is to the publication of my *Anatomico-Pathological Researches upon the Brain and its Appendages*, that I am especially indebted for my most remarkable cases of *diurnal pollutions*; and yet I am the very person that has denied the existence of disease in the brain and its appendages in so many cases where it appeared incontestable.

In many other patients it was believed there existed chronic gastritis or gastro-enteritis, aneurism of the heart, commencing phthisis, &c.; or else *nervous* affections, and particularly a *state of hypochondriasis*.

We see, from this brief statement, how frequently seminal losses occur, how grave they are, how difficult to be ascertained, and to what deplorable errors they every day give rise; and already we may foresee that the causes of them are much more diversified than we have before imagined, and that their treatment must often present great difficulties.

The pamphlet of Wickmann, and the commentaries of Sainte-Marie,² are all that we possess upon a disease that degrades man,

¹ MM. Labat, Emile Verdier, and Antoine Marchal, are those among my students who have assisted me with the most zeal and intelligence in the collection of these notes.

² Dissertation upon Involuntary Diurnal Pollution; by Wickmann; translation of Sainte-Marie. Lyons, 1817.

empoisons the best days of his life, and, unperceived, commits great devastations in society; yet the researches of these conscientious observers are almost entirely unknown.

They have, however, made every effort to call the attention of practitioners to a subject, the importance of which they well understood, and they have developed many useful truths. Why, then, have they not produced more impression upon the medical world? Undoubtedly, because they were not supported with a sufficient number of well detailed facts, and, especially, because they were presented in a manner too vague or too general.

Be it as it may, whatever of good Wickmann and Sainte-Marie have said, has not been appreciated; and they have left numerous and important voids to be filled, and more than one serious error to be corrected.

The materials that I possess encourage me to hope that I shall be more fortunate; at all events, I consider it my duty to publish them.

It is, however, for practitioners that I write. They only, perhaps, will feel the importance of so many diversified and minutely detailed cases, and will derive some benefit from them: others must read them with caution, and guard themselves against the influence of their imaginations.

Among those of my students who have consulted me for seminal losses, the greater number were more frightened than diseased.

TRANSLATOR'S PREFACE.

In presenting to the medical profession this work of Lallemand, the translator has been influenced solely by the consideration of its practical importance; and, in this respect, very few, if any, of the late publications can compare with it—treating, as it does, of diseases hitherto almost unnoticed, or, at best, misunderstood by the great mass of practitioners.

With the exception of the works mentioned in the preface of the author, little has ever been done towards obtaining any correct knowledge of the pathology of the diseases in question; and so little importance has at all times been attached to them, that, in the language of Mr. Good, “in almost every system of nosology, they are scattered through every division of the classification, and are rather to be found by accident, an index, or the aid of the memory, than by any methodical clue.” This, though said of all the diseases affecting the genital organs, is strictly true of the particular one forming the subject of this work. Some of the characteristics of it he has described under the name of spermorrhœa, limiting it, however, to the perceptible loss of semen, attended with libidinous desires, and describing, in various parts of his nosology, under a great variety of learned names, the symptoms attendant upon a more advanced stage of the same disease, as *tabes dorsalis*, some forms of apoplexy, hypochondriasis, madness, &c.

If, then, this work is capable of furnishing us with the correct pathology of the various kinds of pollutions, and of throwing light altogether new upon other diseases, for which no rational plan of treatment has ever been devised, it must every where meet with a cordial reception from the practitioner.

It appears to me to be destined not only to effect considerable changes in private practice, but also to do something for the relief of many of the wretched beings confined in the numerous asylums for the insane. In looking over the reports of the superintendent of the State Lunatic Hospital, Worcester, Mass. I find a table showing the relation existing between the cause of the disease and the recovery, where, out of four hundred and seven patients, fifty-five have become insane from the effect of masturbation alone, forty-three of whom are males, and twelve females. Of this number four only are pronounced cured or curable, whilst fifty-one are styled incurable.

Without venturing to assert that the treatment proposed by Lallemand would produce any more favourable results, I cannot but express the hope and belief that it will receive the attention of the distinguished gentlemen placed at the head of this and similar hospitals. We have reason, certainly, to hope that his manner of treating these diseases may yet be successfully adopted for restoring to society a still greater number of the unfortunate beings who are now the inmates of these truly philanthropic institutions.

It is surprising to witness the effects produced by a single cauterisation of the prostatic portion of the urethra, which is here shown to be not only practicable, but a perfectly safe operation. The instrument by which it is effected has not been described or even mentioned in any part of the work now presented to the medical profession; it having been, without doubt, the intention of the author to do it in the second part, treating of these diseases in females, which he has promised to publish as soon as his labours will permit. To supply the deficiency, or rather to render this part of the work more useful, the translator has added to it a description and drawing of the *Porte Caustique* of Ségalas, which is an improvement upon that by Lallemand, and which appears to have been the one used by him, judging from the description, given in the body of the work, of his manner of using the instrument. That invented, or rather improved, by him, instead of being made to revolve rapidly, could not be made to revolve at all; but, once introduced, and the sheath drawn off, the caustic in the spoon or cistern came in contact with but a limited portion of the circum-

ference of the urethra, so that it was necessary to have numerous wires with spoons presenting in different directions in order to cauterise the whole or any given surface; an inconvenience entirely remedied by the instrument of Ségalas. If this is not the one used by Lallemand, it appears to me to possess decided advantages over that invented by him, or those used by Decamp or Velpeau.

W. WOOD.

Portland, Me. Jan. 1839.

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OF

INVOLUNTARY SEMINAL DISCHARGES.

CHAPTER I.

EXPOSITION.

Involuntary losses of semen present themselves under various aspects, possessing different degrees of importance.

Those which take place spontaneously during sleep, in a robust and continent individual, may be useful by removing from the economy a stimulant which, being duly increased, might disturb the exercise of its functions. They produce, then, an effect analogous to epistaxis, which is so common and useful in the young: but they may become excessive, and outlive the wants of the system from a sort of habit; they are then, like nasal hemorrhage, attended with inconveniences, proportioned to their frequency, abundance, the constitution of the subject, &c.

They may be brought on by an undue excitation of the genital parts, arising from excesses in coition or masturbation. The irritation, persisting in the spermatic organs after the cessation of these excesses, may keep up an excessive secretion of seminal matter, and give rise to precipitate ejaculations, under the influence of erections that are incomplete, and almost unattended with pleasure. In fine, the relaxation of the ejaculatory ducts, which very soon follows this pathological irritation, eventually induces the expulsion of the semen, without the manifestation of the least erection, or the slightest enjoyment: and this especially takes place during defecation or the emission of urine.

The transition between these different modes of spermatic evacuation is sometimes so insensible, that it is impossible for the patient or even practitioners correctly to appreciate it. Besides, very excessive evacuation of semen is capable of producing the same effects upon the economy, in whatever manner it takes place. The different aspects under which seminal losses may present themselves, cannot then be separated, either in theory, or, especially, in practice.

However, venereal excesses and masturbation have already been the subject of careful investigation. I shall cite particularly the recent work of Dr. Deslandes,¹ written with elegance, and full of conscientious researches. *Nocturnal pollutions* are easy to appreciate and even to cure: I shall not speak, then, of these different seminal evacuations, unless they are sufficiently grave to compromise the health, or have some relation to those which ordinarily escape observation.

I shall preserve the expressions of *diurnal* or *nocturnal pollutions*, although seminal losses may assuredly take place in the night, without erection and without pleasure; although lascivious dreams may be followed by ejaculation after sunrise, &c.; neologism is only excusable when it has for its object the prevention of errors, and I do not think that we can be deceived as to the value of these expressions, which are at the present day received. Only, in order to avoid circumlocution, I shall call every abundant seminal evacuation, in whatever manner it takes place, *spermorrhœa*.

Diurnal pollutions are not always, as is too generally believed, the consequence of venereal excesses or of vicious habits. Many other causes may provoke them; and their influence may be isolated, successive, or simultaneous.

Among these causes, there are some that have been already noticed or glanced at; but many are still entirely unknown: it is precisely these which are the most dangerous, because their influence is more difficult to appreciate.

In all things, the study of causes is the most important and the most difficult; this is true, especially in medicine, and particularly so of the disease which is the subject of this work; because it is principally the cause of the pollutions which is to furnish the therapeutical indications.

True, it is necessary to keep in view the particular state of the genital organs, of the constitution of the patients, &c.; but these considerations are less important in the treatment, and it is especially in a practical point of view that I wish to consider these diseases. It is for want of having carefully distinguished these causes, that propositions have been laid down upon diurnal pollutions as often false as true; and that methods of treatment have been boasted of whose general application is sometimes useful, but very often injurious.

It is, also, without doubt, of the greatest importance to study attentively the symptoms of pollutions, since they are little known, very variable, and may resemble a multitude of affections; but their character is independent of the first cause of the disease; they furnish few indications for the treatment.

On the other hand, the history of seminal losses is so little advanced, that I feel the necessity of proceeding as if investigating

¹ De l'Onanisme et des autres abus vénériens. Paris, 1835.

an entirely new subject: that is to say, to commence by an exposition of many particular facts, before arriving at general conclusions.

But these facts are numerous; it becomes then highly important to have some order in their distribution: I shall take the causes for the point of departure of this "classification," since it is these which play the most important part.

In order to proceed from the evident to the doubtful, from the simple to the compound, I shall examine, first, those causes whose action is the most direct and incontestable. In studying the influence of each cause, I shall report, first, the cases in which the action has been energetic, isolated, and as much as possible verified by the opening of the body; I shall terminate with those in which several causes have acted successively or simultaneously.

After having considered all these observations under this point of view, I shall make a general summary of them, in which I shall return to the consideration of the symptoms and treatment.

In fine, I shall again seek the *analogous* phenomena which we may be able to observe in the female.

I propose then to consider the affections of the genital organs in all their bearings: but I shall pass rapidly over all that is already known; I shall dwell, on the contrary, upon the most accredited errors—upon all that may appear strange or obscure.

I shall especially make use of the notes that I am in the habit of asking from well-informed patients, and I shall preserve, as much as possible, their own expressions.

But if I reported all the cases that I possess, tedious repetitions would be the result: I shall select only those the most proper for making known the characteristic features and most important varieties of this disease.

CHAPTER II.

INFLAMMATION OF THE SPERMATIC ORGANS.

Pathological Anatomy.—Of all the causes of pollutions, the most frequent, the most direct, and the most energetic, is inflammation of the organs destined to the secretion and excretion of the semen; it is also that of which it is the most easy to conceive the influence and to find traces after death: it is then with that I shall commence.

Pathological anatomy has left us but very few materials upon this important and delicate subject: this poverty is owing to various causes.

Inflammations of the spermatic organs do not, at their commencement, threaten life: when patients succumb during this first

period, it is in consequence of some more grave affection; this having absorbed all the attention of the physician, they neglect, after death, to examine the spermatic organs.

When the consecutive influence of these inflammations brings on diurnal pollutions capable of causing death, the epoch of their appearance is very remote; the symptoms have been insidious; their true cause has not been even suspected. Whatever care then they may take at the opening of the body, it happens almost always that they examine all except the genital organs: they publish afterwards incomplete facts, in which they place so much the more confidence, as the dissection of the other organs has been made with more care.

In fine, there is another cause of negligence, which is owing to the situation itself of the prostate, of the vesiculæ seminales, &c.

In order to examine these parts with the minute care that this study requires, it is necessary to divide the crural arch near its middle part, to cut away the muscles from the internal part of the thighs, to saw the two pubes near the middle of their horizontal branch, then the two ischia, and to take away afterwards the testicles, the vasa deferentia, the rectum, and the perineum.

It is then, only, that we can expose clearly the parts situate at the bottom of the pelvis; examine their relations with care; ascertain their colour, their consistency, and their dimensions: things which need to be studied with great attention: for symptoms the most grave may have been the result of lesions almost imperceptible.

Thus, for example, the orifices of the excretory conduits may be frayed in consequence of some slight ulceration; they may become deformed, enlarged in one way, of which I shall mention some examples; and we can readily form an idea of the consequences which would result from the destruction, even partial, of these little sphincters. The colour, the consistency, the exact dimensions of the ejaculatory ducts, may also furnish valuable information.

The examination of all these objects requires much time, patience, and address; in order to understand well every thing connected with them, we must examine them in all their aspects, and that is impossible without previously separating from the pelvis the portion to which all these parts are attached. Thus the incision that I have pointed out, is of indispensable necessity, and yet recourse is had to it only for the examination of some extraordinary diseases of the bladder or prostate.

I ought to add here, that, in order to examine these parts profitably when we suppose them to be diseased, it is necessary to have seen them very often in the healthy state; this is, however, what even those neglect who are the most ardently engaged in the study of pathological anatomy; a fact which explains the poverty of the science, in this respect, and the necessity to which I shall find myself reduced of citing observations, otherwise destitute of all interest.

No. 1.

Blennorrhagia—diurnal pollutions—symptoms of hypochondriasis, of chronic affections of the brain or its meninges—congestions of the head—death. Right kidney in a state of suppuration—prostate almost destroyed—ejaculatory ducts isolated, frayed—vesiculæ seminales diseased. Nothing remarkable in the other organs.

In the month of January 1824, I was called to M. de S. for symptoms of *cerebral congestion*, to which he had been frequently exposed for a long time. The following is what I learned from the numerous opinions of physicians that were sent me, and the detailed information that was added to them.

Born at Payerne (Suisse), issue of healthy parents, one of whom died suddenly with symptoms of *cerebral affection*. M. de S. of a robust constitution and an ardent imagination, received a careful education, and applied himself early to the solution of the most delicate questions of philosophy and metaphysics; at a later period, he became ardently occupied with ethics and policy.

After having passed some years at Paris, in the midst of his favourite pursuits, M. de S. was obliged to put himself at the head of a manufactory, and to become occupied with details that offended his pride. He became gradually pettish and capricious; passing, without any known cause, from trifling gaiety to profound melancholy; easily affected by the slightest difficulties, without rejoicing in prosperous events; giving himself up with pleasure to ill-timed censure: in fine, he appeared disgusted and wearied with correspondence and calculations.

At this epoch he married. Dr. Butini, of Geneva, his physician and friend, wrote as follows upon this subject in a consultation:

"This marriage, with a woman of his choice, appeared to form a happier epoch in his life: but, very soon, the germs of the disease, which so many causes had assisted in producing, developed themselves rapidly. It was perceived that M. de S. wrote with slowness and difficulty; his style bore the impress of the decline of his faculties: he stuttered and expressed imperfectly his ideas; he suffered from vertigo, at times sufficiently violent to make him fall; without, however, fainting or convulsions ever being superadded."

One day, as he was writing a very simple letter, he was seized by one of these *étourdissemens*, and could not finish it. This accident strongly alarmed the patient, and left a deep impression upon his family. It was attributed by the physician to a cerebral congestion which had produced a *weakness* of the *right* side of the body. *Twenty leeches* were applied to the anus, and the danger appeared to be removed.

However, analogous phenomena having been repeated at Geneva and at Montpellier, they consulted, anew, Dr. Butini, the professors, Banmes, Fages, and other distinguished practitioners: some, struck with the misanthropic irascibility of the patient, with his passion for solitude, &c., regarded the affection as purely hypochondriac or nervous; others, dwelling upon the derangement of the digestive

organs, thought of a chronic affection of the liver: but the greatest number believed it to be an organic disease of the brain or of its membranes; a chronic encephalitis or meningitis, owing to an hereditary predisposition. This last was the opinion of Dr. Bailly (of Blois).

In these different consultations they were agreed upon the necessity of withdrawing the patient from all serious occupation; upon the utility of traveling, diversion, and regimen; upon the importance of keeping the bowels open by enemata and purgatives: the greater part advised *frequent application of leeches to the anus*, with milk diet, &c.: some proposed assafœtida, baths and pills of camphor. These means produced no evident amendment: the leeches weakened him; milk diet deranged the stomach; constipation became obstinate. Cold baths by immersion, cold affusions upon the head, calmed the insupportable spasms that the patient experienced in the legs, thighs and face: the waters of Aix in Savoy and the *douches Ecoisaises* appeared also to produce some amelioration.

However, the patient became gradually more irascible, and at the same time more insensible: his moments of passion more frequent and violent, and he showed more indifference for things and persons whom he had most loved. The weakness of the limbs increased, to the point of producing frequent falls upon the most level ground. His nights became agitated; sleep lighter, often interrupted by nervous tremblings or acute pains, accompanied with cramps and with throwing of the head backwards.

The cerebral congestions increased; fear of an imminent apoplexy made him recur to new applications of leeches to the anus, to bleedings from the foot, to frictions with antimonial ointment, to blisters, to sinapised pediluvia, and to the application of ice upon the head.

Notwithstanding the employment of these energetic and multiplied means, there came on a new and violent congestion; it was then that I was called. Here is what I remarked:

The patient was restless, agitated, incapable of remaining two minutes in the same place; his countenance was red, his eyes prominent, injected, fixed and wild; his physiognomy bore the impress of profound fright; his gait was unsteady; his limbs bent under the weight of the body; his skin was *cold*, his pulse *small* and *slow*.

These last circumstances struck me less than those upon which my attention had been directed by all that I had just learned, and I also advised leeches to the anus. Immediately M. de S. became violently angry, and assured me that leeches had *always weakened without ever helping him*. I was too much preoccupied with the danger of an apoplexy, to be arrested by this profound conviction, manifested with so much energy, and I had six leeches applied to the neck.

The following day, I found the patient very pale, and so much weakened that he could not go out, which threw him into a state

of despair, for he could not remain in any one place. There came on an œdematous swelling of the right parotid and of the cheek, which was replaced on the following day by a similar state of the foot and left leg.

Repose had become indispensable; the patient was deeply affected by it, and told me *with tears in his eyes*, that he was going to lose his appetite, and would no more be able to go to stool. I learned then, that, notwithstanding repeated falls, he was tormented with a desire to walk and to change his position; that his abdomen was habitually distended and meteorised; that he took many enemata and purgatives to combat an obstinate constipation; in fine, that his *promenades* and his *stools* had become the only objects of his thoughts and conversation.

Having observed analogous phenomena in almost all the individuals affected with diurnal pollution, I made new inquiries with regard to that attack, in which they thought that the *right* side had been affected, and I assured myself very soon that it was the ideas that had failed, and not the movements of the hand that held the pen: the two halves of the body had in reality preserved an equal energy.

Struck with the remark of Dr. Butini, concerning the progress of the disease after marriage, I addressed myself to Madame de S., and I learned that in fact the character of her husband had become peevish, irascible, and meddlesome; which had made his relations suppose that he was unhappy in his family. I began then to believe that we had been deceived as to the true cause of all the symptoms observed during seven or eight years, and I recommended them to preserve the urine of the patient, in order to show it to me the next day.

Its aspect alone proved to me that I had divined justly: it was troubled, thick, of a fetid and nauseous odour, similar to water in which anatomical preparations have remained a long time in maceration. In decanting it slowly, I saw flow out a fleecy cloud like a very thick decoction of barley; a glairy, ropy and greenish matter remained strongly adherent to the bottom of the vessel; in fine, some thick globules, yellowish-white and not adherent, were mingled with this sediment like drops of pus. I remained convinced from that time, that there existed, not only a seminal loss, but also a chronic inflammation of the prostate, and a suppuration of the kidneys.

I imparted my opinion to Madame de S., which surprised her much: I obtained from her the following particulars: she had always thought that her husband was naturally *very cold*; as well as she could judge, he had never committed any excess with her, and nothing inclined her to suspect his conjugal fidelity; coition had always been so rapid, and she had taken so little part in it, that she could not conceive how she could have become a mother; gradually all intercourse had become of very rare occurrence; it had even entirely ceased for the last three years. These hints con-

firmed me more and more in my opinion; but they were still incomplete.

Notwithstanding the state of the intellectual functions of M. de S., I was able, at a favourable moment, to obtain from him some information that had never been demanded of him. Having lost his way in a botanical excursion, in the environs of Geneva, he found himself alone, with a shepherdess, who had left her flock to show him his way. He was 16 years of age, and was just leaving college. Some days after, there came on a blennorrhagic discharge; he concealed it carefully, and succeeded in curing it by the simple use of cooling drinks. The following year the discharge re-appeared and was arrested by astringents. Two years after, having drunk a great quantity of beer in the heat of summer, he saw it make its appearance anew: in fine it returned again during a long journey that he made on horseback. Since then, M. de S. had felt but little inclination for women, and deprived himself of their society without difficulty.

Fully convinced, after the relation of all these circumstances, I explained to M. de S. the nature of his disease. He would not believe it; but he promised to watch himself. The next day, he took me aside and told me that in fact the last drops of urine were viscous, and that in going to stool, he had collected the hollow of his hand full of similar matter. (*Iced milk, &c.*)

Eight days after, there came on a new cerebral congestion, in consequence of which the respiration became stertorous, the skin of an icy coldness, the pulse imperceptible; the patient fell into a kind of syncope, which was followed by death the 1st of March, 1824.

They had regarded the disease of M. de S. as hereditary: he left a son: I took advantage of this circumstance to obtain an examination of the body. A member of the family even desired to be present: it took place twenty-six hours after death.

Subject excessively emaciated, abdomen green, emitting a strong odour.

Cranium. Between the dura mater and arachnoid some *bubbles of air* mingled with a viscous serosity; vessels of the pia mater a little injected; arachnoid a little opaque towards the falx, but without thickening or granulations: in the ventricles two or three spoonfuls of limpid serosity; no alteration of the arachnoid that lines them: cerebrum a little injected, soft in all its parts, but without any perceptible disease in one point more than in another: cerebellum likewise very soft, of ordinary volume, neither more nor less injected than the cerebrum, without any particular alteration. Three or four spoonfuls of serosity at the base of the cranium or at the origin of the vertebral canal.

Thorax. Pulmonary pleura every where adherent to the costal pleura by a dense and compact cellular tissue; lungs crepitant and pale, except behind; heart of ordinary volume, and firm.

Abdomen, meteorised, green, emitting a strong odour; liver of a

natural colour, and very firm; a spoonful of bile in the gall-bladder; spleen small, of a violet colour, and dense; stomach distended with gas; mucous membrane thin, supple, of a slate gray colour; small and large intestines also distended with gases, but thin and pale; fecal matters in small quantity, brown, liquid, and excessively fetid.

Left kidney of ordinary volume, of a fine red colour, and very firm.

Right kidney a third larger, adherent to the surrounding parts by a dense, fibrous, and very strong cellular tissue, containing in its parenchyma about forty small abscesses, varying from the size of a pea to that of a walnut; some recent and without envelopes, others ancient, encysted, filled with a thick, creamy pus; tissue of the kidney reduced in four fifths of its extent, into a dense, coriaceous membrane filled with thick septa, fibrous, and somewhat of a violet colour; internal membrane of the pelvis red, villous; ureter thin, distended, brownish, very much injected on its internal surface.

Bladder ascending almost to the umbilicus, containing two pints of quite transparent urine.

In order to examine the genital organs with greater care, I took them away with the rectum, after having sawed the pubis and the ischia.

Walls of the bladder thin; muscular fibres weak and separated; mucous membrane of a rose colour, a little injected, but thin and scarcely altered.

Prostate projecting three or four lines behind the neck of the bladder, to the extent of an inch and a half in surface. In the entering angle that the peritoneum forms in extending itself from the bladder upon the rectum, effusion of an albuminous matter, of a yellowish white, half a line in thickness, and about two inches in extent, uniting the vesiculæ seminales to the anterior wall of the rectum.

Left vesicula seminalis small, brown, but in its natural situation; right vesicula seminalis separated from the corresponding vas deferens, folded upon the posterior border of the prostate, and, as it were, *wasted*; surrounded by a dense fibrous tissue, and difficult to dissect.

Prostate of twice its ordinary volume, projecting into the rectum; hard upon the lateral parts of the neck of the bladder, soft in its middle part.

A stroke of the scalpel having divided its fibrous envelope, there flows from it a purulent matter, thick, opaque, stringy, and elastic, similar to pus in colour, and to the nasal mucus in consistency. A cavity occupying all the anterior and middle part of the prostate is about fifteen lines larger in all directions when the purulent mucus that it contains is drawn out, the gelatinous mass is seen dividing itself into an infinity of filaments which are inserted into as many little holes. The canal of the urethra being split, these filaments are seen coming out from the openings of the mucous

follicles of the prostate; when the cavity is emptied, we observe that the inferior two thirds of the prostatic portion of the urethral mucous membrane have been, as it were, dissected, and cover the cavity of the prostate as the cribriform plate of the ethmoid covers the nasal fossæ in the cranium.

The opening of the ejaculatory ducts, instead of being circular and mammary, forms an elongated, ragged slit, especially on the side towards the bladder; two stilets introduced by the vasa deferentia, although quite large, pass out easily by these openings; the ejaculatory ducts, small and thin, are, as it were, dissected, and form part of the superior wall of the cavity hollowed in the prostate; the posterior border of the prostate is not yet destroyed, but it is pale, flaccid, easy to tear, as well as the parts in the neighbourhood of the principal disease; an unctuous and puriform matter may be pressed out as through long tubes.

Nothing particular in the urethral canal. Testicles small, flaccid and pale.

I have left this case such as I have recorded it under the influence of first impressions, because this form is eminently suited to bring to light some very grave and long cherished errors in diagnosis, which are much more common than we might believe them to be.

Now that we have seen how the errors were gradually dissipated, let us restore the chronological order of the facts.

An urethral discharge, badly treated in the beginning, reappeared under the influence of quite trifling causes, but of which it is easy to appreciate the action. The follicles of the prostate, often inflamed, become destroyed: the ejaculatory ducts are denuded; their orifices ulcerate and become uneven; the inflammation extends to the vesiculæ seminales and even to the corresponding peritoneum.

From that period a new series of symptoms manifests itself, which rapidly becomes more grave in consequence of a marriage, which provokes an unusual fatigue of the diseased organs: the ejaculation is hurried, because the excretory canals are irritated; the erections become incomplete, impossible, because the semen, eventually, is expelled in proportion as it is secreted; this loss is considerable, because the testicles participate in the irritation of the excretory canals.

During this time, the inflammation extends itself step by step, in the direction of the urinary organs, gains the bladder, and the ureters, and terminates by bringing on the destruction of the right kidney.

Hence, the accidents observed until death; hence, the remarkable character of the urine, a character whose importance is scarcely suspected at the present day, because empirics have rendered the examination of the urine almost ridiculous.

Thus, the inflammation, departing from that portion of the urethra where the excretory canals of the semen and the urine

terminate, extended gradually in these two directions, carrying trouble into these two functions, and disorder into the rest of the economy: by final analysis, all goes back then to the blennorrhagia contracted twenty years before death.

No. 2.

Blennorrhagia—pollutions, hypochondriasis, frequent cerebral congestions—death. Suppuration of the vesiculæ seminales—ossification of the vasa deferentia—cystitis—phlebitis—ancient adhesions of the arachnoid, as well as of the pleura—suppuration of the muscles of the neck and shoulders.

The 25th of September 1825, Professor Broussonet had the kindness to inform me that he had placed at my disposition the body of one of his patients, who, according to what had been related to him, must have died of some cerebral congestion.

Sensible of the kindness of my colleague, I hastened to repair to the amphitheatre of dissection, where were assembled the students of the two clinics. The scull-cap had been already removed, and they were preparing to divide the dura-mater; but, before proceeding further, I demanded some information from those who had followed the disease, with the hope of divining the nature and seat of the changes that we were going to meet with.

This is what I learned:

Francis Maurice, sixty-three years of age, formerly a soldier, and lately forest keeper, had for a long time very feeble legs; he staggered in walking, as if attacked with dizziness; he would have fallen often, if he had not had an attendant. From time to time he experienced congestions of the head; the face became red; he lost his consciousness, and felt very variable spasmodic symptoms; then the face became pale, and he fainted. These attacks had been combated by venesections, derivatives, antispasmodics, leeches, &c.

At length, the 22d of December, there came on a more violent congestion towards the head, with violet colouring of the face; and the following day he died in a state of general paralysis.

These symptoms had made them suspect a chronic affection of the brain or of its membranes, causing congestions, of which the last had terminated by sanguineous effusion.

This opinion appeared plausible to me; but the desire of ascertaining the precise seat of the disease, made me multiply questions.

They led to a result very different from what I had anticipated. The students could not agree upon the side of the body which had appeared the most affected; but it was certain that no distortion had taken place in the features of the countenance, which made me believe that the symptoms had always been general.

As to the cause of the disease, it appeared that it was to be attributed to some chagrin. The patient spoke but little; he had constantly a sombre and taciturn air, and complained of a multitude of different evils, of which the greater part had appeared imaginary or exaggerated. He complained, sometimes, of pains

near the occiput, in the neck and back; sometimes of colics, of tension in the hypogastrium, of borborygmus, &c. In spite of his weakness, he had an irresistible desire for change of place; he could not remain in his bed; went often to the privy: in fine, he had an unquiet, troubled air; he vexed the attendants and affronted the students: he generally passed among them as a hypochondriac.

The union of all these circumstances made me doubt the existence of a cerebral disorganization. I recollected the history of M. de S., and I gave another direction to my questions. I learned very soon that Maurice had experienced several retentions of urine: they reminded me that I had sounded him some days before his death. From that time I declared to the students that I did not believe at all in any lesion of the brain, and that I attributed all the symptoms in question to involuntary and unnoticed seminal losses. It is easy to imagine the increased interest that was excited at the opening of the body. These are the results:

Cranium.—Brain, cerebellum, every where a little soft, but not more in one place than in another; cerebral substance a little injected, especially behind, but in a uniform manner. Near the inferior occipital fossæ, several ancient adhesions, *cellular*, five or six lines in extent, and uniting in an intimate manner the corresponding surfaces of the arachnoid; cerebellum likewise adherent to the pia-mater in the same place, and not to be detached without leaving in situ a portion of the circumvolutions. In the remaining portion of the cranium, not the least *local* alteration, that could be regarded as the result of a *recent* disease.

Thorax.—Lungs healthy; some ancient adhesions of the pleura, of both sides; heart flaccid, colour of wine lees, and very easy to tear; principal veins without consistency, and of a violet brown; same state of the iliac and crural vessels.

Abdomen.—Mucous membrane of the stomach lightly injected; same state of the small intestine; nothing else remarkable. Kidneys in a healthy state, as well as the ureters.

Bladder containing a great quantity of muddy urine, *united to the rectum by cellular adhesions*; mucous membrane of a *deep red, strongly injected*, covered with small ecchymoses by the extravasation into its substance of some drops of blood. Prostate of natural dimension and consistence.

Vesiculæ seminales dilated with thick and dense walls, with a surface regular and almost without wrinkles or inequalities; *adhesion* of these vesiculæ to the neighbouring parts, by a dense and much injected cellular tissue: in each of these a spoonful of *thick and yellowish pus*, enclosed in three or four cavities communicating with each other and with the excretory canals. Surface of the purulent centres, unequal, rough, lined with a species of false membrane, formed by a layer of thicker pus.

Vasa deferentia tortuous, completely *ossified* to the extent of about three inches, but not obliterated; containing, also, a slightly viscous liquid.

Mucous membrane of the urethra much injected, particularly from the bulb of the bladder; mucous follicles strongly developed.

Neck of the bladder tumefied, of a reddish brown, without consistency, furrowed with several recent rents.

Some days after, some students who were studying myology upon the subject, informed me that they had found the subscapularis, infra-spinatus, and supra-spinatus muscles of both sides, as well as several muscles of the neck, in a state of *suppuration*.

The scrupulous examination of all these organs had completely justified my anticipations; but I regretted not having any positive detail upon the cause of the disease, upon its symptoms, &c. M. Bernardi, one of the most zealous of my students, commenced a research, and some days after, he discovered successively three persons who had been intimately acquainted with Maurice for fifteen years: he obtained very detailed information from them: the most important and best substantiated is as follows:

Maurice, whilst serving, had contracted, at the age of twenty-three years, a violent blennorrhagia, accompanied with inflammation of the testicles and of the spongy tissue of the urethra, (*chaude-pisse cordée tombée dans les bourses*.)

After the disappearance of the first troubles, he had abandoned the discharge to itself, and since, he had often been led to reproach himself bitterly for his negligence; he appeared even to give way to it in a hurtful degree. His character, formerly very gay, had gradually changed; he fell frequently into fits of profound melancholy, during which he imagined that every body bore a grudge against him: when these moments had passed, he abandoned himself to pleasure: he drank much to stupify himself; but when he was no longer excited by the presence of his comrades, he fell back again into his melancholy mood, and complained often of pains in the head, *seated about the occiput*.

He had, at first, nocturnal pollutions; afterwards he perceived that on going to stool, he passed sometimes some semen, particularly when he was constipated. Gradually his digestion became deranged; constipation became habitual, and the seminal losses increased.

He ceased from his orgies, and finally could not drink wine. His health, however, became impaired; he took cold easily, and was exposed to a *stitch in the side*, to frequent pains in the limbs and kidneys: he was incessantly annoyed with flatulence, colic, diarrhœa, or obstinate constipation. His limbs grew weak; his whole body was habitually agitated with tremblings; still he could not remain in bed; he was tormented night and day by a continual desire for a change of place; and, as he was very feeble, he met with frequent falls. Towards the last, he had some difficulty in supporting his head, and complained of a constant pain *in the shoulders and neck*, accompanied with stiffness in the vertebral column. The emission of urine, at first irregular and laborious, at length became at times impossible without the aid of the catheter.

In fine, he was subject to frequent sanguineous congestions towards the head, during which the face became very red and even of a violet colour: he lost his consciousness, was strongly agitated, and appeared menaced with a new attack of apoplexy. The *élève de garde*, called under these circumstances, practised invariably venesection, or applied leeches; and, as the attack lasted but a short time, the patient attributed its disappearance to the loss of blood: immediately after, even when they had not taken blood, the patient remained extremely pale, and as it were in a swoon: it was in one of these attacks that he died.

The same causes produced the same effects as in the preceding case; the same symptoms conducted to the same errors in diagnosis; also, it was as difficult to arrive at the truth: the same changes were found after death. Cases of this nature are not then so rare as we might imagine.

Let us suppose that, in these two cases, we had proceeded to the examination of the organs with the prepossession that had existed during the observation of the symptoms. It is clear that we should have found nothing in the cavity of the cranium which could account for the cerebral phenomena observed up to the last moment; for the general and uniform softness of the nervous substance is observed at the termination of all chronic affections, particularly when the cadaveric decomposition has already made some progress. I have had occasion to observe this before commencing the study of the *ramollissemens*. It is evident, also, that we should have found nothing more satisfactory in the other viscera: who knows, then, to how many errors these observations might have conducted?

Among the facts cited by the partisans of nervous apoplexies, of essential spasmodic affections, &c., I am convinced that there are a great number which belong to diurnal pollutions; but the genital organs not having been examined, it is impossible to prove that these conjectures are well founded. I hope that, very soon, all practitioners will be able to avoid similar errors. But let us return to Maurice.

At twenty-three years of age, he had a *chaude-pisse cordée tombée dans les bourses*; that is to say, an inflammation extended to the spongy tissue of the urethra, and to the testicles. As soon as the most severe symptoms were dissipated, Maurice resumed his habits, and gave himself up very soon to excesses of all kinds. Gradually, his health became deranged under the influence of nocturnal, then diurnal pollutions: he became a hypochondriac; and in spite of his tardy and forced prudence, he died at seventy-three years of age, in the same state as M. de S. The vesiculæ seminales were in a state of suppuration, &c.

This neglected blennorrhagia, often exasperated, was, then, the first cause of the disease which produced death fifty years afterwards. It is perhaps very extraordinary, but it is rigorously true.

Why did this patient continue so much longer time than the

first? Because the disorganizations were much less grave: and even the state of the pus found in the prostate appears to announce that the inflammation had not assumed an acute character until the last period of the disease.

Can there exist, at seventy-three years of age, diurnal pollutions capable of compromising life? Without the least doubt, since the vasa deferentia still contained a gluey viscous matter, which was nothing else but badly elaborated semen: besides, the patient told his friends, a short time before his death, that in going to stool he had again passed the hollow of his hand full of semen.

I have said that Maurice passed for a hypochondriac, and that they regarded his pains as imaginary, or at least as much exaggerated: however, we have found in many different organs, recent or ancient alterations that it is important to compare with the complaints of the patient.

In proportion as his health decreased, he was more susceptible; became subject to stitches in the side; the lungs were united to the ribs by cellular adhesions; he complained often of pains in the head seated about the occiput, and the cerebellum was found adherent to the membranes in several points, at the same time that these were united among themselves; during the last periods he complained of constant pains in the shoulders and neck; the subscapularis, supra and infra spinatus muscles of both sides, as also several of those of the neck, were in a state of suppuration; the patient was subject to retentions of urine, and the neck of the bladder was tumefied, of a brownish red, as well as the urethral and vesical mucous membrane.

I ought to add that the principal abdominal veins, and even the crural, were softened, of a violet colour, presenting, consequently, traces of phlebitis.

We see, then, that the greater part of the evils of which Maurice complained, were owing to as many real local inflammations.

I know that many of the symptoms experienced by patients attacked with diurnal pollutions, are purely nervous; that often we do not find after death any trace of change in the organs that we thought affected; but I know also, in what manner the greater number of post mortem examinations are conducted.

We forget also too often, that the slow and progressive weakening of the constitution, in consequence of the derangement of the digestive organs, has not only the effect of increasing the nervous susceptibility of the hypochondriac, but that there results from it also a less energetic resistance of the different organs to the action of all causes fitted to derange the health; so that they are much more exposed to all diseases, at the same time that they suffer from them more.

Again, a few words upon two other changes. The vasa deferentia were ossified in several points: this ossification was not the effect of age, as some might think; for I have found it, under

similar circumstances, in very young subjects: it must then be attributed to an ancient inflammation.

In orchitis which follows blennorrhagia, the inflammation extends itself from the mucous membrane of the urethra to the testicles, by the ejaculatory ducts, the vesiculæ seminales, and the vasa deferentia: these are almost cartilaginous, in the normal state; when they are inflamed, they become readily encrusted with phosphate of lime.

The neck of the bladder was furrowed with several recent rents. When the *élèves internes* desired me to sound this patient, they had not been able to penetrate into the bladder; I learned that they had always made use of the smallest catheters: on the contrary, I employed the largest I could find, and passed it without difficulty into the bladder: this goes to support what I have said of catheterism in cases where there are no strictures to be overcome.

No. 3.

Blennorrhagia—retention of urine, &c.—apoplexy—death. Extravasation of blood in the left ventricle—hypertrophy of the heart—gastro-enteritis—abscesses and tubercles in the kidneys, in the prostate—stricture, &c.

Gojon contracted at 40 years of age, an intense urethritis, complicated with orchitis (*chaude-pisse tombée dans les bourses*). Treated by irritating medicines, which produced diarrhœa and violent colics, it diminished without disappearing entirely: a slight urethral discharge persisted until he was fifty years of age, with pain in the prostatic region and fossa navicularis. There was connected with it also an obstinate constipation.

From the fiftieth to the sixtieth year, difficulty in the emission of urine, painful sensation in the urinary apparatus, curvature of the body forward, laborious digestion, considerable emaciation and remarkable decline of the intellectual functions; later, frequent retention of urine, treated with success by baths and emollient drinks; intolerable pains in the kidneys and bladder; hypochondriasis, aversion for frequented places, melancholy, great debility.

The 1st of February, 1827, new retention of urine, (*leeches to the perineum, general baths, emollient drinks,*) no relief; acute inflammation of the perineum and of the cellular tissue of the scrotum: (*fomentations.*)

The 5th, rupture of the skin of the perineum in three places; issue of a great quantity of urine mingled with pus.

The 10th of February, entrance of the patient into the hospital. Sixty-five years of age; skin hot; pulse full, strong; cheeks red; eyes suffused, sub-orbital pain; ideas quite clear; tongue red and dry; great thirst; desire for cold drinks; abdomen sensible to pressure, particularly in the hypogastric region; fruitless attempts to introduce the catheter: (*fomentations upon the abdomen.*)

The 11th, attack of apoplexy. The 12th, death.

Post-mortem examination.—*Head.* Considerable extravasation of red blood into the left lateral ventricle of the brain.

Thorax.—Lungs crepitant. *Hypertrophy of the left ventricle of the heart.*

Abdomen.—Mucous membrane of the stomach red in its whole extent, covered with small ulcerations here and there; injection of the intestines more and more evident as we approach the anus; in the rectum some ulcerations.

Genito-urinary organs.—In each kidney ten to twelve abscesses; in the left, tubercles in a dormant state, of the size of a bean; ureters dilated, red, and injected internally.

Bladder.—Of a firm texture, with fleshy columns, one inch in thickness. Mucous membrane bordering upon the violet, thickened and softened, ulcerated in several points. Prostate three times more voluminous than usual, more developed under the neck of the bladder than on the side of the rectum; furnishing upon pressure a purulent matter, very abundant, containing about thirty small abscesses and as many miliary tubercles in a dormant state. This prostate resembles the tissue of the lungs, loaded with tubercles, of which some are softened, others in a state of suppuration, and others still unchanged. Vesiculæ seminales thickened, as also the vasa deferentia.

Circular stricture of the canal, half an inch in front of the prostate, formed by a reddish tissue of a horny consistence, and scarcely permitting the introduction of a catheter, No. 2. Enormous dilatation of the urethra, between the obstacle and the neck of the bladder; mucous membrane of this portion of the canal thickened, fungous, and softened, presenting at its posterior part a crevice into which open three fistulæ.

Cellular tissue of the scrotum and the perineum filled with pus. Testicles healthy.¹

This patient died the day following his entrance into the hospital. During this short space of time, his state did not permit us to think of seminal losses, under ordinary circumstances very difficult to prove in cases of this nature. However, the stricture had its seat a little in advance of the orifice of the ejaculatory ducts; the prostatic mucous membrane was disorganised by inflammation; nothing is more common than diurnal pollutions under these circumstances. On the other hand the prostate was profoundly disorganised, the vesicular seminales were thickened, as well as the vasa deferentia. It is then presumable that the hypochondriasis, the decline of the mental faculties, the great debility of the economy, &c. were owing, as in the preceding cases, to an habitual loss of semen.

Death was caused by an extravasation of a considerable quantity of blood into the left ventricle. Was this hemorrhage the result of one of those cerebral congestions of which there has been question in the preceding cases? This is what analogy appears to indicate.

¹ I am indebted for the notes of this case to M. Waton, one of the most studious of my pupils.

Moreover, there existed a hypertrophy of the left ventricle of the heart, and all know the influence that the undue development of this cavity exercises over the brain. If this hypertrophy was not the only cause of the hemorrhage, it must have had the greatest share in it. In questions so new and so obscure as this with which we are occupied, that only must be admitted which is incontestable, and we must resist as much as possible the fascination of prepossession; thus it is for other reasons that I have here reported this case.

It confirms, in fact, in a very clear manner, what I have said of the facility with which inflammation of the mucous membrane of the urethra extends itself to all those in the neighbourhood.

The first disease was *chaude-pisse tombée dans les bourses*. Thus, at the commencement, the inflammation extended itself from the urethra to the organs destined to the secretion of semen, by the way of their excretory canals; and this mode of extending itself cannot here be questioned, since, twenty-five years afterwards, the vesiculæ seminales were still thickened, as well as the vasa deferentia. The extension of the inflammation in the direction of the urinary passages was still more evident, since, not only the prostatic mucous membrane was thickened, fungous, and softened, but, in addition, that of the bladder was thickened and softened also, violaceous, and even ulcerated in several points; the ureters were dilated, red, and injected internally; in fine, each kidney contained from ten to twelve abscesses; there existed besides tubercles in the left kidney.

The prostate is the principal seat of blennorrhagic discharges; it is situate at the junction of the spermatic and urinary organs; it could not then be otherwise than implicated by disorders seated in tissues still more remote from the point of departure; thus was it more diseased than the kidneys. It had three times its ordinary volume; independently of the purulent matter furnished by its mucous follicles, it contained about thirty small abscesses and as many tubercles in a dormant state.

I will remark, in passing, that the circumstances under which the tubercles of the prostate and left kidney were developed, and the existence of these tubercles by the side of recent abscesses can leave no doubt as to the cause of their formation.

Before terminating these reflections, I ought also to remark, that there existed unequivocal traces of acute gastro-enteritis, and even of ulcerations in the rectum. It is to this complication that we must attribute the redness and dryness of the tongue, the ardent thirst, and the tenderness of the abdomen to pressure, &c., symptoms very characteristic of inflammation of the digestive organs, which must not be confounded with the derangement of their functions, with the gastralgia which frequently accompanies diurnal pollutions; neither must the alarming hemorrhage which caused the death be confounded with the cerebral congestions considered in the preceding cases.

Unfortunately these distinctions between these different cases are the more difficult to be established, as some disorganisation of tissue often succeeds to these functional derangements, purely sympathetic ; so that it is often impossible to ascertain the moment when the affection becomes really idiopathic. It is this difficulty especially, which, until the present time, has thrown so thick a veil over diurnal pollutions ; it is this which renders the accumulation of particular facts and their minute discussion so necessary.

No. 4.

Several blennorrhagias—stricture—retention of urine, delirium, &c.—death. Injection of the kidneys—cystitis, pus in the prostate, in the left vesicula seminalis, in the left testicle—tunica vaginalis of the same side obliterated. (Stoll. *pars prima rationis medendi*, sext. xv.)

A musician, aged thirty-two, entered the hospital the 8th of October. He was delirious, the pulse was very frequent, small, and disappeared under the slightest pressure of the finger. Those who had brought him said, that for a month he had remained in bed at home, and that a surgeon was treating him for a disease of the testicles. The prepuce was callous and adhered to the glans in its whole circumference. No ulceration was perceived any where. The left testicle appeared a little larger than the right. The orifice of the urethra was so narrow that no bougie could enter it.

In order to rouse up the vital powers, Stoll prescribed vesicatories, sinapisms, infusion of the root of the *serpentaria virginensis*, of *contrayerva* and camphor in large doses. The pulse regained its strength ; at the end of two days his senses returned for a short time, and the patient said that, for eight years, succeeding several gonorrhœas, his urine was rendered with great difficulty and with a very small jet. He wished to say more but the delirium returned, which prevented him. At length they passed a very small catheter upon him, by means of which very red and bloody urine was evacuated. The patient died Oct. 12th.

The urethra having been opened, there was found near the frenum a considerable stricture, which was the only obstruction that had rendered the introduction of the catheter difficult during the life of the patient ; for there existed no other alteration in the rest of the canal.

The verumontanum was healthy, only the orifices of the ejaculatory ducts were more dilated than usual, and the left emitted some pus when the prostate was pressed. In compressing slightly this same gland with the finger, pus was poured out from all its excretory ducts ; and when opened, some small abscesses were found, of the volume of a lentil or of a pea.

The right vesicula seminalis was in the natural state, and full of spermatic liquor ; the left was filled with pus, and its walls were

hard, thickened, and inflamed in several points. The left tunica vaginalis was very adherent to the testicle; this, more voluminous than the right, contained an abscess as large as a walnut, filled with thick and healthy pus. The two cords of the spermatic vessels were in a good state.

The bladder contained a little bloody urine; and there were to be seen, over all its internal surface, large spots of a deep red, which appeared like so many bruises.

The kidneys were more red than usual.

The intestines were inflamed. No alteration of the right lung; but there was found throughout the whole substance of the left, tubercles of the size of a pea or lentil; hard, white, solid, as if formed of soft cartilage. The substance of the lung interposed between these tubercles was very friable, and appeared changed. Besides, this lung was strongly adherent to the pleura, which itself was very thick; its greatest thickness was one inch. In some points it had the aspect of soft cartilage; other portions were white, tenacious, tendinous; formed of different layers applied one upon the other, which could be separated with an instrument or even with the finger. Some pieces, cut transversely and pressed between the fingers, poured out blood in all directions from the numerous small vessels distributed to them.

The lateral ventricles of the brain were found full of a yellowish serosity.

Stoll does not mention seminal losses; but he had no opportunity of observing the disease except during the last four days of the patient's life: besides, we have seen that this accident was difficult to prove, even when unaccompanied by stricture. The profound disorganization of the spermatic organs, permits us, then, to attribute the weakness that confined the patient to his bed during one month, to these enervating evacuations. However, these are only conjectures; and although they appear well founded to me, I abandon them willingly, to pass to the more positive circumstances which have induced me to report this case.

This patient, like the preceding, had blennorrhagias: their influence was likewise extended to the organs destined to the secretion of semen and urine, by the way of their excretory canals. The kidneys contained no abscesses, but they were redder than usual. The mucous membrane of the bladder presented large spots of deep red, similar to bruises.

On the other hand, some pus escaped from the left ejaculatory duct; the corresponding vesicula seminalis was filled with it: the left testicle contained an abscess. In fine, the left tunica vaginalis had itself been inflamed, since its cavity was obliterated by adhesions. The prostate, which had been the point of departure of all these inflammations, furnished pus from all its excretory ducts, and contained a great number of abscesses of the volume of a lentil or pea.

Here, then, is another fact which proves in the most evident manner, that inflammations of the urethra extend themselves, in all directions, through the medium of the mucous membranes. We see, also, in what manner abscesses and tubercles (No. 3) of the prostate are formed, and how they can empty themselves by the orifices of the mucous follicles, without its envelope becoming implicated, (No. 1.)

No. 5.

Delirium—agitation—hypogastric pain—death. Meningitis—peritonitis—cystitis—remarkable suppuration of the mucous follicles of the prostate, of the right vesicula seminalis, and of the corresponding vas deferens.

Being at Paris in November, 1826, I had an opportunity of seeing my former schoolfellow, Dr. Dalmas, at the moment when I had just read an excellent dissertation of his, upon *organic lesions considered as the only cause of all diseases*. The conversation naturally fell upon this subject; and I communicated to him several cases of seminal losses resembling cerebral affections, gastro-enteritis, &c. These facts corresponded too well with his own views not to strike him. He promised, then, no longer to neglect any opportunity of examining the genital organs.

Some days after, Dr. Dalmas, having made at the Charité the post mortem examination of an individual who had died with a cerebral affection, wished to examine the state of the prostate and vesiculæ seminales, and he was not a little surprised to see pus poured out of them: he took care to preserve the parts, in order that I might examine them with him, on the following day. He gave me, at the same time, an account of what he had been able to learn with regard to this patient.

Jean Pierre, domestic, aged twenty-four, of a brown complexion, ordinary height, well proportioned, appeared to possess a good constitution. He had had, however, in the summer of 1826, a disease that his physician designated under the name of *inflammation of the belly*. He was subject to some cough. It was under these circumstances that this young man was seized, without any known cause, or of which he would tell, with lassitude, fever, and all the symptoms which precede acute diseases. Some days afterwards, 14th of November, 1826, he was received at the Charité, Salle St. Michel, in the following state:

Agitation; eyes brilliant; physiognomy changeable; alternate pallor and redness of the countenance; passing chills, slight tremblings in all the limbs, in the tongue when he puts it out or when he articulates sounds; headach; sight a little troubled; pulse frequent, but little developed; nausea; colics; sensibility of the whole belly to pressure, particularly in the hypogastric region: when the patient is questioned a long time, we perceive that he at length talks incoherently. (*Barley, oxymel, diet.*)

The following day, the 15th, subsultus tendinum; tongue dry; belly and hypogastrium more sensitive; no diarrhœa. (Barley, oxyinel, sinapisms.)

The 16th, slight delirium; pulse diminished; otherwise, same symptoms: same treatment.

The 19th, considerable dilatation of the pupils; delirium more marked and almost constant; disorderly movements, but which are not convulsive; agitation of the arms and legs to free himself from the coverlids; no paralysis of sensation or motion; retention of urine; pulse diminishing. (Ten leeches to the hypogastrium, ten more to the neck, barley water, diet.) Catheterism easy, appearing to cause but little pain; bloody urine.

20th.—Abdomen tense; fever; delirium; pupils constantly dilated; cold extremities; death, without either convulsion or paralysis having been observed.

Post mortem examination, on the morning of the 22d.

Cranium.—Meninges dry; cerebral circumvolutions flattened; anfractuositities slightly marked; six or seven ounces of turbid, milky serosity in the ventricles; septum lucidum softened, flowing like cream, without any trace of injection or pus; brain and cerebellum healthy.

Thorax.—In each lung, miliary tubercles, gray and semi-transparent; no caverns; pleura and bronchia of natural appearance.

Abdomen.—Adhesion of two portions of small intestine to the summit of the bladder, by means of recent unorganized false membrane; vesical mucous membrane injected, of a red black, lined with grayish false membranes; thickening of the muscular coat; urine troubled.

Vas deferens of the right side larger, more dense than the left, with thicker and less transparent walls; increasing in volume towards the corresponding visicula seminalis; containing, in its whole extent, thick pus, well formed, and of a yellowish white. Internal surface of this same vas deferens velvet-like, unequal, as it were alveolar, of a yellowish white, lined with a kind of false membrane, formed of concrete pus, as far as the orifice of the corresponding ejaculatory duct. Vesicula seminalis of the same side more voluminous, more prominent than the left, less wrinkled surface, much thicker walls; its tissue more dense and of a yellowish tinge; containing more than a spoonful of a greenish yellow pus, less thick than that of the vas deferens, exactly like the pus of an acute phlegmon; alveolar anfractuositities of the vesicula effaced, destroyed, so as to form only one vast sac a little irregular: at the bottom, cells destroyed, pus much more concrete, precisely analogous to tuberculous matter.

Left vesicula seminalis healthy, containing a thick, greenish, glutinous, not ropy matter, but unctuous, and quite like meconium.

Prostate voluminous, unequal, wrinkled, presenting at its surface a multitude of small whitish points, isolated as in the furunculus, or grouped as in certain kinds of anthrax, slightly elevated below

the fibro-cellular envelope of the prostate, through which they can be seen, owing to the deep colour of the surrounding parts.

The right lobe of the prostate is more prominent than the left; divided, it resembles at first view a large scrofulous tubercle yet hard, and, as it is called, in a *dormant* state. The parenchyma appears entirely replaced by concrete tuberculous matter. However, on examining with attention this alteration, it is easily seen that it is not a homogeneous matter, but an agglomeration of mucous follicles, dilated and filled with pus. In dissecting them separately, from their orifice in the mucous membrane, to the bottom of their cul de sac, we see evidently that each of them has participated in the inflammation of the ejaculatory duct of the vesicula, of the vas deferens, and that they are filled with similar pus.

The laminated tissue that unites them not having participated in the inflammation, it is easy to isolate them in their whole extent, and to assure ourselves that the white points remarked upon the surface of the prostate, are only the cul de sacs of these mucous follicles, gorged with pus and covered by the fibro-cellular coat. In the left lobe, the number of the inflamed mucous follicles is less, and they are more isolated: which allows us to prove still better the nature of the disorganization. Never could any artificial preparation give a more exact idea of the structure of the prostate.

Whatever desire I might have to support my own views by the observations of others, I shall be able to resist the temptation of torturing them in order to draw from them forced conclusions. It is not demonstrated to me that this patient experienced abundant seminal losses; and, even if it were, I still could not see any relation between these pollutions and the symptoms observed.

The delirium, agitation, dilatation of the pupils, &c. are symptoms of meningitis, which differ much from those which have been remarked in the first two cases: since there existed an inflammation of the arachnoid: I can only see here then a coincidence of the two diseases.

The case of Dr. Dalmas is not less interesting in other respects; it proves, like the preceding, how obscure are the diseases of the genital organs, since nothing led them to suspect the existence of this acute inflammation. It shows also with what facility these inflammations extend to the neighbouring mucous membranes.

That of the bladder was *reddish black*, and lined with false membranes.

It is rare to find so favourable an opportunity for examining the mucous follicles of the prostate at the commencement of an acute inflammation, before the cellular tissue has had time to undergo any change: it is easy after this examination to form an idea of the course taken by the disease in cases where it was more advanced.

The inflammation has likewise extended itself to the vas deferens, by the way of the mucous membrane, since the vesicula seminalis and the ejaculatory duct of the same side were filled with pus.

It is well to remark here, that the pus, which was found confined at the bottom of the cells of the vesicula seminalis, was much more concrete, entirely similar to tuberculous matter. If that which occupied the central part of the cavity had presented the same appearance, it is probable we should not have been willing to recognise this tuberculous matter as a product of inflammation.

The other vesicula seminalis contained a thick greenish matter, quite similar to meconium. These are not the ordinary qualities of semen. This profound modification of its composition must be attributed to an irritation provoked by the same cause which had occasioned the inflammation of the other spermatic organ.

Dr. Dalmas has reported this case in an interesting memoir, from which I shall select two similar cases observed by him.

No. 6.

Diarrhœa—vomiting—delirium—carphologia—dilatation of the pupils—death. Gastro enteritis—meningitis—pus in the prostate, the vesiculæ seminales and the vasa deferentia.—(Dalmas, Journal hebdomadaire, No. 33, Mai 1829, obs. 3.)

Michael Boeps, aged 23, labourer, residing in Rue de Bourgoyne, No. 25, was admitted the 10th of September, at the Charité, into ward St. Jean, service of M. Rullier. He had fallen the preceding day into a state of hebetude and prostration, giving only imperfect replies as to his situation. Those who brought him said that, for three months, he had had a copious diarrhœa, very lately checked; that he vomited every thing he took: his pulse gave at the most sixty beats.

M. Rullier, struck with the stupor, with the appearances of weakness, and the want of reaction, prescribed sinapisms, mild drinks, emollient enemata: sanguineous evacuations did not appear to be indicated, and nothing led them to seek for the cause of this irregular state in the genital organs. Gradually the skin became warmer; the pulse rose; the stupor became converted into a tranquil but real delirium. There came on carphologia, and involuntary subsultus. (Twenty leeches, blister to the neck, infusion of arnica, enema.)

17th. Dilatation of the pupils, coma at times interrupted: and then moanings, agitation. (Infusion of cinchona, enemata, diet.)

18th. Delirium, abdomen sonorous and distended; pupils contracted; pulse small and feeble; death in the morning.

The autopsy was made on the 19th in the presence of M. Rullier, by my friend and colleague, M. Thouret. The organs appeared to us as follows.

The arachnoid is clouded upon the anterior surface of the hemispheres. The pia-mater is infiltrated here and there with purulent serosity. The substance of the brain is firm, although highly injected. The septum lucidum alone is softened, but not entirely disorganised.

The lungs, pleura, heart and large vessels, appear to be in a healthy state.

In the abdomen, the mucous membrane of the stomach is of a blackish brown, softened in the greater part of its extent; small round ulcerations are distinguished here and there, grayish at the bottom, smooth and cellular, as if the mucous membrane alone was destroyed.

The small intestines and the glands of the mesentery offer nothing extraordinary.

The large intestine, on the contrary, is the seat of a very grave chronic inflammation: swelling, thickening, injection, and frequent ulcerations of the mucous membrane.

The urethra is free; the penis is healthy and entire; the prostate is infiltrated with pus, or rather with a pultaceous matter which appears in grains, when its substance is pressed.

The two vesiculæ seminales are filled with matter of the same nature, thick and yellowish; the same in the two vasa deferentia, deeper in the left than in the right.

The two testicles are healthy.

I ask pardon of Dr. Dalmas, for not adopting conclusions which have probably been suggested by facts that I communicated to him; but it is not demonstrated to me that he had had spermorrhœa; and, even if it were, the gastro-enteritis and meningitis explained too well the symptoms observed during life, for them possibly to be attributed to any other cause: I should not dare even to admit that an abundant and prolonged loss of semen had provoked the development of these diseases. I can only see there a simple coincidence of several inflammations, among which I can perceive no other connection than that dependent upon a general disposition of the economy.

The fact is not, however, less curious, as it tends to support what I have already said, of the obscurity of the most acute inflammations of the prostate, and of the vesiculæ seminales, of the frequency of these diseases, and of the manner in which the inflammation extends itself by continuity of tissue.

No. 7.

Remarkable alteration from the urethra to the testicle.—(Dalmas, loc. cit. obs. 4.)

The last case of Dr. Dalmas contains no information of the symptoms observed during life; and I should not have spoken of it if the description of the alterations did not present some interesting details: this is the substance of it.

At an inch and a half from the neck of the bladder, stricture formed by a true cicatrix, smooth, dense, surrounded with wrinkled folds which run towards its edges.

Prostate hard, scirrhus, creaking under the scalpel, particularly on the left side. Vesiculæ seminales small, hard, formed by sacs

in a state of atrophy, containing only matter of a dull aspect, and small in quantity.

Vasa deferentia presenting swellings more and more considerable, the nearer to the testicles they are examined; filled with a homogeneous matter, pultaceous, dry, yellowish, similar to tuberculous matter, or to soft cheese: matter the more liquid and assimilated to pus, as the swelling is greater; the more dry and assimilated to tuberculous matter, as the swelling is smaller. Between these different points of disease, complete obliteration of the cavity of the vasa deferentia.

Left testicle: epididymis knotty, irregular, as large as the testicle itself; formed of swellings similar to the preceding, and filled with the same matter. Corpus Highmorianum scirrhus, formed of a dense and firm tissue, gradually losing itself in that of the testicle, which is healthy. In the tunica vaginalis, hydrocele in cysts, (*avec cloisons.*) Right testicle: epididymis of the size of a pea only, scrotal fistula terminating at the corpus Highmorianum; encysted hydrocele in the tunica vaginalis.

I need not say, that it is still more difficult to appreciate, in this case, the connection that M. Dalmas thinks he has found between the affection of the genito-urinary organs and the meningitis. Thus, it is only in reference to the anatomical lesions, that this case presents any interest.

The stricture was formed by a wrinkled cicatrix, &c.; it is a case sufficiently rare to be worthy of note; it follows from it also that an ulceration had existed there. This inflammation in the neighbourhood of the prostate, and the mechanical obstruction offered at a later period to the passage of urine, have, without doubt, caused all the other alterations.

The preceding observations excuse me from insisting upon the manner in which the inflammation of the canal extended itself to the prostate, vesiculæ seminales, vasa deferentia, testicles, and even to the vaginal tunics. This phenomena must appear sufficiently clear; but several details of pathological anatomy need some explanations.

Dr. Dalmas is disposed to think that the tuberculous matter found in the vasa deferentia, was the product of inflammation; but he advances this opinion with a great deal of caution; as for myself, long since convinced that the tubercle is nothing else but ancient pus, I still have no doubt in that respect.

We have seen, in case 5th, the pus confined at the bottom of the cells of the diseased vesiculæ seminales much more dense than that which occupied the centre of the mass, and entirely similar to tuberculous matter. This greater consistency is only owing to the absorbent vessels having acted upon the almost isolated drops of pus, before being able to exercise their influence upon the central portions of the disease. It is for the same reason that, in the same patient, the vas deferens, filled with pus, was lined with a species

of pseudo-membrane formed of concrete pus. In cases of this nature, it is always the surface of the disease which assumes the most readily some firmness, because it is the most easily deprived of the water, which alone maintains the pus in a liquid state.

In the case with which we are at this moment occupied, the largest abscesses were those in which the pus had best preserved its characters: it was in the smallest that it the most resembled tuberculous matter: which is explained by the greater or less quantity of moisture preserved by these purulent deposits, according as the absorption acts upon a more or less considerable mass.

This question of tuberculous matter is so simple and so easy to clear up, that I am surprised to see it still agitated by men the most advanced in pathological anatomy. Whoever has practised post mortem examinations to a certain extent, with a little care, must have found in the pleura, in the peritoneum, in the fallopian tubes, &c., purulent deposits, presenting every degree of consistency. In fine, if they will take the pains to moisten in a little bag the driest tuberculous matter, they will see it liquify and become deposited at the bottom of the vessel with all the appearances of pus flowing from a phlegmon; and this deposit, submitted, after decanting, to the same trial as pus, will act precisely in the same manner. But this is not the place for entering into any more extended details upon an opinion that I see every day confirmed by the most numerous and conclusive facts.

To return to our patient, if we go back to the preceding cases, we shall see that the scirrhus engorgement of the prostate, and a part of the testicle, was produced by the same cause which determined the suppuration of the vas deferens; only, the materials deposited in the parenchyma of these organs were gelatino-albuminous. The hardened parts of the testicle were precisely those which joined the epididymis: which proves well that this alteration was a consequence of the inflammation of the vas deferens.

The encysted hydrocele was another effect of the same cause: these cysts were produced by partial adhesions organised during the acute stage of the inflammation; the serous effusion took place when this passed into the chronic state.

The vasa deferentia were completely obliterated; thus the patient was no more exposed to pollutions. Dr. Dalmas thinks, it is true, that some semen might escape by the fistula of the right testicle. I shall not examine here the importance that might be attached to such an evacuation; but I shall add that this obliteration of the vasa deferentia was also the result of the inflammation, and that the fistula must have succeeded to the opening of some abscess similar to those which existed in the epididymis of the other testicle.

Instead of regarding, as is always done, the different effects of one and the same cause, as so many distinct beings, we ought to endeavour to bring them together so as to understand the connection, and follow the modifications, according to the nature of the

different tissues, their forms, their functions, &c. It is only in this manner that we shall be able to arrive at general and precise laws.

No. 8.

Intermittent fever—anasarca—death. Profound alteration of the prostate, bladder, urethra and left kidney—induration and dilatation of the ejaculatory ducts—ossification of the vesiculæ seminales.

A patient, aged 66, became dropsical at the termination of an intermittent fever, and died in the wards of the medical clinic. His body, brought to the Ecole de Médecine, presented some alterations which we were far from expecting.

The left kidney was strongly developed, deformed, of a whitish yellow; the portion corresponding to the quadratus lumborum was very thin, hard, elastic, without any trace of normal organisation; the other half, more voluminous, had the same appearance, and besides contained six vast anfractuosités, lined by a white and very smooth membrane; another similar abscess contained a great quantity of pus: the pelvis was deformed; the orifice of the ureter was narrower than the rest of the canal: from the kidney to the bladder, it was about an inch in circumference, saving some contractions at intervals.

The bladder presented numerous columns; its walls were six lines in thickness; they were hard, whitish, as it were cartilaginous, and did not collapse upon being cut; it was impossible to recognise the different tissues which enter into their composition. The internal surface was of a dull gray, wrinkled and rough to the touch. Pus existed under the mucous membrane in several points. The neck of the bladder was open, surrounded with wrinkles like those about the anus, when studded with hemorrhoids.

The prostate was of three times its ordinary volume; it presented some granular parts, of a dull rose colour; the rest was lardaceous and very hard. At its inferior part was a burrow which might have contained a large garden bean. The verumontanum was very prominent.

The ejaculatory ducts were of a cartilaginous hardness: there existed several bony kernels in their substance: their orifice was so much dilated, that it might have admitted a goose-quill. The vesiculæ seminales were completely ossified, of a dull white, of the form and volume of an olive stone. Two species of hydatid tumours were attached to them.

Urethra flaccid, of a wine-lees red, and very large dimensions: testicles healthy: internal pudic artery ossified through the perineum, as well as several smaller arteries in the neighbourhood.¹

It is very unfortunate that no information could be obtained upon the cause of these grave alterations. All that we can conjecture is, that the fever and dropsy have been the result of them.

¹ These notes were taken by Dr. Clement, one of my students, who is zealously occupied with the diseases of the genito-urinary organs.

We see here again the inflammation extending itself from the urethra to the kidney, by the bladder and ureter, and also to the vesiculæ seminales, by the ejaculatory ducts; it produced also in the prostate and kidney some analogous disorders.

But it is particularly the alteration of the ejaculatory ducts, and of the vesiculæ seminales, that is very remarkable. Some dilated beyond measure, contained osseous granulations: others hardened, were completely ossified: it is then probable, from this, that the patient was subject to habitual seminal losses.

This ossification of the vesiculæ seminales is the only one that has come to my knowledge; however, it is as easily explained as that of the vasa deferentia.

I shall terminate the review of the alterations of the genital organs by a fact equally curious, but in another point of view.

No. 9.

Mental alienation—belief in a change of sex—death. Thickening of the arachnoid—profound alteration of the prostate—a kind of atrophy and obliteration of the ejaculatory ducts.

This is what I find in a note relative to a deranged person, who died in the ward of Professor Rech:

The intellectual functions had been deranged for a long time; the patient imagined that he had changed sex; and, believing himself a girl, passed a part of his time writing letters to an imaginary lover: sometimes he would kneel during whole hours, apparently employed in digging the ground. He had lost entirely the sight of the left eye. His death took place in consequence of an obstinate diarrhœa.

On opening the body, we found the dura-mater healthy in its whole extent; the arachnoid had increased in thickness in several points; we discovered upon its surface something like clouds that altered its transparency. The pia-mater contained quite a large quantity of serosity, especially in the cerebral anfractuosités.

The brain was healthy in all its parts, as also were the cerebellum and medulla oblongata. The optic nerve of the right side was in a state of atrophy behind its union with the left, to the extent of half an inch; of a grayish colour, and very soft. In the left eye, a considerable effusion of serosity separated the retina from the choroid; the vitreous body, as it were, in a state of atrophy, formed an irregular and reddish button.

The lungs were healthy, as was also the heart: but the latter was remarkably small.

From the cœcum, the mucous membrane was red and thickened; the disease increased as it approached the rectum, where existed numerous ulcerations.

The prostate projected into the bladder, it was about two inches in extent in its antero-posterior diameter, and fifteen lines transversely; its tissue was exactly similar to that of the cancer *en rave*;

it contained in its substance three small abscesses. The ejaculatory ducts were soft, as it were, shrunken, and obliterated; the vasa deferentia and the vesiculæ seminales were, on the contrary, more ample than usual.

This patient succumbed to a chronic diarrhœa; the intestinal mucous membrane was injected, thickened, and ulcerated: he had lost the vision of the left eye, which was greatly diseased, as was also the right optic nerve, before its union: he believed himself a girl, and the functions of the testicles must have been abolished, since the ejaculatory ducts were shrunken and obliterated, in consequence of the disease of the prostate.

If this rare alteration of the genital organs was not the only cause of the idiotism, it must, at least, have influenced his singular character.

SUMMARY OF THE PRECEDING CASES.

Symptoms.—The two first patients are the only ones in whom seminal losses were demonstrated, and the general symptoms well described. The others are of but little importance, except in reference to the pathological alterations. It is only in these two cases that we can follow well the progressive march of the deterioration of the spermatic organs, from the first blennorrhagia to death; that we can appreciate the always increasing influence of the seminal losses upon the whole economy, particularly upon the cerebro-spinal system.

The illusions produced, in these two patients, by this last order of symptoms, are well adapted to open the eyes of practitioners upon cases of this nature. The therapeutical consequences that flow from them are so grave, that we cannot attach too much importance to them.

But how can too abundant seminal losses resemble to this degree affections of the brain or of its membranes? By what characters can we distinguish these symptoms from those which are owing to idiopathic affections? In order to discuss suitably questions of this nature, it is indispensable to take into view all the facts connected with them; but, in the mean time, we can already compare together those with which we are acquainted.

In the two first cases the cerebral symptoms are preceded, during a long period, by a notable derangement in the other functions; thus, the digestions are badly performed, the stomach can no longer support alcoholic drinks, highly seasoned or too nutritious food; constipation becomes obstinate; the intestinal tube is habitually distended with gases; coition becomes more and more rare, precipitate, then utterly impossible. The patients, discontented with themselves and others, tormented with flatuosities, from which they want to free themselves continually, avoid society and its restraints; they become averse to every thing that reminds them of enjoyments in which they cannot partake; they fall into profound melancholy, become irascible, misanthropic, hypochondriac; occu-

pied with one sole object, they manifest the greatest indifference to every thing that does not relate to their health.

The cerebral functions are not more weakened than all the others, but their derangement is followed by more grave consequences, and is more easy to appreciate. We remark very soon a loss of memory, that the thread of ideas is easily interrupted, that the least mental application directs the blood to the head. It is in such dispositions that laborious digestion, a more prolonged constipation, a distention of the abdomen with gases, &c. are induced, which end by determining congestions towards the weakened and fatigued brain.

But these congestions are accompanied with a remarkable weakness of the pulse, with coldness of the limbs, with general uneasiness, with anxiety, with agitation in all the senses, and a remarkable desire for a change of place. These are very soon followed by great paleness of the face, general debility and alarming syncope, without one part of the body being more affected than another.

Apoplectic congestions are not preceded, during tedious years, with a progressive deterioration of the economy; the pulse is full; there is tendency to repose, to drowsiness. } copied

The patient who is the subject of the third case succumbed to a remarkable hemorrhage, supervening suddenly into the left lateral ventricular; but he had hypertrophy of the heart, and this first attack promptly caused death: it is then probable that it was not owing to the same cause, and did not present the same character, as in the first two cases.

The derangement of ideas that we have remarked in these first two patients, cannot be confounded with delirium. Every time delirium has been really observed, there existed a true meningitis. (Nos. 4, 5, 6.) The state of the intellectual functions in these two cases might perhaps bear more resemblance to dementia; but dementia is the ordinary result of mental alienation; moreover, it was always easy to obtain from these patients clear and connected answers.

Neither is it possible to confound the disorder of the digestive functions with the symptoms of a true inflammation of these organs; in all cases where these last have been observed, there really existed gastro-enteritis.

Lesions.—But it is particularly on account of the alterations found in the spermatic organs that these cases possess great interest.

The influence of the urethra upon all the organs which open into it is an important phenomenon in the history of diurnal pollutions. In order to have a clear idea of it, it is important, before all, to prove with what facility the inflammation extends itself, step by step, along the mucous membranes to parts the most remote.

Prostate.—The blennorrhagic discharges are furnished by the mucous follicles of the urethra, but especially by those of the pros-

tate; for it is there that they are the most developed and the most numerous; the prostate is indeed only made up of these follicles, united by cellular tissue.

During the first days that follow the infection, a tickling manifests itself in the urethra, followed by itching, heat, and lancinating pains, especially during the emission of urine; the secretion of the canal increases, changes its aspect, &c.; but it is only when the inflammation has arrived at the prostate that the discharge acquires all its intensity. It is, then, by that organ that it is principally furnished, and experienced patients are not deceived by it; for we see them, in doubtful cases, press the canal from the perineum to the glans, in order to squeeze out the secretion. Besides, post mortem examinations leave no doubt upon the subject.

Yet, the matter that gives rise to the disease is not deposited upon the surface of the prostate, and it is not because it contains a contagious principle, that the inflammation propagates itself so promptly from the orifice of the urethra to the mucous follicles of the prostate, for leucorrhœa, the menstrual flux, and lochia, are sometimes sufficient to provoke an abundant and obstinate running, of which the principal source is likewise in the prostate.

Neither is it the transportation of this matter from one point of the mucous surface to another that favours this propagation; for the discharge proceeds from within outwards, and the inflammation marches in the opposite direction.

Whatever it may be, the fact is constant, and it explains very well the frequency of diseases of the prostate in consequence of blennorrhagia.

Case 5th has shown us in what state the prostatic follicles are found during the first periods of an inflammation eminently acute: they were gorged with concrete, adherent pus; they formed by their union a firm and yellowish body, similar to a scrofulous tubercle; but the surrounding cellular tissue was still perfectly healthy, so that we could easily isolate them one from the other through their whole extent, and thus determine the nature and seat of the alterations.

At an epoch more advanced of the disease, we found the prostate infiltrated with pus or pultaceous matter, which pressure caused to flow out in form of grains (No. 6); thus, the cellular tissue was already invaded by the inflammation, but suppuration was not yet well established there.

At an epoch still more advanced, by slightly pressing the prostate, we made pus flow out from all its excretory ducts: it contained besides, small abscesses of the volume of a lentil or pea (No. 4). Here the suppuration of the cellular tissue had already had time to become united into very distinct abscesses.

In case 3d, the prostate was three times more voluminous than usual, and furnished upon pressure a very abundant purulent matter; it contained about thirty small abscesses, and as many miliary tubercles in a dormant state. We see here always the same

progress of the inflammation ; but long existing abscesses, instead of emptying themselves externally, are transformed into tubercles by absorption of the water that held the pus in a liquid state.

In case 1st the prostate was in part destroyed, and contained in its fibrous envelope an elastic and purulent matter, which was poured into the canal by a multitude of holes in the mucous membrane of the urethra. These holes were nothing else than the orifices of the mucous follicles, whose walls had been destroyed by suppuration.

We see, by this series of cases, how the inflammation extends itself from the urethral mucous membrane to that which lines the follicles of the prostate, then to the cellular tissue that unites them: how it there gives rise to abscesses which may empty themselves by the openings of the follicles, after having destroyed their walls, or else give place to the formation of tubercles which eventually terminate in the same way: how the prostate may become gradually dissolved, and be reduced to a fibrous shell, perfectly entire, covered by a kind of sieve, whose holes vary in form and dimension, according as the excretory orifices have remained distinct, or that several of them have become united into one by the destruction of the tissue that separated them (No. 1).

When the inflammation of the cellular tissue of the prostate is less intense it deposits there, instead of pus, an albuminous matter, which infiltrates and produces an indolent engorgement. If prompt and complete resolution does not take place, there results from it an induration of the prostate (Nos. 7, 8, and 9).

Spermatic Organs.—The frequency of what is termed *chaude-pisse tombée dans les bourses* shows, that the inflammation of the urethra propagates itself also with extreme facility to the secretory organs of the semen, and this extension takes place in the same manner. A contusion, a cold, &c. may indeed favour the development of these orchites; but their principal cause—often even their only cause—is the influence exercised by the mucous membrane of the urethra over that which lines the excretory organs of the semen.

In fact, patients and practitioners are strongly embarrassed, in many cases, to explain this appearance, and they would be still more so if prejudice did not render them ready in the way of explanations.

It is sometimes for having walked too much, or having remained sitting too long; sometimes for having worn too tight pantaloons, or for having bruised the testicles in crossing the thighs one upon the other, &c. that the disease has developed itself! But who is there that is not exposed to the action of some cause of this nature?

I grant that it is often in consequence of one of them that the patient experiences for the first time, in the testicle, a more or less acute pain, soon followed by the other symptoms of orchitis. But patients who observe themselves with care, do not fail to remark that at its commencement they experienced a weight in the inguinal region, tension and pain in the spermatic cord; on exploring

this, they find the vas deferens tumefied and extremely sensible; it has sometimes happened that the swelling of the cord has even been carried to the point of provoking a kind of strangulation in the interior of the inguinal canal.

When at a later period the inflammation extends to the body of the testicle, they attribute it to the first cause that made them remark the sensibility of the organ; it is then that the urethral discharge diminishes or is suppressed, according as the new inflammation is more or less grave; which makes the patients believe that it is that matter itself that has struck to the testicles, (*tombée dans les bourses*), and many physicians, also, that it is the suppression of the discharge that has provoked the inflammation of the testicle. They are deceived in taking the effect for the cause; but it is not less true that it is in reality the inflammation of the canal that has excited that of the testicle, and the succession of the symptoms would be sufficient to indicate the course it has pursued.

Besides, the cases that I have reported permit us to ascertain clearly this mode of transmission; and it is, indeed, on this account that they present the most interest.

When both testicles have been diseased, we have found the two excretory canals altered, (No 2.) When both vesiculæ seminales or the two vasa deferentia have been effected, we have remarked the same alteration in both of the ejaculatory ducts, (Nos. 1, 5, 8.)

When one half only of the spermatic organs has been affected, we have always been able to follow the inflammation to the orifice of the corresponding ejaculatory duct, whilst the other has been found healthy, (Nos. 4, 5.)

We have even seen the inflammation extend without interruption to the tunica vaginalis of the testicle (No. 4), or of both testicles (No. 7), according as the disease had propagated itself in one or both directions. This affection of the tunica vaginalis is easily conceived, since the alteration of the glandular tissue is readily shared by its fibrous envelope, which is intimately united to the serous membrane that lines it.

It is exactly in the same manner that the inflammation of the vesiculæ seminales has extended itself, in several cases, to the corresponding peritoneum. In the 1st and 5th cases this inflammation was very recent; the materials deposited upon the surface of the serous membrane were still albuminous, soft, and without any trace of organisation; in the 2d, the bladder was united to the rectum by *cellular* adhesions, owing evidently to the same cause.

These alterations are more interesting than they appear to be; they prove that a general peritonitis might readily arise from the diseases with which we are occupied. The ancient and circumscribed adhesions of the peritoneum that lines the bottom of the pelvis ought also to be remarked, as proofs nearly certain of a former acute inflammation of the vesiculæ seminales; they may

aid much then in the explanation of the symptoms observed during life, when the disease of the spermatic organs has become dissipated or leaves but slightly apparent traces.

However it may be, these alterations of the peritoneum and tunica vaginalis prove that the inflammation has propagated itself by *contiguity* of tissue.

But it is important to examine, with still more detail, the state of the different parts of the spermatic organs.

Ejaculatory ducts.—In the patient who forms the subject of the first case, the orifices of the ejaculatory ducts, instead of being circular, formed *an elongated and ragged slit*. These ducts themselves were very large. The same enlargement was noted by Stoll (No. 4); it was much more extraordinary in another patient (No. 8), since this opening would have admitted a goose quill. In all these cases there existed other much more grave diseases; but it is easy to conceive that the dilatation, or the erosion of the kind of sphincter which terminates the ejaculatory ducts, may of itself alone have a great influence over the production of diurnal pollutions, and I should not be surprised if we should sometimes find no other alteration capable of accounting for it.

The ejaculatory ducts participate ordinarily in the alteration and dilatation of their orifices: but, in addition, they may become isolated, as it were dissected, by the suppuration of the prostate (No. 1); or else thickened, hardened, cartilaginous, and may even contain osseous granulations (No. 8). These alterations, by far more grave than those of the orifices, must favour much more the involuntary emission of seminal matter. These canals having lost their elasticity and even the possibility of contracting, can no longer force the semen back into the vesiculæ seminales; or at least they are incapable of retaining it, if these reservoirs contract ever so little or are compressed.

The pressure exercised upon these ducts by the tumefied tissue of the prostate, may give rise to their atrophy and obliteration (No. 9), whence results again the more or less complete loss of function.

Vesiculæ seminales.—It would appear that the pus formed in the vesiculæ seminales must be readily expelled; but these two cul de sacs, with ramified cells, are placed upon the sides of the direct path of the semen, in order to serve as reservoirs; they do not communicate with the vasa deferentia and the ejaculatory ducts except by a quite narrow opening, before which the seminal fluid passes in its course from the testicle to the urethra: it appears that the swelling produced by the inflammation may narrow this opening of communication sufficiently to become an obstacle to the flow of the pus during a greater or less length of time; for in case 5th it had acquired a considerable degree of firmness; and that at the bottom of the cells was still more concrete, entirely similar to tuberculous matter. The pus may even remain until the water be

more completely absorbed: we only find then a yellowish homogeneous matter, soft like plaster, and even cretaceous, the true origin of which is completely misapprehended.

It is almost useless to remark, that the presence of the pus is opposed to the introduction of semen into the reservoirs destined for it, and becomes of itself an immediate cause of diurnal pollutions. We conceive, also, very easily, that after its expulsion the walls of the vesiculæ must be engorged; that they may always remain indurated, deformed (No. 1), thickened (No. 3), cartilaginous, and even bony (No. 8). In the most favourable cases, the internal membrane must preserve for a long time an unusual sensibility, the influence of which cannot be otherwise than very injurious.

It is not, in other cases, necessary to find alterations so grave in the vesiculæ seminales, to account for the spasmodic and inordinate contractions of which they are sometimes the seat, and for their influence upon the production of diurnal pollutions; but it was useful to study well those the most strongly marked, in order to appreciate better the others.

The qualities of the semen found in the vesiculæ seminales ought to be also carefully noted: we found it similar to *meconium* in one of these reservoirs, whilst pus existed in the other (No. 5). It is probable that the alteration of the products of this testicle was due to an influence similar to that which had acted upon the other half of the prostatic organs in a more marked manner.

Vasa deferentia.—Neither is the pus formed in the vasa deferentia always easily expelled. The tumefaction of the walls may induce complete obliteration of the cavity in certain points, whilst in others it becomes distended with an accumulation of pus; so that these pouches more or less dilated, separated by strictures more or less extensive, resemble irregular strings of beads. This disposition may extend to the epididymis, and even to the *corpus Highmorianum*, the mucous membrane of which is continuous with that of the vas deferens on one hand, and on the other with that of the secretory ducts (No. 7).

The pus thus confined, submitted for an indefinite length of time to the action of the absorbent vessels, dries more and more, and gives rise to what are called *deposits of tuberculous matter*, the aspect and consistency of which may present every variety of appearance in the same individual, according to the antiquity, dimensions of the purulent abscess, &c.

It follows, also, from this obliteration of the vasa deferentia, that the semen is retained in the testicles; by consequence, that the procreative power is destroyed; but it does not necessarily follow that the patients are freed, on that account, from seminal losses. If abscesses of the epididymis open outwardly, we can conceive that the semen would then escape by this rupture of the excretory canal, in proportion to its formation by the secretory vessels, and thus constitute a true spermatic fistula (No. 7): if the same alteration

existed on both sides, it is clear that the patient would be exposed to the same phenomena as those suffering from diurnal pollutions.

If the obliteration of the excretory duct is not followed by any rupture, it is probable that the secretory organ, after having been a long time distended, swelled, and painful, will gradually diminish, and at length become completely wasted, like other glands under the same circumstances. It is thus that certain states of atrophy of the testicles may be explained, succeeding very painful and prolonged swellings of that organ.

When we feel the vas deferens hard and knotty, there can be no doubt as to the cause of that atrophy. But sometimes the alteration takes place in parts concealed from sight and touch (No. 9); then the state of the prostate may furnish important information. When it is found unequal, tumefied, and voluminous, the atrophy of the testicles must be regarded as the consequence of the compression of the ejaculatory ducts.

In a soldier, whose history I shall relate, the testicles were not larger than those of a child of six years; the patient had felt there for a long time dull and incessant pains: the prostate was much diseased; the moral powers had experienced the same changes as in cases of diurnal pollution, but the physical were not so much weakened, a fact very readily explained.

The slow atrophy of the testicles, in consequence of more or less acute pains, prolonged for a greater or less length of time, is not very rare; these pains are ordinarily regarded as nervous, and until the present time the insensible wasting that follows them has not been explained in a satisfactory manner. All the patients of this kind that I had occasion to see had had blennorrhagiæ. I am convinced that these absorptions were the remote but direct consequence of them.

We find often, in patients who have had hernia humoralis (*chaude-pisse tombée dans les bourses*) the vasa deferentia thickened, hardened, cartilaginous, gravelly, and even entirely osseous (No. 2). These alterations confirm what I have said of the mode of transmission of the inflammation from the urethra to the testicles, for all these varieties of induration are so many results of inflammation.

Testicles.—Every body knows with what slowness engorgements of the epididymis and corpus Highmorianum are dissipated at the termination of these orchites. That alone would suffice to prove that it is by the vas deferens that the inflammation had arrived at the testicles; since it is at this point that the secretory vessels unite in order to terminate in the excretory duct. It is not, then, astonishing that this portion of the testicle should be more seriously diseased, and often, indeed, the only one compromised (No. 7).

Purulent collections formed in the testicle (No. 4) cannot, like the preceding, escape by the excretory ducts, and the fibrous envelope that retains the secretory vessels is very firm; it must, then,

happen quite often, that inflammations of little intensity, and well circumscribed, become arrested before suppuration has had time to manifest itself externally. Then, if absorption does not take place promptly and completely, the thickest part of the pus forms tubercles, whose presence, in their turn, causes new inflammations; and the secretory vessels of the semen may, like the follicles of the prostate, become gradually destroyed, so that the gland may be reduced to its envelopes.

But it is not pus alone that may be formed in the cellular tissue of the testicle. When the inflammation is slight, but prolonged, or often renewed, it deposits there a gelatino-albuminous matter, which thickens and becomes the source of organic changes similar to those of the prostate, and of which the first cause goes back, oftener, to chronic affections of the urethra too long neglected.

I have considered it important that the manner in which inflammation is transmitted from the urethra to the testicles should be well established; for this, once settled, explains in the simplest manner, why the prolonged presence of a catheter in the canal, the existence of a stricture, &c., provoke so often the engorgement, inflammation of the testicle, and even sometimes the development of certain hydroceles; how the disappearance of the cause is ordinarily sufficient for the removal of these accidents.

But the union of all these facts is eminently of importance in the study of diurnal pollutions: for the intimate connection of the urethra with the testicle, by means of the excretory ducts, would be sufficient to enable us to foresee the influence that the state of the mucous membrane, surrounding the orifice of the ejaculatory ducts, must have over the secretion and expulsion of the semen.

Urinary organs.—Exactly similar phenomena have presented themselves in the secretory and excretory organs of the urine.

The inflammation commencing in the urethra has propagated itself to the kidneys by the bladder, the ureters, and the pelvis; it has even been easy uninterruptedly to follow the traces of it. Hence, the violaceous injections, the species of ecchymosis, and even the ulcerations of the mucous membrane that lines these organs (Nos. 1, 2, 3, 4, 5, 8), hence the swelling and redness of the kidneys (No. 4), hence the abscesses of all dimensions and epochs, encysted or not encysted (Nos. 1, 3, 8), mingled with immature or suppurating tubercles (No. 3), which have been found in the kidneys.

In consequence of these successive inflammations we have seen the proper tissue of the kidney become destroyed like that of the prostate and testicle (Nos. 1, 3, 8), and almost reduced to its external fibrous envelope.

There is, then, a complete similitude between the lesions of these two orders of organs. If the kidneys were accessible to our senses as are the testicles, this resemblance would appear still more striking.

Comparison.—We often see, in consequence of a cold, an excess of drink, &c., a blennorrhagia diminish or cease entirely, and at the same time the patient experiencing violent and deep-seated pains in the loins; the urine becomes at the same time very scanty, deep-coloured, sometimes bloody, &c. If we could, then, explore the kidneys as easily as the testicles, we should find, perhaps, that nephritis succeeding blennorrhagiæ are as frequent as orchitis.

Certain it is, that, in the preceding cases, the disorganisations of the kidneys have been more frequent than those of the testicles. But it is not only in consequence of blennorrhagiæ and strictures that this influence manifests itself: every inflammation of the urinary passages has a tendency to extend itself to the kidneys; this is why acute or chronic cystitis, the presence of calculi, &c., are so many causes of inflammation of these glands; this is why the kidneys are so often disorganised when the bladder has been a long time tormented by the presence of foreign bodies, by repeated retentions of urine, &c.

I think I have amply shown with what facility acute inflammations of the urethra extend themselves to the secretory organs of the semen and urine, by the way of their excretory ducts. I have constantly instituted a parallel between the phenomena that were transpiring in the two orders of functions, because they have presented themselves at the same time, with nearly the same degree of energy, and with analagous characters. But this similitude is not alone observed in cases of acute inflammation; it is only more easy to demonstrate, and it is for that I commenced with them; but similar phenomena are observed under the influence of less energetic causes.

When the bladder is irritated by any cause whatever, the secretion of urine increases, and changes its nature; at the same time it is more abundant and more watery, and remains a less length of time in the bladder. The desire to urinate is felt oftener and with more energy; however desirous the patient may be not to yield to it, the sensation is so painful and the bladder contracts with so much violence, that the urine is sometimes expelled, in spite of all the efforts of the patient, and that, too, before he may have had time to prepare for it. The urine is rendered each time in small quantities, its jet is short, feeble, embarrassed, and falls at a little distance from the feet. If this state continues a long time, the muscular membrane becomes more developed, the walls of the bladder thicken, and its capacity diminishes in the same proportions.

Those who have remarked the coincidence of this limpidness of the urine with its frequent expulsion, have concluded from it, that the more watery it was, the more irritating it became to the mucous membrane. But it is impossible to admit that the urine is the more irritating in proportion as the quantity of salts it holds in solution is diminished. It is evident that the effect is here taken for the

cause. It is because the bladder is irritated, that it cannot support a long time the presence of urine; this is more watery because the irritated kidneys secrete a greater quantity of it, and because it remains less time in the bladder. This is so true, that, when the mucous membrane enjoys its ordinary sensibility, it can support for a long time the presence of a great quantity of watery urine, as is seen every day after repasts.

If this irritation is prolonged, it may induce, finally, a kind of relaxation of the secretory vessels, and degenerate into diabetes. Then the urine loses entirely its chemical characters; the urea and uric acid are replaced by a saccharine matter; the economy becomes exhausted by furnishing such an abundant secretion, &c.

We observe exactly the same phenomena in the spermatic organs, when they are submitted to the influence of a similar irritation. The testicles secrete a greater quantity of semen because they are irritated; this semen is more watery because it is less elaborated, and remains less time in its reservoirs; it is more promptly expelled because the vesiculæ seminales are more sensible to the impression produced by the presence of the spermatic fluid, and act more readily.

The spasmodic contractions of which they become the seat, commence by provoking the discharge too promptly, either in the venereal act, or in consequence of lascivious dreams; which render coition precipitate, incomplete, and nocturnal pollutions very frequent. At a later period, the weakness and sensibility increase, the semen becomes more abundant, more liquid still, the convulsive contractions of the vesiculæ seminales are oftener repeated; then the approach of a woman, or merely a voluptuous picture, an erotic thought, are sufficient to excite a discharge; but the semen is no longer thrown out with energy, erection is never complete, and there is scarcely any pleasure.

These fatal contractions end in being excited by causes still less direct; the patients feel them coming on at a time when they are thinking the least of them; they fear the consequences, and yet cannot prevent them. In fine, there are cases in which the weakness and susceptibility of the genital organs are carried to the point of constituting a true spermatic diabetes, as well by the quantity and quality of the fluid secreted, as by the frequency of its emission.

We have not been able to make, upon this altered semen, the same chemical experiments as upon the urine of those suffering from diabetes; but it contains no more spermatic animalculi, than the other contains of urea. And let no one think that this analogy is alone founded upon theory; it really exists in practice. I am at this moment attending a patient who is dying, exhausted by a diabetes, and by diurnal pollutions of the same character. I shall report elsewhere this remarkable case.

Here are, then, under the empire of the same causes, the kidneys and the testicles, the bladder and the vesiculæ seminales, which act

in the same manner and produce analogous effects. I will say further, it is very rare that these affections exist separately.

Thus, in cases of strictures, it is the urinary passages that are principally affected, but we have seen that the spermatic organs were almost as much so; and it is not inflammation alone that propagates itself in these two directions; so does also simple irritation of the urethral mucous membrane.

Diurnal pollutions are too little known, to have been remarked in these cases which are always obscure, and where the attention, also, is fixed upon another object; but I have so often ascertained their existence as a sequel of stricture, that I regard the seminal losses as the real cause of the hypochondriasis, ischuria, debility, &c., ordinarily attributed to the affection of the urinary organs: what proves it is, the weakness and infrequency of the erections, the promptness of the discharges, the limpidness of the semen, &c., observed in the greater part of these patients.

It is quite rare that diurnal pollutions are not complicated with chronic catarrh or irritation of the bladder; it is this, indeed, which renders the diagnosis very often difficult, not only on account of the presence of the symptoms peculiar to catarrh, but also on account of the mucosities secreted by the prostate and the bladder. This is why, when I see the urine troubled, I always direct my questions with reference to diurnal pollutions, although I do not confound these mucosities with semen.

It is very remarkable, also, that those who give themselves up to venereal excesses, or to masturbation, experience frequently a desire to urinate, which has caused the ancients to say, *rarò mingitur castus*. I have always been struck with the truth of this axiom: it proves with what facility the urinary organs partake of the excitation of the spermatic organs.

Another very important fact in the history of diurnal pollutions, proves how exact is the analogy between the irritation of the bladder and that of the vesiculæ seminales. It is almost always at the end of the emission of urine that the semen escapes: the bladder then contracts with energy, in order to expel the last drops of liquid; the vesiculæ seminales likewise begin to act, and cause a greater or less quantity of spermatic fluid to flow out with the urine. They are wrong who attribute this viscous matter to the prostate, because it does not present all the qualities of ordinary semen; the evacuation sometimes is very abundant, and the semen, in this case, cannot be mistaken. Besides, when the patients have their attention fixed upon this phenomenon, they know very well how to appreciate the contractions of the vesiculæ seminales: they are, indeed, generally in proportion to the amount of the loss.

The greater number also observe, that when they are menaced with a relapse, it is preceded with a more frequent and imperious desire to urinate, whether this increase of sensibility of the bladder manifests itself in consequence of a cold, or succeeds an excess in

drink, coition, &c; which proves that the same causes act at the same time on the two orders of organs.

The patients affected with diurnal pollutions, experience, in general, very injurious effects from diuretics.

Almost all those who have taken squills, nitrate of potash, digitalis, &c., have observed, during their use, a remarkable increase of the seminal losses, and some, after having been cured for a greater or less length of time, have had relapses which could not be attributed to any other cause, and which were spontaneously dissipated as soon as the patients renounced the use of these medicines.

It is indeed worthy of remark, also, that children, subject to incontinence of urine, are particularly exposed to nocturnal pollutions at the epoch of puberty; and at a later period, to diurnal pollutions.

In fine, I cannot terminate this parallel without remarking here, that the obliteration of the seminal ducts may be followed by the formation of spermatic fistulæ, as strictures of the urethra give rise to urinary fistulæ, (No. 7.)

To sum up the whole, all the mucous surfaces of the genito-urinary organs have the greatest analogy and most intimate connections one with another. It is by them that the inflammation extends itself, step by step, to the secretory organs of the semen and urine. The portion of this membrane that lines the prostate being in intimate connection with that of the mucous follicles, ejaculatory ducts, and bladder, is that whose different states may have the greatest influence over all the others. The relations of this prostatic surface with the ejaculatory ducts, give to it particularly a great importance in the study of the different seminal losses; for every sensation felt at the orifice of an excretory duct is easily transmitted to the secretory organ.

This transmission takes place by the membrane that lines the excretory duct; it is not the result of a *sympathetic* connection, such as that which exists, for example, between the uterus and the mammæ.

The excretory duct, charged with this transmission, must necessarily itself partake of this influence: the visiculæ seminales cannot, then, remain insensible to the impression that they transmit to the testicle; which is important to be considered, seeing that these reservoirs are the agents of the spermatic emission, as the bladder is of the expulsion of the urine.

We shall often have occasion to apply these data to the study and treatment of diurnal pollutions. In the mean time, it is well to remark, that the influence of the excretory ducts upon the secretory organs is not an isolated phenomenon, exclusively peculiar to the kidneys and testicles, but the result of a general law, applicable to all the glands.

In fact, suction excites the secretion of milk, and changes its quality: the first drops that flow from the nipple are watery; the

milk becomes then more abundant and better elaborated, in proportion as the suction continues.

The introduction of a foreign body between the eyelids increases the secretion of tears : sometimes even they change their nature, to the point of irritating and excoriating the skin of the cheeks.

The presence of food in the mouth increases the secretion of the salivary glands, particularly if it is stimulating, spiced, &c.

During digestion, the liver and the pancreas increase their secretions : the action of emetics and purgatives produce the same effect.

The ejaculatory ducts open upon the surface of the prostatic mucous membrane ; ought we then to be astonished at the important part it plays in the production of seminal losses ?

CHAPTER III.

BLENNORRHAGIÆ.

No. 10.

Age 20. Lymphatic temperament—blennorrhagia—orchitis—nephritis—nocturnal and diurnal pollutions—abuse of mercurials—injurious effect of cold and tonics—leeches, flannel, milk, cure—new blennorrhagia—same treatment, same result.

The first case of diurnal pollutions I had occasion to treat, was that of a student in medicine, of great intelligence, who studied his disease with much exactness, and described to me the causes and symptoms with unusual clearness. I desired him to leave its history with me : the following is as it was put into my hands.

I shall only remark that he was of a temperament eminently lymphatic ; that he had red hair, pale face, white skin, habitually cool and even cold ; that his form was slight and emaciated, his chest narrow, his voice soft and feeble.

“ I am twenty years of age, and have never had any other disease than the one of which I am going to give you the history.

In January, 1821, I contracted a blennorrhagia, the treatment of which consisted of emollient ptisans, general baths, and thirty-two grains of sublimate. In the month of April of the same year, some doses of the potion of Chopart put an end to this discharge, which lasted four months.

Scarcely cured six weeks, I contracted a new blennorrhagia, (eight grains of sublimate, four grains of muriate of gold.) In September, a ride on horseback occasioned a swelling of the left testicle, (repellents, such as the vapor of vinegar, cutler's earth, &c.) The engorgement became in a great degree dissipated ; but there remained a relaxed state of the scrotum ; whence resulted painful draggings in the spermatic cords, which were relieved by the application of a suspensory bandage.

At the commencement of 1822, the discharge still continued : I employed local astringents, fifteen general mercurial frictions, the hydriodate of potash in frictions upon the testicular tumour, four hundred pills of the sublimate in doses of one tenth of a grain : the discharge diminished, but did not entirely disappear.

Whilst I was taking all these medicines, being lightly clad for the season, I exposed myself to a severe cold, that suppressed the perspiration of the feet, and brought on pains in the kidneys, ordinarily obtuse, but which became acute when I was again exposed to the cold.

At about the same period my digestion became laborious. Attributing this languor to weakness of the stomach, I endeavoured to rouse it by stimulating food, by the use of rhubarb and generous wine ; but the use of these different means only increased my troubles. About the month of June, 1822, they became insupportable ; as soon as food reached my stomach, I experienced a tightness in the whole base of the chest and under the sternum, with difficulty of breathing, general lassitude, and sometimes a desire to vomit : my tongue was white and clammy ; my belly constantly distended with wind ; I had an obstinate constipation, and at times slight faintings ; no reading could fix my mind, (five purgatives in ten days, nitrated ptisan, diet.) These means rendered me still more ill than ever.

Although I never experienced the sensation of hunger, I ate much to repair my strength ; but my digestion was only more difficult, and I felt overburdened by it : I endeavoured to assist my stomach by the aid of coffee ; I took it after all my meals : with the same view I went to the river to take a bath every morning ; but I could not remain in the water more than a quarter of an hour without trembling in all my limbs : when I came out no reaction took place, and I remained a very long time unable to get myself warm ; yet I perceived that ice creams did me good, and I took a great many.

The discharge still continued in a slight degree ; it was particularly in the morning on getting out of bed, that I perceived, at the urinary orifice, a drop as large as a pea of a viscous, stringy, and pearly matter : a part of this matter, remaining in the canal, was driven out by the first urine from the bladder ; it remained suspended in the liquor in the form of flakes, which finally were precipitated to the bottom of the vessel.

Near the close of 1822, as soon as the cold weather came on, my condition became aggravated ; all the symptoms I have described increased ; I became sad, prejudiced, always uneasy, without motive to action, and very timid. I had chills, especially when I exposed myself to the cold ; I felt them start from the inferior extremities and extend over the whole body ; then I experienced more intense pains in the kidneys ; I urinated frequently, and it was only with difficulty that I expelled the last drops of urine ; they were viscous, and a part of it was always spilled upon my shirt and

into my pantaloons; I had neither erections nor venereal desires. I passed semen often during sleep, without lascivious dreams, or the least erection of the penis; I experienced an irresistible desire for sleep.

At the commencement of 1823, I perceived in my urine an abundant sediment, earthy, of a fawn colour, of which one part became deposited upon the walls of the vessel, whilst the other gained the bottom, mingled with small red concretions of the size of the head of a pin, similar to coral powder.

About the end of February, my condition had become insupportable; it was then only that, according to your directions, I commenced the following treatment: twelve leeches to the anus, cold lotions upon the perineum and scrotum, three times a day; a pint of iced milk; flannel jacket upon the skin; progressive decrease in the quantity of wine taken at each repast, then complete abstinence from every fermented liquor. Some days afterwards, I experienced a notable change in my health; my digestion had improved; the lumbar pains and lassitude disappeared. I became less sad, less timid, more active, and I commenced study with ardour: my genital parts acquired vigour; I threw aside my suspensory bandage: no deposits in the urine: the erections reappeared. (Second application of leeches, fifteen days after the first: continue treatment during two months.) At that epoch, that is to say, at the end of April, my health was in the best state: the approach of summer was sufficient to continue it so: I wore, however, the flannel jacket until the middle of summer without being incommoded by it.

In the month of July, 1823, third blennorrhagia which did not in any way derange my general health: one month after its appearance, I treated it successfully by an application of leeches, and the balsam copaiva in small doses; when I took too much of it I felt again vivid pains in the kidneys.

Sea bathing, which I practised during the whole month of September, contributed not a little, I think, to strengthen my genital parts.

The reduction of the atmospheric temperature during the month of November made me resume the jacket and woolen stockings; I experienced already constant chills, and an acute pain in the kidneys; I found myself menaced with a relapse into the state from which I had just escaped.

I am obliged, at least during winter, to take milk every day and to abstain from spiced meat, as well as wine, under penalty of having my lumbar pains re-appear, and an obstinate constipation, burnings in the urethra, a slight discharge, a sediment in my urine and inconvenient itchings in the external genital parts; I must not remain stationary when exposed to a moist cold of the least intensity. It is by taking all these precautions that I have the happiness of enjoying satisfactory health."

M. N. was afterwards appointed by means of the *concours*, surgeon in chief of a very important hospital, which proves that he

was able after his case to give himself up to severe study. I have seen him several times, and have learned from him that his health was perfect, but that it was necessary for him to protect himself with great care against the least impression of cold and against all undue excitement of the digestive organs; thus, for example, he is obliged every winter to return to milk, to the mildest and lightest aliment, and to the use of pure water at his meal.

The patient having a blennorrhagia, mounts on horseback; very soon after he is attacked with orchitis; painful draggings are felt in the spermatic cords, and that too long a time after the cure: it was then by the vas deferens that the inflammation transmitted itself from the mucous membrane of the urethra to the testicle, as has been demonstrated by myself in a great number of autopsies.

A short time after exposing himself to cold the perspiration of the feet becomes suppressed, and pains of the kidneys manifest themselves, &c. In writing this phrase, the patient was not probably thinking of the secretory organs of the urine; yet, they must in reality have been the seat of pains, for, at this same time, the expulsion of the urine became very frequent, the last drops were expelled with difficulty, its composition was entirely changed, &c.

If we recollect the numerous cases in which we have been able to trace the phlegmasia from the urethra to the proper tissue of the kidney, through the bladder, ureter and pelves, we cannot doubt that the inflammation of the canal extended itself in the direction of the urinary organs in the same manner as in the spermatic organs, that is to say by way of the excretory ducts: thus the two orders of symptoms have constantly undergone the same vicissitude.

In fact the urine deposited an abundant, earthy sediment, containing at the same time semen in suspension. The bladder had become more sensible to the impression of the urine, since the desire to urinate was oftener renewed, and in a more imperious manner: the vesiculæ seminales were exactly in the same condition, since the semen was rendered during sleep and without erection. In addition, the contractions of the bladder finally brought on those of the vesiculæ seminales, as the last drops of urine, expelled with so much difficulty, were viscous, &c. The two orders of symptoms ceased, re-appeared, and were cured at the same time. They were owing to an inflammatory state, for the antiphlogistic treatment was the only one which succeeded.

The injurious effects of cold were well marked in the case of M. N.: we may attribute it to his constitution eminently lymphatic; yet we shall have occasion to remark similar phenomena in patients endowed with a very different temperament. However it may be, I am well convinced that without the habitual use of flannel, M. N. would not have succeeded in protecting himself against new relapses and in strengthening his constitution.

M. N. adopted numerous anti-venereal remedies, although he never had any other disease than blennorrhagia; he experienced

from them effects the more injurious, as his constitution adapted itself but poorly to the use of mercurials. We find these injurious notions adopted by many practitioners.

M. N. fell into other errors much more common, because they are the ordinary result of a false logic almost inevitable on the part of the patient. Perceiving that they are growing weak, they eat much to repair their strength, and they select the most nourishing food; the digestion goes on with difficulty and is accompanied with a development of gas, because the stomach partakes of the general weakness; then they have recourse to generous wines, spices, rhubarb, &c.; hence arises the chronic gastritis which so often accompanies pollutions of long standing.

The intellectual functions languish like all the others, the patients are habitually drowsy, then they resort to tea, coffee, &c. to arouse themselves.

In fine, M. N. has, as many physicians do, *treated the symptoms*, and has allowed himself to be influenced by the names imposed upon medicines. The urine was muddy, contained a sediment, and was passed with difficulty; for this he took nitrate of potash, as a *diuretic*, without reflecting that the increased secretion provoked by this medicine, was the result of an excitation of the urinary organs, and that his were already too much irritated. Being constipated, he took purgatives without seeking the cause of this constipation, without troubling himself as to the effect that the irritation of the rectum would produce upon the bladder, the prostate and vesiculæ seminales: these errors are committed every day under the same circumstance.

But what is still more common, is the abuse of *cold* in cases of nocturnal and diurnal pollutions. In taking the river bath, M. N. only followed the precepts given by every one that has written upon this subject: he was injured by it, and that inevitably: his genito-urinary mucous membranes were too highly irritated not to experience injurious effects from the immersion of the body in cold water: he ought to have foreseen this result from the bad effects that cold had always produced upon him. On the other hand, he was too feeble to experience a suitable reaction after the bath. We shall see, that cold baths, employed *indiscriminately* in all cases of seminal losses, have done much more injury than good.

Yet the patient *thinks* that sea bathing gave tone to his genital parts, and, unquestionably, he employed this doubtful form of expression, because he could not satisfactorily explain these two effects so diametrically opposed to each other: nothing however is more simple. When he resorted to sea bathing he was cured: the irritation of the genito-urinary organs had passed away, his strength was restored; the first impression of the cold then could no longer be injurious; and the consecutive reaction would be readily established. It is true there exists a great difference between sea and river bathing; but it is particularly to the state of the diseased organs and to the degree of vigour of the economy that must be attributed the opposite results produced by the cold.

For not having made this important distinction, general propositions have been laid down upon the employment of these powerful agents, the application of which is every day followed with the most disastrous results.

No. 11.

Blennorrhagia, followed by irritation of the kidneys, bladder, spermatic cords, then by nocturnal and diurnal pollutions, alternating with sore throat—cold lotions, &c.—Cure.

M. T., of Cette, aged fifty-four, of a nervoso-sanguineous temperament, much inclined to the venereal act, contracted a blennorrhagia for which an empiric prescribed enormous doses of the powder of cubebs: the discharge ceased, returned, and disappeared again; but an intense irritation of the bladder manifested itself very soon; the emission of urine became frequent, accompanied with pains and spasms, especially after the expulsion of the last drops of urine; there came on dragging pains in the kidneys, thighs, and the spermatic cords; heat and weight in the perineum: nocturnal pollutions took place more and more frequently: at length, the patient perceived that in going to stool he passed a great quantity of grumous matter, with the odour of semen.

Very soon after, heaviness of the head, dragging pains of the stomach, no appetite, derangement of the digestion, decrease of strength, alteration of the face, cessation of the venereal desire, fatiguing insomnia, increasing sadness, profound melancholy.

At a later period the irritation of the genito-urinary organs was replaced by a sore throat, which ceased when the first symptoms reappeared. These alterations were thus repeated several times.

In fine, at the end of two years, the patient consulted Dr. Clement, who advised frequent lotions upon the genital parts with iced water, hip baths of salt water, iced drinks, and a light regimen. This treatment, adopted during the hot days of summer, caused the nocturnal and diurnal pollutions to disappear: a short time after M. T. recovered his former vigour.¹

It is needless to point out how much this case resembles the preceding; only the affection was more simple, more recent, the constitution of the patient more robust; the action of the cold was also very advantageous and very prompt.

No. 12.

Masturbation—Blennorrhagia—Diurnal pollutions—Failure of the ordinary means—Cauterisation of the prostatic portion of the urethra—Prompt cure.

Alexis Poit, seaman, aged 20, short stature, sanguineous and corpulent, came to the Hotel-Dieu of Montpellier in 1822, to be cured of a venereal affection, which he said he had in the body, from the

¹ This case was communicated to me by Dr. Clement, of Nice.

commencement of a gleet, contracted three months before, and cured in a few days without any other treatment than a ptisan of couch-grass (*chiendent*).

Nothing externally confirmed this assertion: the patient complained of violent headaches, of pains in all the bones, of frequent spasmodic tremblings in all the limbs, of a continual agitation, which prevented him from enjoying a moment's sleep; dizziness, vertigo, accompanied with ringing in the ears; suffocations, palpitations, and itching of the skin; his eyes were red, dry, sensible to light, &c.

The pains in the bones were the only symptoms which could lead us to suspect a venereal disease; the patient said he suffered more during the night, but his replies were very obscure, and often contradictory. However it may be, the skin was hot, dry, and covered with pimples. I prescribed blood-letting, a bath, and cooling ptisans.

The next and the following days no change; the patient appeared more and more persuaded that he had the pox in the body. His constitution appeared robust, his countenance indicated health, his replies were obscure and often contradictory: I thought at first he had some motives for feigning different diseases; but as he did not eat, and appeared disposed to bear moxas and other means of the same nature, I observed him more closely. The students regarded him as a hypochondriac, a melancholic, or a maniac, because he complained of a fixed pain in the epigastrium, although his tongue was neither red nor dry; because he said he heard a continual noise in the belly, and felt the intestines bound, as with iron, for several hours, and then suddenly loosened.

When this sort of strangulation took place, he felt something that ascended to the epigastrium and suffocated him: this suffocation ceased all at once; then he passed both ways a great deal of wind. He was habitually constipated, and with great difficulty expelled hard and very fetid matter; he urinated very often, and with difficulty, and complained of pains in the penis and bladder, pains that he attributed to the suppression of his discharge: (twelve leeches to the anus, a bath,) decrease of the pains in the penis and bladder. I urged the patient to get up and walk, but he pretended that his limbs could not support him, and passed all his time in groaning and sighing, his head concealed under the coverlid.

Having observed the most of these symptoms in almost all my patients affected with diurnal pollutions, I interrogated Poit on this point. But he affirmed that he had never seen any thing that resembled semen, either in urinating or in going to stool. Besides, he had never had any connection except with the woman who had given him the disease, and three times only in the space of eight days.

From the manner in which he deplored the momentary misconduct to which he owed all his troubles, I thought that he was given to masturbation: he obstinately denied it before the students, but

informed me afterward that he had in fact given himself up to it from the age of ten years, and even five or six times a day. He experienced then a very vivid tickling, unaccompanied by any emission, and which was very soon changed to a painful burning. About the age of twelve years, having perceived that these fatal enjoyments were affecting his health, he became more reserved; but at fourteen he abandoned himself to them anew with a kind of fury; the irritation was often carried to a painful degree; the cords of the spermatic vessels became engorged; there existed in all the body, particularly in the loins and articulations, a great weakness, accompanied with contusive pains, continual vertigo, and ringing in the ears; his memory was weakened, &c.

From sixteen to eighteen he had gradually refrained from this habit, and gained some strength and embonpoint. It was at this period that he had, for the first time, connection with a woman. Very soon succeeded the discharge in question.

I advised the patient to preserve his urine, and to observe carefully what took place in regard to the penis, on going to stool. I found the urine red, thick, fetid, muddy with flocculent cloud that floated suspended in the fluid; the walls of the vessel were lined with a brick-like powder; a glairy and ropy sediment adhered to the bottom. The patient had observed that the last drops of urine, thick and viscous, were expelled with difficulty, by brisk and involuntary contractions of the bladder. After having been to stool, he had found a thick granulous and transparent matter at the orifice of the urethra.

I prescribed milk three times a day, as cold as possible, diluted with spa or lime water; a vegetable diet; two cold hip baths, of a quarter of an hour's duration; cold lotions three times a day; two cool glysters, one in the morning and one in the evening, in order to facilitate the stool.

These means, that I had seen recommended by Wickman and Sainte-Marie, and with which I had succeeded at other times, produced no amelioration in the symptoms; the patient became more unquiet, more chagrined than ever; he did not sleep more than an hour in the night. The emollients and leeches had assuaged his pain, but relaxed the tissues; the patient suffered less, but he lost a greater amount of semen. The tonics, cold, &c. diminished for a time the seminal discharge, but very soon increased the irritation.

After about three weeks of fruitless trial, I renounced all these general means, convinced that the spermorrhœa was owing to a chronic inflammation of the prostatic mucous membrane, the influence of which had extended to the ejaculatory ducts, vesiculæ seminales, &c. I thought that by inducing a new action in this membrane by cauterisation, I should subdue the irritation of the spermatic organs, and particularly the spasmodic contractions of the vesiculæ seminales.

The favourable results that I had obtained from the nitrate of silver in analogous cases, removed my fears as to the danger that

was said would result from cauterisation of the prostatic portion of the urethra, on account of the vicinity of the bladder. However, in order to empty this cavity and take the exact length of the canal, I had to catheterise the patient.

Scarcely had the catheter penetrated an inch or two into the canal, before it determined violent contractions of the urethra that prevented it from advancing, and might have excited suspicions of the existence of a stricture. After some moments this spasmodic action ceased, and the catheter penetrated further, and so on successively, to the neck of the bladder. There the pains and contractions redoubled; the bladder appeared to be exactly closed. At length, after a very long time, I engaged the extremity of the catheter in the opening of the neck; immediately it was strongly drawn into the vesical cavity, as by a kind of suction. Having completely abandoned the catheter to itself, I saw it several times drawn in and repelled, by the alternate and sudden convulsive contractions of the muscles of the perineum and bladder; the urine was powerfully and promptly expelled; the extraction of the catheter was almost as painful and as difficult as its introduction, so strongly was it retained by the neck of the bladder.

All these circumstances having confirmed me in the idea that I had formed of the cause of the disease, I practised immediately cauterisation of the prostatic portion of the urethra. It only lasted during the time necessary for inclining the caustic to the right and left, making it run rapidly over the inferior surface of the canal.

The first day the patient suffered a good deal in urinating. The next day the pains were much less. The third day they had almost ceased. During these three days the urine was thick and muddy, and the last drops were accompanied by streaks of blood. Then it became transparent, and the patient retained it for a longer time.

Twelve days after the cauterisation, it was entirely natural, without deposite or cloud; the last drops flowed out as readily as the first and were as transparent; the patient no longer experienced tension or uneasiness in the perineum, nor involuntary contractions at the neck of the bladder; but when the stools were hard and copious, he still observed some thick drops at the end of the glans.

The first amelioration that we observed was in the sleep, which became more and more profound and prolonged; then in the physical and moral energy; and at length in the activity of the digestive organs. At the end of fifteen days the erections had returned. Some time afterwards there came on nocturnal pollutions, preceded by lascivious dreams and accompanied with vivid pleasure. The intellectual functions were the last in becoming completely re-established. It is true they never appeared strongly developed in this patient.

At the end of one month his health was perfectly re-established, and he desired to resume his service.

This patient is the first on whom I practised cauterisation for diurnal pollutions, so that his history contains a multitude of details upon the point that have now lost some of their importance : I have only preserved all those relative to the catheterism, because the spasmodic contraction of the canal in advance of the catheter, especially near the neck of the bladder, the manner in which it was retained there, and the movements that were impressed upon it by the convulsive contractions of the neighbouring muscles, may give an idea of the extreme sensibility of the urethral mucous membrane, and the influence that this disposition must exercise upon the vesiculæ seminales.

These phenomena are observed very frequently in patients affected with pollutions, a thing, which is very readily understood. Their study is important then in many respects; thus, for example, I have remarked that the effects of cauterisation were the more certain, as the proofs of exalted sensibility were more marked : these are also the cases to which tonics, ice, cold baths, &c. are the least adapted.

The seminal losses were brought on by blennorrhagia, as in the preceding cases; but the excess of masturbation to which the patient had given himself, even before puberty, must have contributed much to this unhappy termination : so that the cure could not be obtained by the employment of the same simple means.

No. 13.

Intemperance—Menorrhagia—Nocturnal pollutions—Impotence—Very frequent emission of urine, &c.—Cauterisation—Cure in less than fifteen days.

J. D. gave himself up to excessive drinking at an early period, but little to masturbation; he had had but few connections with women; when at the age of twenty he contracted a blenorrhagia. It disappeared spontaneously at the end of three weeks: but a short time afterwards J. D. observed that he was subject to very frequent nocturnal pollutions; they returned sometimes for eight or ten nights in succession. On the day succeeding these losses, D. was dejected and enfeebled; he had headach, ringing in the ears, and dimness of sight, which made him resort to venesection three times, and to the application of leeches to the temples.

D. was drawn several times by his comrades to the public brothels, but nothing could determine the least erection; he was completely impotent.

Since the disappearance of the blenorrhagia, a yellowish discharge from the anus had made its appearance at several different periods, accompanied with a very annoying pruritus. A little later the patient had a herpetic eruption upon the face, for which he took a ptisan of soap-wort and bitter-sweet, as well as some mercurial pills. This herpetic affection was dissipated, but symp-

toms of irritation manifested themselves in the region of the bladder.

In 1834, D., aged 24, came to the hospital St. Eloi in the following condition: of middling size and well formed, skin white, hair black, face deeply coloured, air sombre and taciturn, desire for solitude, indifference for women, horror of masturbation; head constantly heavy, digestion difficult, limbs weak, emission of urine two or three times an hour during the day, and five or six times in the night, accompanied with burning and even pain in the canal.

The introduction of a silver catheter, of middling calibre, was accompanied by spasmodic contractions and acute pains in the neck of the bladder. These last circumstances determined me to propose cauterisation to the patient; he decided without any hesitation, and I practised it immediately.

I introduced the porte caustique into the bladder, so as to cauterise the neighbouring parts of the neck, and I ran over the surface of the prostate as well as the membranous portion in drawing out the instrument.

Immediately afterwards, pressing desire to urinate, emission of blood with urine. (Baths, ptisan of barley.)

The following night a painful pollution; emission of urine once only, but with acute burning.

The next day the patient urinated but four times, but always with burning and slight running of blood.

The third day more blood in the urine, but little scalding in urinating.

The fourth day emission of urine only at intervals of two or three hours, cessation of the discharge provoked by the cauterisation.

The succeeding days the emission of urine becomes more and more rare; the pollutions no more appear; the patient has resumed his gaiety, and converses with pleasure; his health is completely re-established.

Towards the fifteenth day he left the hospital.

In this patient the blennorrhagia had not been preceded by excess in coition or masturbation; but the abuse of alcoholic drinks is almost as injurious to the genito-urinary organs: besides, he was predisposed to an herpetic eruption, which manifested itself at a later period about the margin of the anus, and upon the face. It is especially in cases of this description that tonics, ice, cold baths, &c. fail, and are even injurious; fortunately cauterisation is then of great efficacy.

In this patient the eruption of the face having disappeared, there came on an inflammation of the vesical mucous membrane, more intense than in any of the preceding cases, since the patient urinated two or three times an hour; from that time the urinary symptoms became predominant; thus, catheterism was accompanied by acute pains in the prostatic region, and spasmodic contractions of the neck of the bladder.

It is not long since cauterisation of the prostatic portion of the urethra was looked upon as a deed of great rashness, so much was the introduction of the smallest quantity of nitrate of silver into the bladder feared. Although these fears were entirely founded upon theory, still they were so generally received, and appeared so natural, that I shared in them for several years: I have shown elsewhere in what manner I was led to rid myself of them, and with what success I had cauterised the mucous membrane of the bladder, in catarrhal affections of that organ.¹

Since then, when I meet with cases in which the bladder is implicated along with the prostatic mucous membrane, I commence the cauterisation with this cavity; and I continue it to near the bulb of the urethra, by drawing out the instrument and turning it rapidly to the right and left; it is then no longer for taking the length of the canal that I catheterise the patients, but to empty the bladder, in order that the action of the nitrate of silver may be more energetic.

We have just seen what has been the effect of this treatment; the patient, who urinated two or three times an hour, finally retained his urine as long as any person: at the same time his pollutions disappeared.

This case confirms then, in a remarkable manner, what I have said of the relations that exist between affections of the urinary passages and those of the spermatic organs.

No. 14.

Blennorrhagia—Abuse of copaiba—Jaundice—Chronic inflammation of the urinary and spermatic organs—Diurnal pollutions—Cauterisation—Prompt cure.

Brun, soldier of the 47th of the line, of a vigorous constitution, aged 23, contracted in the month of August, 1833, a blennorrhagia, of which he took no care during three weeks, and then entered the hospital to be cured of it.

At the end of a few days he was seized with an intermittent fever, and passed into the medical wards; the sulphate of quinine arrested promptly the attacks, and very soon afterwards, the patient, having concealed his running, obtained his discharge from the hospital.

Having then procured some balsam of copaiba, he took it in large doses for fifteen days. The running stopped, but there came on a jaundice and vivid irritation of the neck of the bladder, characterised by a frequent and irresistible desire to urinate, and by an acute pain in the perineum during the emission of urine.

The patient entered anew the ward of the fever patients, and was cured of his jaundice at the end of a month by an emollient and antiphlogistic treatment. Then, the chronic inflammation of the

¹ Vide Leçons de Clinique, &c.

urethra still persisting, he obtained leave to pass into the venereal wards.

After two venesections, three applications of leeches, and the administration of a very great number of baths, they gave him a hundred of Sedillot's pills. Under the influence of this last treatment, symptoms of diurnal pollutions manifested themselves, and the patient was sent to the surgical ward. This is the state in which I found him on the 13th of March, 1833.

Form good, muscles thick, bony system well developed, skin brown, hair black; notwithstanding this appearance of vigour, general lassitude, feeling of weakness and prostration, melancholy and dispirited air, forehead covered with pimples, habitual headache, torpor of the mental faculties, disgust of life, laborious digestions, accompanied by flatuosities, no erection for a long time, absence of all venereal desire, frequent emissions of urine, sixteen to twenty times a day, in a feeble, short, and embarrassed stream.

The passage of the urine causes an intense pain at the root of the penis, a kind of tickling along the canal, a slight swelling, like a half erection; the last drops are mingled with a thicker fluid; it becomes quickly decomposed, muddy, with an infectious odour, and deposits a copious sediment; the orifice of the urethra is very red, and is often the seat of a troublesome pruritus.

Half an hour after the patient goes to bed, he feels an itching in the canal, followed by an intolerable pain, which keeps him in a state of great anxiety, from which he can only rid himself by getting out of bed and walking briskly about his apartment.

A silver catheter, introduced into the canal, meets with no stricture, but excites spasmodic contractions and acute pains, especially as it approaches the bladder.

Cauterisation of the neck of the bladder and prostatic portion of the urethra, bloody urine rendered frequently and with pain. (A bath, ptisan of barley, milk, two soups.)

The next and the following days, diminution of the phenomena produced by the cauterisation and of the former symptoms.

At the end of twelve days the urine is transparent, the patient renders it only three or four times a day, and can resist a long time the contractions of the bladder; the appetite becomes imperious, and the digestion easy; the erections reappear, the face loses its wrinkles, and resumes its colour.

At the end of twenty days the emission of urine takes place only three or four times in twenty-four hours: this without pain, without tumefaction of the penis, in a full stream, and thrown out with vigour; the erections are energetic, digestion is perfect, the sleep is profound and refreshing.

Discharged the 6th of April.

I have met Brun several times since in the city; this cure had remained permanent, although the genital organs had resumed their functions; he finds himself in every respect as well as before his blennorrhagia.

The affection of the liver and the extension of the urethritis to the bladder and vesiculæ seminales, were brought on by the immoderate doses of copaiba that the patient indiscreetly administered to himself. It is certainly a powerful remedy against runnings from the urethra, but practitioners neglect too often to observe its influence upon the mucous membranes of the digestive and urinary organs. By administering it in too large doses, it produces a true inflammation instead of a tonic effect. By combating the urethritis with a suitable antiphlogistic treatment, the cessation of the discharge would be obtained much more surely and with much smaller doses.

The urinary passages were also as much affected in this patient as the spermatic organs, and in the same manner; cauterisation produced the same effect upon both, and the amendment followed the same course.

No. 15.

Benign discharge—Bad effect of copaiba—Tonic injections—Waters of Vichy, and especially of the cress juice—Diurnal pollutions—Impotence—Cauterisation—Prompt cure.

M. M., of a good constitution, having never committed excess of any kind, experiences in the month of May 1821, an indolent and slight discharge, after having passed a night with a woman that he thought healthy; administration of copaiba in large doses, injections with different preparations of cinchona: violent irritation, which is spontaneously dissipated after the cessation of this treatment; but embarrassment in the stream of urine, continuance of the discharge.

One year later, the patient being at Vichy, takes the waters as a matter of course: quartan fever that lasts till March 1823.

A short time after, administration of the juice of cress (*cardamine*), in larger and larger doses; from that time, rapid increase of all the symptoms, frequent emission of urine, with a feeble and embarrassed jet; discharge more and more bloody. These injurious effects of the cress juice were combated by an equally excessive use of cooling drinks, and severe regimen, that increased the weakness of the patient.

On his arrival at Montpellier, he had lost all venereal desire, and had had no erections for a long time; the jet of the urine is feeble and embarrassed; the last drops are mixed with gluey mucosities, that leave spots upon the linen.

The introduction of an ordinary silver catheter provoked spasmodic contractions in the canal and acute pains, particularly in the prostatic region.

An ordinary cauterisation, practised between the neck of the bladder and bulb of the urethra, produces a momentary increase of the symptoms, and induces very soon their rapid decrease and complete disappearance.

This case, as simple as possible, permits us to appreciate exactly the effect of the different remedies employed.

In the beginning, the discharge was of the most benign character, perhaps even it was only a non-contagious excitement, as the patient thinks; the copaiba in large doses and the tonic injections brought on an intense irritation, without diminishing the secretion: the use of the waters of Vichy was followed by a very obstinate intermittent fever: in fine, the juice of the cress exasperated the inflammation to the point of producing a bloody discharge. The baths, cooling drinks and strict diet, employed in an excessive manner, and long continued, prostrated the patient without destroying the irritation: hence the seminal losses and impotence.

It needed the direct action of the nitrate of silver upon the deranged mucous membrane, to modify essentially and in a durable manner its organisation and its vital properties.

No. 16.

Four blennorrhagiæ—Diurnal pollutions—Cauterisation—Cure.

I find among my cases, the following note of a student who has described with remarkable care and clearness the phenomena that he observed upon himself.

The patient has had several gonorrhœas: the first was treated with but little care, which rendered the cure long and difficult. He reckons four discharges of the same nature; but he cannot affirm that they were not the consequence of the first, or of a predisposition to this kind of disease.

In the month of March, 1824, first appearance of a white discharge, quite consistent, analogous to semen, running from the canal during the efforts of defecation. The patient does not recollect whether, in the beginning, this evacuation was accompanied by voluptuous sensations, but he has felt nothing of the kind for a long time; it takes place always at the end of difficult stools. There is scarcely any when the fecal matters are soft and rendered with facility.

The patient perceived, that after every stool which caused a laborious and copious evacuation, he was seized with a general weakness and total prostration of the economy. By taking suitable precautions to moderate the expulsive force of the urine, he saw the first drops bringing away with them a whitish, glairy-like matter, that destroyed their transparency. After their emission, he experiences a state of uneasiness and weakness in the region of the bladder. The urine, when cold, ordinarily holds in suspension a white, opaque, and quite abundant matter.

The canal of the urethra is extraordinarily susceptible: the meatus is almost always red, inflamed, and moist; the fluid that collects at its opening is whitish: the emission of the urine is accompanied by irritation of the urethral membrane, burning and slight pains: in the interval, the patient experiences there itchings, ticklings

almost voluptuous, sometimes even acute titillations and darting pains, similar to the pricking of pins: this takes place especially when he changes his position or presses upon the penis.

The patient has remarked, also, that his shirts are slightly spotted with a yellowish, thick matter: sometimes he experiences disagreeable sensations in the rectum, shootings like that of an electric shock.

Since the appearance of this seminal loss, the sensibility of the patient has become considerably exalted; during defecation, he is seized with chills that run over the whole body. This great susceptibility of the nervous system manifests itself in an especial manner at the time of any great emotion, by whatever cause excited.

The moral feelings are not less affected than the physical. The patient is continually sombre and melancholy. Great disorder exists in all his ideas: what formerly was the source of the strongest emotions, at the present time produces no impression upon him; and the smallest matter often became the cause of the greatest annoyance.

The organs of generation have lost all their energy. The excessive debility that has fastened upon them, only admits of incomplete erections of short duration, even under circumstances the most likely to excite them.

Such are the circumstances that my memory recalls, &c.

I have not been able to find the remainder of this case, and I have not a sufficiently distinct recollection of what succeeded, to finish it from memory; I only know, that after being cauterised, M. B. left Montpellier very soon in a satisfactory condition. As I have never heard from him, I suppose that his cure was confirmed. These patients are incredibly tenacious: it is probable that this one would have demanded additional advice if his health had not been promptly re-established.

Besides, it is principally for the symptoms that I have reported this case: it is rare to find patients who observe themselves with so much care, and express themselves with so much precision.

No. 17.

Blennorrhagiæ—Diurnal pollutions unnoticed—Grave nervous symptoms of an hysterical appearance—Cauterization—Prompt cure.

At the commencement of June, 1827, I received from a merchant of Bilbao, a letter that I translate literally.

"The principal inconvenience that I experience, consists in a great difficulty of going to sleep: when I go to bed, a kind of revolution takes place in my whole body; vapours mount into my head and sometimes to the throat, as if I was going to suffocate; this only lasts a moment; then a violent palpitation seizes me, but it only lasts a short time. At other times, I first feel a burning heat in the stomach, and then the vapour mounts to the head, throat or

heart. If I take any supper, I am much more incommoded during the night, and I feel then a kind of dragging in the stomach, a very irregular palpitation, as if respiration was going to stop. All this takes place every night more or less strongly, and the next day I am more fatigued than when I went to bed.

"I feel also constant pains in the shoulders, at the top of the kidneys, in the loins, and in the whole body: these pains are not very acute, but are very annoying. Every morning I feel also chills in the shoulders, followed by heat. I have a very costive habit, for nothing passes me except with great difficulty, and not every day. I experience very often a great burning in the face: an interior impatience consumes me, as if I had mercury in all parts of the body. Severe pains disturb my mind, especially when I have eaten more than usual. I have remarked that wine was my greatest enemy; every time I have taken it I have been worse.

"The physicians attribute my disease to the piles, because for two years and a half I have had no discharge of blood per anum; they have sent me to Bagnères de Bigorre, to drink the waters of Lasserre, and take the baths of Salut; but I do not wish to proceed further without your advice."

"Receive, &c.

N.

"It will not be useless perhaps to remark, that I took every morning, at Brussels, for a month, the corrosive sublimate, and afterwards copaiba in great quantities.

"BILBAO, June 3d, 1827."

This is my reply to M. N.

"The account I have just received is very incomplete; yet from the symptoms described by the patient, I think I am able to assert, that he experiences losses of semen on going to stool, and during the emission of urine; I am still more confirmed in this opinion by the postscript of his letter, relative to the treatment pursued at Brussels.

"However, as it is important, before all, to prove exactly the existence or absence of these seminal losses, I urge M. N. to take the following precautions in urinating or going to stool: I desire him to reply afterwards to the questions I am going to address him."

Here follow very detailed instructions that it is useless to transcribe.

Twelve days afterwards, M. N. was at Montpellier. It needed but little attention on his part, to prove the correctness of my diagnosis, and he was so much struck by it, that he left immediately, to place himself under my care.

He confirmed me in the opinion that I had formed from the treatment indicated in the postscript of his letter. The change in his health had, in fact, commenced at the termination of a blennorrhagia contracted in Belgium, and treated with sublimate, and then with large doses of copaiba: which did not prevent the discharge

from being very often reproduced by the slightest cause. His urine was often thick, muddy, very fetid, &c.

Some days after his arrival, I practised an ordinary cauterisation upon him, at the prostatic portion of the urethra, where the catheter caused acute pain.

At the end of eight days the diurnal pollutions had disappeared: at the end of fifteen, sleep had returned; the nervous symptoms had ceased, and digestion was easy.

I advised M. N., however, to stop at the waters of Saint Sauveur on his return home, and to take about twenty baths to confirm his cure; I have had the satisfaction to learn that his health was completely re-established.

What is most remarkable in the symptoms experienced by this patient, is their hysterical character; however, on examining them attentively, we find all the phenomena mentioned in the preceding cases; it was, indeed, by them that I divined the true cause of the disease, although the exposition of them was made in a very incomplete manner.

From the small number of facts that I have reported, it is already easy to see that all the organs of the economy suffer, each in its own way, from the debility produced by seminal losses; that all are susceptible of becoming the seat of sudden congestions that increase momentarily the habitual derangement of their functions; but, according to the original idiosyncrasy of each individual, such or such organ is more strongly influenced, which causes certain symptoms to predominate, and prevents us from observing others, although they really exist.

Thus M. N. felt often a great burning in the face; very great pains of the head, that troubled his mind; feelings of impatience, wandering pains, &c. He was habitually constipated, his digestion was laborious, and disordered all the other functions; but the respiration and circulation were especially deranged, and this predominance gave an appearance to the disease altogether peculiar.

Nevertheless, the efficacy of the cauterisation can leave no doubt as to the true cause of all these symptoms.

No. 18.

Repeated blennorrhagiæ—Swelling of the prostate—Difficulty in urinating—Impotence—Hypochondriasis—Cauterisation—Prompt cure.

M. M., a Spaniard, contracted, in 1798, a blennorrhagia that was treated with copaiba, astringent injections, &c., and was not completely cured until the end of some years.

In 1819, he had a slight discharge that was spontaneously dissipated. In 1822 a urethro-prostatic inflammation supervened after different excesses, and was followed by suppuration of the prostate. In 1824 there was still flowing from the canal a very great quantity of greenish pus, thick, and streaked with blood.

The urine was habitually passed with difficulty in a small and bifurcated stream; it excited acute pain, that was felt behind the pubis, and brought on an irresistible desire to go to stool.

From the commencement of this last disease, all erections and venereal desires had disappeared. The patient fell into profound melancholy, and lost his appetite.

For three months antiphlogistic treatment, strict regimen, pill of digitalis and copaiba: suppression of the discharge and pains; greater facility in the emission of the urine; but little change in the genital functions, or in the mental state of the patient.

Easy introduction of a small bougie of catgut, and afterward of a gum elastic catheter; in one of these attempts at catheterism, the extremity of the stilet escapes from one of the eyes of the catheter and wounds the prostate. Vivid inflammation; attack of fever excited at every attempt to pass the catheter; antiphlogistic and emollient treatment. Evident amelioration.

The patient came to Montpellier in the following state:

No discharge; the pains and tenesmus, provoked by the passage of the urine, take place but seldom; the difficulty in urinating has much diminished; the stream is larger; the urine is less troubled and deposits less mucosity; the passage is free; but the prostate is engorged; the genital organs are rendered completely impotent. The patient is feeble, melancholy, sombre, hypochondriac, without appetite, and digestion bad.

Cauterisation from the neck of the bladder to the bulb of the urethra.

Cessation of the local symptoms; return of the erections; rapid amelioration in the moral and physical state of the patient; prompt cure.

I have not found any other documents relative to this case than the physician's letter, and the notes that I added after the departure of the patient. Not wishing to trust to my memory for its development, I have been content to translate the one and transcribe the other; but I am thoroughly convinced that seminal losses must have existed, although no mention is made of them in the text.

In fact, the repeated discharges, the swelling of the prostate, the state of the urine, the phenomena induced by its emission, the complete impotence of the genital organs, the weakness, hypochondriasis, and, on the other hand, the return of the erections after cauterisation, all make me think that this patient was exactly in the same state with those whose seminal losses have been carefully described.

No. 19.

Masturbation—Excess of coition—Seven blennorrhagiæ, &c.—Chronic cystitis—Diurnal pollutions resembling a chronic gastritis, &c.—Cauterisation of the bladder and prostatic portion of the canal—Prompt cure.

M. H., shoemaker, aged 29, came to consult me for a chronic gastritis that had resisted all treatment for eight months. His countenance was livid and thin, his voice feeble and small; his air timid, embarrassed as if begging. He experienced acute pains in the epigastrium, colics, &c., but his tongue was pale; I ascertained very soon that all his symptoms were owing to diurnal pollutions, whose existence had been entirely overlooked.

M. H., of a nervous temperament, had contracted, at the age of eleven years, the fatal habit of onanism, and did not entirely renounce it until within two years. From the age of twelve to fifteen he practised it five or six times a day, and his frenzy was even carried so far, that he abandoned himself to it often on leaving the arms of his mistress.

At 15, blennorrhagia accompanied with chancres, and very soon after an herpetic eruption on the left leg, and a suppuration quite abundant from the ear of the same side. Treatment with the muriate of gold; disappearance of the syphilitic symptoms; continuance of the urethral discharge during fifteen months.

At 17, new blennorrhagia, new chancres; pustules of the anus: new treatment with the muriate of gold. Cure at the end of four months.

At 18, third blennorrhagia without complication. From 23 to 25 three other discharges of the same nature.

At 26, seventh blennorrhagia, so violent that it occasions a complete retention of the urine.

At 27 M. H. was married, and gave himself up to coition three or four times a day. From this epoch the venereal desires became less urgent; erection of the penis took place with less facility, the semen escaped before it was complete, and sometimes even during the night, the patient being unconscious of it; sleep, far from repairing his strength, appeared to diminish it; in the morning he left his bed with great unwillingness, with yawnings, pandiculations, and weakness of the lower extremities.

Although his appetite was sufficiently good, his digestion was badly performed, was slow, and generated great quantities of gas: the aliments thrown off at stool were but little changed, and very fetid. The desire to urinate was very often renewed in an urgent and irresistible manner: the evacuation of the bladder took place with a feeble, short, and embarrassed stream. The urine passed each time in small quantities, caused a disagreeable burning in the canal: it was of a brick red, deposited very soon a thick and muddy sediment, became very rapidly decomposed, and assumed an odour of rotten flesh.

His face, formerly florid, became pale: his habitual gaiety was replaced by a profound melancholy. Indolence and negligence succeeded to activity and a desire for employment.

Alarmed at these changes, the patient consulted a physician, who thought he recognised a chronic gastritis, and prescribed leeches to the epigastrium, antimonial ointment, a mild milk diet, and abstinence from coition. Under the influence of this treatment, the gastric symptoms experienced some amendment; but the patient complained of pains in the chest. (Blister to the arm, flannel upon the skin).

The pains abandoned the chest and attacked the liver. (Frictions with the antimonial ointment, slight purgatives). Improvement in regard to the liver; but increase of the pain in the epigastric and lumbar regions: obstinate constipation: extreme heaviness of the limbs: lassitude and shortness of breath brought on by the least exertion: disgust of life; indifference to his own interest and person; negligence and slovenliness; desire for change of place and movement; projects for traveling. No coition for eight months.

Having satisfactorily ascertained the existence of seminal losses, during the stools and at the end of the emission of urine, the absence of any lesion of the chest or abdomen, I proposed cauterisation to the patient; after some explanations, he decided to submit to it.

The introduction of a silver catheter, of medium calibre, provoked spasmodic contractions the whole length of the canal, and acute pains, especially after passing the bulb.

After having emptied the bladder, I cauterised the part nearest the neck, then the surface of the prostate and the membranous portion of the canal.

During the day, frequent and painful emission of urine tinged with blood. (Bath, injections, barley water.)

The following days, feelings of strength and activity, strong appetite, profound, invigorating sleep, cessation of the constipation, return of the erections, urine more and more clear, voice evidently deeper and stronger, slight colour in the face, expression of gaiety, more confident air.

The thirteenth day, M. H., tormented by frequent and energetic erections, yielded to the temptation, and resumed his conjugal functions suspended for eight months. This premature act of emancipation had not, however, any unhappy result, and convalescence followed its ordinary course.

M. H. is at the present day in a new world; all that surrounds him produces impressions of pleasure; it is sufficient simply to see his countenance in order to appreciate the change that has taken place in him; it is the expression of the most lively happiness substituted for that of the most sombre melancholy.

It is evident that the deplorable excesses in masturbation and coition to which the patient abandoned himself, have not had less

influence in producing the diurnal pollutions than the seven blennorrhagiæ contracted in so short a space of time; they must then be taken into consideration; but it is well to remark, also, that individuals who give themselves up to such excesses, must be prompted to them from a great energy of the genital organs, an energy which renders these excesses less injurious.

Notwithstanding all the causes of disease that have acted upon the constitution of this patient, and the gravity of the local and general symptoms, the cure was very prompt, which I attribute to this primitive vigour of the organs affected. These privileged organisations present, in fact, very great resources, if they are ever so little assisted.

In this case all believed in the existence of gastritis, of hepatitis, in a disposition to pulmonary phthisis, &c., and did not once fear a cerebral affection. Yet the symptoms experienced by this patient differed little from those which in other cases had caused the belief in disease of the brain or its envelopes; but this man exercised his limbs more than his head; we could only observe in him laziness, negligence, and awkwardness, because his memory, his imagination, &c., were not much developed. In order to appreciate exactly the influence of seminal losses upon all the functions, it is necessary to take into consideration, not only the original or acquired predominance of the different organs, but also the habitual occupations and social position of the patients.

One of the sisters of M. H. is affected with very copious leucorrhœa, and, what is remarkable, she experiences symptoms very analogous to those of her brother. The face presents the same appearance. Her digestive functions are deranged in the same manner; weakness, insomnia, &c., exist to the same degree.

This coincidence appeared to me sufficiently remarkable to be noticed *en passant*.

No. 20.

Masturbation—Blennorrhagia—Various anti-venereal treatments—Diurnal pollutions—Progressive debility, especially of the brain—Frightful emaciation—At the end of sixteen years cauterisation—Cure—Venereal excesses—Relapse—Second cauterisation—Same success.

M. V., born at Tortose, in Catalonia, of a spare habit, and nervous temperament, given to masturbation about the epoch of puberty, abstained from it when he found his health becoming affected; he gave himself up to it anew when his strength began to be re-established, and did not renounce it until he saw his life in danger. He regained his health again, and entered with ardour and success into the study of law.

At 18, he contracted a blennorrhagia, that was treated at Saragosa for six months, with injections of acetate of lead, sulphate of copper, &c.; it disappeared; in consequence of a journey on horse-

back, returned very soon after; ceased again; and at a later period was reproduced with the greatest facility.

Independently of the tonics, injections, and astringents that were prescribed to the patient without discretion, they made use of sublimate, mercurial pills, frictions and sarsaparilla. His health became more and more deranged; he became subject to headaches, pains in all the limbs and loins, accompanied with weakness, insomnia, frequent syncope, &c.

M. V. attributed all these symptoms to the existence of the venereal virus; and as they increased several times after coition, he became convinced that he had become newly infected. At length attention to his health became a kind of monomania. He abandoned the career he had been pursuing for eight years, and came to Montpellier to study medicine, with the sole object of ascertaining the first cause of all his troubles, and of finding a cure for them. But recurring always to the idea that they depended upon a venereal virus, he submitted successively to all the anti-syphilitic treatments that he found indicated in authors, and combined them in different manners.

Yet his health declined more and more; his digestion became difficult and laborious; he was tormented with gases and an obstinate constipation, that he combated by frequent purgatives. His mind became weakened to such a degree that his attention could not be fixed by any book; indeed he was very soon incapable of reading.

He attended the course of the faculty, but he could not hear the half of a lecture without becoming fatigued and impatient; the blood rushed to his head, and very soon he felt a desire for a change of place and for walking.

Passionately occupied in former times with the most abstract ideas, he could not follow the simplest reasoning; and forgot the most recent and important facts. He was tormented with vertigo, dimness of sight, and ringing in the ears. The slightest effort of the mind caused flushes of heat in the head; these light, momentary congestions were also very often produced by the labour of digestion, flatulency, and by the efforts of defecation.

The patient having his mind constantly occupied with these symptoms, eventually became persuaded that *the cerebral substance had been absorbed*, and that his cranium contained only *the nervous cords destined to the functions of the senses*; he thought he could feel them *bathed in serosity*; he was no less obstinately haunted with the idea that he was menaced with an attack of apoplexy.

On the other hand his character became sombre, peevish, and unsociable: he became averse to music, which he had loved passionately; he renounced all his relations; and his misanthropy became so unnatural, that he turned back when he met a friend in the street, in order not to be obliged to speak to him. Tormented with an irresistible inclination for movement, he could remain but a short time in the same place; and this desire for walking

and love of solitude, made him constantly wander into all the paths in the environs of Montpellier. Indifferent to every thing, he was often in distress from having neglected to provide for the morrow.

At length, after seven years' residence at Montpellier, M. V. came to consult me. I was convinced that he was tormented with diurnal pollutions, and all my questions were directed with this view; but he had never remarked any seminal loss in urinating, or in going to stool, and he persisted in the opinion that all his troubles arose from the venereal virus.

A short time after, in consequence of a cerebral congestion, he applied some leeches to the anus, and was not able to leave his bed for three months.

The observations that he had made upon himself during this time had proved to him that I was not deceived, but he still wished to prescribe for himself; among other means he had thought of inclosing camphor between the prepuce and gland, in order to act more directly upon the genital organs; but a few hours afterwards, having risen to go to stool, he passed the hollow of his hand full of semen; he lost his senses, and remained a long time unable to call for assistance.

I have never seen a more disgusting spectacle than that which struck me on my arrival at his bedside; the disorder and filthiness that surrounded him announced the greatest degree of negligence; muddy urine of an infectious odour filled a greasy vessel placed near his bolster, upon a chair covered with dust and garments. The patient, excessively emaciated and pale, was tossing about upon his bed like a dying person just come out from a deep syncope; his limbs were icy cold, his pulsations feeble and irregular.

As soon as he was in a state to understand me, I proposed to him cauterisation of the prostatic portion of the urethra. He hastened to accept it, and I practised it the same day.

The silver catheter of medium calibre, that I introduced previously, in order to empty the bladder, determined spasmodic contractions of the canal, and appeared to cause violent pains, especially towards the prostatic portion; which confirmed me in the idea that this part of the urethra had been for a long time the seat of a chronic inflammation.

The cauterisation presented nothing remarkable.

Two days afterwards, the patient experienced a sensation of strength in the genital organs, and a general improvement that gave him some hope. Very soon there was a return of gaiety, appetite, and sleep; his voice acquired more strength; he felt a renewal of his passion for music; and sought again the society of his friends: his countenance changed completely, its expression; his joy became expansive and even noisy.

At the end of fifteen days he experienced some venereal desires that gave a new course to his ideas; his erections were frequent, energetic, sometimes even troublesome. His appetite returned, and digestion was performed with unusual energy.

The convalescence was continuing to make some progress, when M. V., in order to accelerate it, introduced into the canal an instrument containing acetate of lead and copaiba; from that moment the pollutions reappeared; the inflammation extended to the testicles, in the left of which suppuration took place in spite of the employment of leeches, cataplasms, &c. a puncture gave issue to an ounce of pus, which appeared to me to flow from the tunica vaginalis: after this evacuation all these accidents were gradually removed, and he again became convalescent.

One month later, all the functions were performed with a regularity that M. V. had not enjoyed for twenty years. As he had a good deal of natural talent, he recounted in the most piquant manner the sensation that he had experienced, the opinions that he had formed upon his disease, and especially the motives of his most singular actions.

Yet at the end of two months, I saw him reappearing as melancholy as at my first interview with him. He informed me that, tormented by frequent erections, he had taken a mistress, with whom he had consulted more his desire and pride than his strength. This new regimen, which would not have been any thing extraordinary for another, sufficed to bring on, at the end of fifteen days, his former irritation of the genital organs, and the accidents that had resulted from it.

M. V. hastened then to break this liaison, but his health did not become re-established, because the diurnal pollutions had reappeared.

I practised a second cauterisation similar to the first: it had the same result: but this time M. V., warned by this relapse, was more moderate in his conduct, and returned home.

This case must have resembled those of the first two patients of whom I have reported the post mortem examinations (Nos. 1 and 2;) the symptoms were almost as grave; they presented the same characters; they gave rise to the same illusions as to the state of the brain.

The prompt re-establishment of the intellectual functions of M. V. proves that there was no more cerebral disorganisation, than in the two other patients: the effects of cauterisation are as peremptory as a post-mortem examination. However, it is probable that the genital organs were not so seriously diseased.

The obstinacy with which M. V. combated the venereal virus is remarkable as being peculiar to the character of the Spanish people; but we have already seen M. N. (No. 10) fall into the same error, and that too without ever having had any syphilitic symptoms, either primary or secondary.

These prejudices are very common with patients, and physicians too often participate in them eventually. Sensations painful, vague, contusive, and deep seated, are those which are especially mistaken for pains in the bones.

This case is well fitted to show how difficult it is for patients to discover the seminal losses they experience in urinating or in going to stool. M. V. had but one thought, and that was to search out the first cause of all his trouble : he sacrificed every thing to this ardent desire ; it was for this purpose alone that he came to Montpellier, to study medicine ; and he was upon the right path, since he was always thinking of the blennorrhagia that had preceded the change in his health ; yet after fifteen years of daily observations upon himself, after seven years of medical studies, he had never once suspected the existence of these diurnal pollutions : indeed, it was only with great difficulty, that he at length decided to attend to them.

Let us judge from this of the number of hypochondriacs who must be in the same condition !

No. 21.

Two blennorrhagiæ—Bubo—Inflammation extended in the direction of the testicles and kidneys—Diurnal pollutions—Cauterisation—Cessation of the pollutions—Relapse—Second cauterization—Same result.

I am indebted to the kindness of M. Willeaume, surgeon in chief of the military hospital of instruction of Metz, for the following notes of a case analogous to the preceding.

“M. B., officer, aged thirty-one, robust, of a mixed temperament, contracts in 1823 an urethritis that lasts two years, and is then suppressed by injections.

In 1825, urine depositing a whitish sediment. Three months after, uneasiness in the region of the bladder. The disease is treated as a vesical catarrh.

In 1826, daily and reiterated converse with a mistress ; at the end of some time, intense urethritis, although this woman appeared healthy. Bubo terminating in resolution. Treatment with mercurial frictions that we were obliged to suspend on account of the swelling of the gums and the great excitability of the subject : soon after, great irritation of the urethra, bladder, and kidneys, in which the stomach sympathised. Diurnal pollutions that return at first every five or six days, then at each stool, and even in urinating. In fine, the irritation extends in the direction of the testicles ; the semen is tinged with blood, then grayish, puriform.

The first of June, cauterisation of the prostatic portion of the urethra. The irritation of the canal and the pollutions cease for one month : they return in the month of July, with the trouble that ordinarily follows in their train ; discouragement, bad digestion, weakness, &c.

New cauterisation. Later, bougies passed from time to time into the urethra, which is contracted. Wandering irritation, readily changing from the pelvis to the chest ; but yielding as readily to baths, emollient applications, and demi-injections slightly narcotized.

The 10th of September, M. D. leaves the hospital in a quite satisfactory condition, without pollutions. - WILLEAUME.”

The remarkable precision of this laconic history permits us to follow perfectly the progress of the disease in the direction of the kidneys and testicles. The first urethritis was followed by a whitish sediment in the urine and by uneasiness in the region of the bladder. The second extended its influence from the bladder to the kidneys: at the same time diurnal pollutions manifested themselves, and the semen passed was tinged with blood, then puriform. Thus, the kidneys and testicles, the bladder and vesiculæ seminales, are found exactly in the same condition.

Twice, the effects of the cauterisation have been remarkable for their promptitude. It is true the patient had a relapse at the end of a month; but we must ascertain to what cause it ought to be attributed. The preceding case shows how disposed patients are to yield to the first venereal desires, and we can conceive that the least imprudence of this kind must be followed by results as injurious as an indigestion in a case of convalescence from gastritis.

We shall see that excesses at table, a ride on horseback, or a prolonged exposure to cold, are sometimes sufficient to induce relapses more or less grave. But can any method of treatment be held responsible for the conduct of the patient? If the same curative means produce the same effects the second time, is this not an additional reason for believing in their efficacy?

No. 22.

Blennorrhagia, followed by excoriations of the gland and diurnal pollutions—Cauterisation without success—Artificial sulphurous baths—Cure.

M. B., lieutenant of voltigeurs, affected with varicocèle, contracted in 1818 a blennorrhagia: emollient ptisans and warm baths reduced it at the end of a month to a slight oozing, that ceased at a later period entirely, after the appearance of excoriations about the urinary meatus. This kind of herpes of the glans yielded at the end of twenty days to cold lotions; returned four months afterwards; disappeared by the same means, and since then manifested itself periodically every three or four months, without being influenced by the most energetic anti-venereal treatment. Every time, its return was preceded by perineal and testicular pains, which the excretion of the fecal matters very much exasperated.

At the end of five years, these excoriations ceased, and the pains, formerly calmed by their appearance, became permanent, and were accompanied with seminal losses during defecation. The patient experienced pains in the regions of the kidneys that became insupportable after remaining stationary a few moments under arms. The urine deposited a whitish sediment.

Sea bathing increased momentarily the pains of the perineum, and the difficulty in passing urine. Baths of fresh water exasperated the pains in the kidneys. His digestion became disturbed.

When the patient came to consult me, I at first thought there was a stricture. I endeavoured several times to explore the canal with

a *porte empreinte*; but every time it was arrested at different depths, and came out with a peculiar form. After some days' repose, I introduced into the bladder an ordinary catheter without meeting any permanent obstacle, but not without causing acute pain, especially after passing the bulb of the urethra. This patient, then, was only afflicted with an excessive sensibility of the mucous membrane of the urethra. I hoped to put an end to it by cauterisation, as I had often done before; but this time, the means was absolutely without effect.

Recollecting then the excoriations of the glans, whose disappearance had been followed by the increase and continuance of the difficulties, I prescribed artificial sulphurous baths, with two ounces of the sulphuret of potash. The first produced immediately the best effect; the others caused an intense irritation of the stomach, and the return of all the difficulties. I learned very soon that there had been added to the last baths a certain quantity of sulphuric acid; I suppressed it, and as soon as the patient had resumed the use of the baths, with the sulphuret of potash alone, his health improved anew in a rapid manner.

At the end of one month, the pains had disappeared, the urine was transparent, and the emission of fecal matters was no longer accompanied with seminal losses. Digestion was re-established without delay, and the patient very soon regained his strength and embonpoint.

Before his blennorrhagia, M. B. had never had any herpetic eruption; from that epoch a periodical excoriation manifested itself about the glans: it might be thought that it was owing to a syphilitic affection, but it resisted the most energetic anti-venereal treatment. When it made its appearance, the pains in the perineum and testicles ceased; but as soon as it disappeared, these symptoms returned; diurnal pollutions came on with them; it was probable that cauterisation would modify the susceptibility of the mucous membrane of the urethra; it did not, however, produce any apparent amendment.

Artificial sulphurous baths were given with advantage as long as nothing entered into them but sulphuret of potash: sulphuric acid was added to them, as is often done with the intention of increasing their activity; from that moment, all the difficulties reappeared; we returned to the sulphuret of potash alone, and the cure resumed its course without interruption.

It is remarkable, also, that ordinary baths constantly increased the pains in the kidneys, whilst sea-bathing always aggravated those of the perineum.

Anomalies of this nature abound in the treatment of pollutions: it often requires much investigation to appreciate them, but particular facts will put practitioners in the way of doing it, by furnishing them with analogies.

No. 23.

Two blennorrhagiæ—Diurnal pollutions, &c.—Cauterisation—Hydro-sulphurous baths—Cure.

In 1813, Capt. R. contracted an intense blennorrhagia; peculiar circumstances forced him to neglect it entirely: it was, however, at length cured.

In 1816, he had a second discharge that was at first very slightly treated, but yielded at a later period to the use of copaiba.

From the time of this second infection, Capt. R. broke off all intercourse with suspicious women; but the least excess, or the slightest excitement, induced often the return of abundant and prolonged gleets.

The spermatic organs at length sympathised with these repeated inflammations of the urethra; diurnal pollutions were the consequence of them, and the whole economy very soon felt their influence. The following is what the patient wrote to me on this subject: I transcribe his own expressions.

"For two or three years my health has been extraordinarily changed; and obstinate constipation incessantly torments me; the efforts that it requires determine considerable evacuations from the canal: I have lost my appetite, my mouth is foul, I digest poorly; I am always full of wind, which twists my entrails, and causes a continual uneasiness, an insupportable restlessness. I do not sleep by night, and during the day I am in a constant state of drowsiness. My head is heavy, I cannot occupy myself about any thing; I am as it were imbecile, incapable of the least reflection."

The exploration of the canal caused acute pains and spasmodic contractions, especially when the catheter approached the prostatic region.

I practised a slight cauterisation from the neck of the bladder to the bulb of the urethra.

Some days after, an evident improvement was remarked in all the functions: some sulphurous baths administered at a later period confirmed the cure.

No. 24.

Lymphatic temperament—Masturbation—Dartres—Violent and prolonged blennorrhagia—Pollutions—Vesical irritation—Hemorrhoids, &c.—Cauterisation—Rapid improvement—Hydro-sulphurous baths—Cure.

During his youth, M. N. was subjected to a diet most generally of vegetables, to sedentary, assiduous labour, and to prolonged watches, under the influence of a cold and moist climate: thus the lymphatic system acquired in him a high degree of development.

From his sixteenth year, he gave himself up to excessive masturbation; one year afterwards, his constitution, naturally feeble, became very much deranged; frequent nocturnal pollutions, great weakness, especially of the loins, and painful digestion with acidity,

were the first symptoms that manifested themselves. At a later period, pityriasis showed itself every winter upon the face, and disappeared in the spring.

At 19, M. N. had a blennorrhagia, the violence of which was excessive, for a person of his weak constitution; it was attended with acute pains in the loins, and at the neck of the bladder; with an intense fever that lasted four days. At the end of three months, the discharge stopped; but the derangement of the digestion had continued to increase. His repasts were followed by vertigo and drowsiness. There supervened an obstinate constipation, and the urine was often troubled and lactescent.

Six years elapsed without any remarkable change. At the end of this time, the dartre reappeared about the nose; it was combated by antiphlogistics that increased the weakness, favoured the flatulency and disposition to constipation.

Later, hemorrhoids came on, accompanied with a yellowish oozing from the anus, and with symptoms of irritation in the region of the bladder. Sitting caused spasmodic contractions in the perineum. Ascending douches at first relieved the constipation; but they finally brought on a diarrhœa that was followed by a still more obstinate constipation.

Then came on continual and insupportable ticklings in the canal; acute pains during the emission of urine, frequent spasmodic contractions of the bladder, and an extraordinary sensibility in the hypogastrium.

A copious hemorrhoidal flux brought on a momentary amendment; but a short time after, emaciation was carried to such an extreme that the patient was forced to support the abdomen with a belt. It was in this condition that he arrived at Montpelier. He thus terminates a long memoir, from which I have made the preceding abstract:

"I am weak and my gait is unsteady; am very susceptible to cold and but little affected by heat; my skin is dry; my memory is fugitive; my extremities are of an icy coldness; my scrotum pendant; my testicles soft and sensitive; the semen that they secrete is clear and watery; pollutions are more rare, but always accompanied with a wearisome sensation in the head. For two months past, my urine is thicker, and especially within a few days, as the weather is cold and moist; it is muddy, full of filaments, sometimes accompanied with a cloud floating on the surface or suspended in the fluid. The spasms of the bladder are less frequent; but sometimes, in urinating, I experience a burning, at other times a tickling at the commencement of the canal of the urethra. When the urine or semen is passing, this sensation is felt at the orifice of the glans. I ought to add, that all my mucous membranes are very susceptible to disease; that all the irritations of which they have been the seat have always become chronic, &c."

I find at the bottom of this long memoir the following note added by myself: Cauterisation of the prostatic portion of the canal:

notable diminution of all the symptoms: cure terminated by the use, during two months, of the waters of *Bagnères de Luchon*.

The hydro-sulphurous waters probably contributed as much to the cure as the cauterisation. They are especially indicated whenever there exists a cutaneous affection and great susceptibility of the mucous membranes; but when the irritation of the genital organs is too intense, they cannot be supported: the cauterisation, when it is not sufficient to cure, has at least the advantage of subduing this excess of sensibility.

No. 25.

Nervous temperament—Masturbation—Two blennorrhagiæ—Nocturnal pollutions—Gastritis—Stricture—Five cauterisations—Cessation of the pollutions—Relapse—Injurious results from sea bathing—Advantageous effects from cauterisation and hydro-sulphurous baths.

M. Felix R., of a spare habit and nervous temperament, given at an early period to masturbation, contracted afterwards two blennorrhagiæ, that he entirely neglected. A short time after the last, he remarked that coition was followed, even in the night, by a spontaneous seminal loss; that he experienced itchings of the anus, prickings at the extremity of the gland, and a burning heat in the urethra after the emission of urine.

The nocturnal pollutions disappeared after a journey and a complete change of habits, but the other symptoms remained.

In 1829, M. R. fell desperately in love, had frequent and prolonged erections, in consequence of which the pollutions returned two or three times every night. His digestive functions soon became deranged; some mental troubles supervening a short time after, developed an acute gastritis that required a strict diet.

Weakness and emaciation made rapid progress; constipation became obstinate; the itchings of the anus assumed a painful character; they were accompanied with darting pains that extended to the perineum and bladder: an insupportable heat was experienced along the whole length of the canal; the desire to urinate became more frequent and more imperious; the stream of urine was bifurcated and twisted spirally.

In 1831, M. Velpeau having ascertained the existence of a stricture in the canal, destroyed it by five cauterisations. For several months the pollutions appeared only at intervals of from twelve to twenty days, and this in consequence of a long jaunt on horseback or on foot: but these repeated instances of imprudence eventually rendered them more and more frequent.

During the use of salt water baths, the seminal losses became less frequent by night; but they showed themselves at the end of the emission of urine and during defecation, with a constantly increasing quantity. The itchings of the anus became redoubled, and the pains of the canal and bladder extended to the testicles.

The application of a moxa to the perineum relieved these pains, but did not stop the seminal losses.

In June, 1823, M. R. came to consult me, and put into my hands a long memoir, from which I have made the preceding extracts: this is the termination of it:

"Almost daily, on going to stool, the seminal losses occur, and are sometimes very abundant. Emaciation increases every day; my head is weak, and my nervous system very susceptible. The gastritis appears to be intimately allied to these seminal losses; for when they are the most abundant, the gastritis is exasperated in a very perceptible manner.

The irritation appears to have its seat in the prostate, yet the pain is variable; sometimes the bladder is affected, and then the urine is red and troubled; sometimes it is the anus that is affected, and then it is clear, retained a long time, and passed with facility. It is the fatigue produced by walking especially, that brings on the nocturnal pollutions."

I found the canal perfectly free; but the catheter was arrested several times by spasmodic contractions, and caused very acute pains, particularly in approaching the bladder; the patient was convulsively agitated, and uttered piercing cries, although he was firmly resolved to bear all.

I practised a cauterisation from the neck of the bladder to the bulb of the urethra. It produced its ordinary effects, that is to say, a momentary increase of all the symptoms, then their progressive decrease from the third day, with the feeling of increased strength in the parts cauterised and in those connected with them.

The seminal losses that took place during the emission of urine and fecal matters gradually disappeared, and the nocturnal pollutions became more rare. Still the itchings of the anus continued; the stomach was yet feeble and irritable; and there remained a high degree of nervous susceptibility; all which circumstances made me prescribe for the patient the baths and douches of *Aix en Savoie*. I learned that he experienced very beneficial effects from them, but have not since heard from him.

The nervous constitution of the patient, the masturbation, and the darts affection seated at the margin of the anus, contributed without doubt to the development of the pollutions, but it was the blennorrhagiæ that left in the canal that obstinate irritation of which the consequences were so injurious.

Here again we see the spermatic and urinary organs affected in the same manner and degree; but the rectum also plays an important part in the production of the symptoms.

The patient himself had correctly discerned that the prostate was the principal seat of the disease; but he was confounded by the continual variations that he observed in the symptoms, according as the rectum or bladder became more particularly the seat of the irritation. The urethra, the vesiculæ seminales, and even the testicles, were each subjected to its influence, at different periods of the disease.

These continual and sudden changes of the irritation are very common when there exists any dartsous affection, and thus they contribute to render the diagnosis of diurnal pollutions more obscure, from the confusion they throw into the narrations of the patients and the mind of the practitioner. However, it is easy to account for them when we reflect upon the connections that exist between the mucous membrane of the urethra, bladder, vesiculæ seminales, and rectum. The influence of the seminal losses was principally felt by the digestive organs, and M. R. understood well the intimate connection that existed between them and the symptoms of his gastritis. It is a very common phenomenon, but one which patients do not always account for in so precise a manner.

It is well also to remark, that the cauterisations practised by M. Velpeau, not only re-established in a permanent manner the natural condition of the canal, but caused an almost entire cessation of the nocturnal pollutions for several months: probably they would have effected a cure if the patient had not indulged, a short time after, in fatiguing walks and rides on horseback.

Yet these cauterisations must have been applied to the strictured part of the canal only, and the pollutions were kept up by the irritation of the mucous membrane situate behind it. We may judge from that of the influence that the nitrate of silver must have, when it is applied directly upon the orifice of the ejaculatory duct.

We have seen what disastrous effects baths of salt water produced: these results are not rare, and they are easily explained by the irritable state of the genito-urinary organs; but there are few patients who watch themselves with so much care as M. R., and who render so clear an account of their observations.

In cases of this nature, the nocturnal pollutions becoming less frequent, they conclude from it that the salt water baths fulfil the proposed indication, which makes them persist in their use, notwithstanding the increasing aggravation of the general symptoms: when they are at length forced to renounce them, they suppose that the salt baths would have cured the patient, if his constitution would have permitted him to continue them; they do not see that the nocturnal pollutions diminish because the semen is expelled with the urine or during defecation; because these continual losses must eventually render the others impossible.

Fresh water baths produce every day the same illusion. I point this out more particularly to the attention of physicians, because these powerful means really produce the most advantageous effects when there is no irritation.

The hydro-sulphurous baths are not liable to the same inconveniences, and they are also tonic. There was still another indication to be fulfilled in this case; but I shall have to return very soon to the dartsous affections considered as a cause of pollutions.

No. 26.

Frail constitution — Masturbation — Syphilis — Blennorrhagia — Excess of every kind — Pollutions — Cauterisation — Notable amendment — Hydro-sulphurous baths — Cure.

The Marquis de L., born in Biscay, of a feeble and slender constitution, had succeeded in improving his health by means of exercise, when being placed at a boarding school, he led a sedentary life, and indulged in masturbation. He renounced it as soon as he was able to have connection with a woman; but he contracted very soon chancres and buboes, that got well under the ordinary anti-syphilitic treatment.

Numerous venereal excesses reduced him, at the end of three years, to a state of emaciation and exhaustion that forced him to continence; he regained, then, rapidly his strength and embonpoint.

A short time after, he married a young person with whom he abused the rights of matrimony.

Being a widower in 1823, he resided at Bordeaux, where he gave himself up to coition and dissipation; then at Paris, where he contracted a blennorrhagia; being improperly treated it frequently returned, in consequence of his excesses or rides on horseback.

After numerous relapses and various treatment, the patient perceived, on going to stool, that he passed semen by the canal, and that his urine was at times thick and whitish.

A physician advised the use of women; he found himself worse from it. Another prescribed pills, continence, &c., which succeeded no better. He was then treated with cold baths, spirituous frictions upon the genital organs, a milk diet, &c., with as little success.

He got better in consequence of a journey to England and Belgium. But a new urethritis, contracted at Paris, left him in a more unhappy condition than ever. He lost semen every time that he went to stool, and even in urinating; he was meagre and pale, excessively irritable, melancholy, and disgusted with every thing; his limbs would scarcely support him, yet he could not remain stationary.

It was in this condition that he came to ask my advice. I found his urine muddy, of an infectious odour, containing a thick and flocculent cloud; the urethra was exceedingly sensitive.

I essayed at first to leave an ordinary catheter in the canal, for a half hour or an hour, every three or four days; but not obtaining any evident advantage from it, I decided to cauterise the prostatic portion of the urethra.

Very soon the appetite returned, digestion became better, the embonpoint and strength increased gradually; nocturnal pollutions came on, but the seminal losses that had taken place during defecation diminished, and the urine became transparent.

Still the first symptoms reappeared from time to time in consequence of some indigestion, ride on horseback, sudden cold or late hours at the ball and especially at play; or else, after some other imprudences that the patient daily committed.

The watering season having arrived, I sent the Marquis of L. to Bagnères de Bigorre: he found them injurious; I advised him to go to St. Sauveur—he obtained the best effects from them.

The following year I advised the waters of Barèges; he remained there two months, and his health was completely re-established.

For ten years his cure has remained complete. He re-married, and when I saw him, three months ago, he assured me that his pollutions had entirely disappeared, and that he had never been more vigorous. He was, besides, the father of three children.

The Marquis of L. was feeble from birth, and his constitution had also been injured by excesses of every kind, which a robust temperament could scarcely have borne; blennorrhagic and syphilitic affections must have left in the genital organs traces of their presence, and multiplied remedial agents completed the ruin of his health. A careless and trifling disposition made this grown child commit a great many imprudent acts, and the return of strength was inevitably followed by some relapse. The cure presented, then, the greatest difficulties, yet it was complete.

I think that the hydro-sulphurous baths contributed as much to it as the cauterisation; but they would not probably have produced the same effect in the first instance.

No. 27.

Masturbation—Blennorrhagia—Injections—Cystitis—Diurnal pollutions—
Injurious anti-venereal treatment—Cauterisation—Thermal waters—
Cure.

M. F., born in Catalonia, of parents subject to hemorrhoids, endowed with a good constitution, passed the first thirteen years of his life in a state of perfect health; but the development of the genital organs gave rise to imperious desires that led him to excesses in masturbation: they were continued for nine years, without however producing any appreciable derangement of his health.

In 1830, M. F., aged 22, contracted a blennorrhagia that was treated by astringent injections; very soon after, there came on an orchitis, accompanied with acute pains in the canal; yet the injections were continued for twenty days, that is to say, to the time when the patient, no longer able to bear them, consulted another physician.

This one prescribed alternately a large dose of copaiba, and the next day a bath. Under the influence of this new treatment, the erections became more painful, the spongy tissue of the urethra more rigid, curvature of the penis greater, and the discharge more abundant.

From that time the patient gave up all remedies, and these acci-

dents were gradually dissipated; but the running persisted till 1831, when it disappeared, without any known cause, to give place to symptoms of inflammation of the bladder, characterised by great pain in the hypogastrium, a continual vesical tenesmus, with frequent twinges in the fossa navicularis, vivid redness of the urinary orifice and prepuce, a pressing and irresistible desire to pass urine, which, in its emission, caused a burning sensation, and, on cooling, deposited a sandy and grayish sediment.

At a later period, sinapisms to the thighs; very abundant mucous deposit in the urine; leeches to the hypogastrium, eruption of pimples, relief; fomentations with vinegar; cure of the pimples; intense pain in the kidneys; leeches to the loins, warm baths, demulcent drinks, sub-carbonate of potash, ammoniacal frictions, emollient cataplasms; no lasting improvement.

This want of success gave rise to the belief in a syphilitic cause: they prescribed, in consequence, mercurial frictions, sarsaparilla, and *the rob de L'affecteur*; but this treatment only aggravated the symptoms.

In 1832, the patient took, in Spain, some very energetic, natural sulphurous baths, at thirty degrees of temperature of Réaumur's thermometer; he drank, also, of the same waters at forty degrees. At the end of ten days he experienced a diarrhœa, a considerable swelling of hemorrhoidal tumours, with repeated and abundant losses of blood: accidents that forced him to suspend the use of the waters at the end of ten days. From that time the patient was subject to vertigo, to frequent blindness, and to continual ringing in the ears.

In September, 1832, twelve mercurial frictions, alternated with warm baths: increase of the cerebral and genito-urinary symptoms.

At the commencement of 1833, eighteen mercurial frictions; sublimate internally; fumigations with cinnabar, &c. In spite of the most severe regimen, and the exhibition of opiates, this third anti-venereal treatment was as injurious as the preceding.

The patient then came to Montpellier in the following state:—

Face yellow, bloated; eyes sunken, surrounded by a lead coloured circle; gait staggering like that of a drunkard; vertigo, humming in the ears, throbbings in the temples; palpitations, anhelation, especially in walking, which is toilsome, and often provokes convulsive movements of the limbs: digestion laborious, accompanied with flashes of heat and a considerable development of gas; stools softer than in the normal state; frequent colics; heat of the anus; hemorrhoids painful and bleeding; pains that traverse the abdomen, passing through the kidneys and hypogastrium; erections rare and incomplete; emission of urine very frequent, in a bifurcated stream, with pain at the neck of the bladder; urine depositing a grayish sediment, sandy, above which float some flocculent mucosities; disengaging, a short time after its emission, an odour of rotten flesh; slight stricture two inches from the urinary orifice; excessive sensibility of the urethral mucous membrane: frequent seminal losses

during defecation : decrease of the mental powers, and of memory ; profound hypochondriasis ; disgust of life.

I cauterised superficially the neck of the bladder and the prostatic portion of the urethra.

The improvement was not as marked as I had anticipated. I should have practised a second more energetic cauterisation, if the season of the thermal waters had not arrived.

I sent the patient at first to Bagnères de Bigorre, where he became worse ; and very soon after to St. Sauveur and to Barèges, from which he derived the best effects.

On his return, I put him upon the use of tarred water, of terebinthinate pills, and submitted him to a milk diet. The happy results of this treatment rendered another cauterisation unnecessary.

The following spring I sent M. F. to the hydro-sulphurous baths of Arles (near Perpignan), where his health became completely re-established.

When I saw him, not long ago, his countenance was smiling, and of a healthy colour : he had regained his embonpoint and vigour ; he retained his urine for a long time, and passed it without pain ; it remained transparent after cooling, and no longer exhaled any bad odour. The seminal losses had disappeared, the erections were frequent and energetic.

To give an idea of the change that has taken place in M. F., I ought to say that he can scarcely believe it himself, and that in order to convince himself of it, he must read over the various consultations of which he has been the object ; consultations that he always carries about him, and which he was not even willing to confide to the student whom I had appointed to commit his case to writing. In fine, he had made his last journey to Montpellier for the sole purpose of enjoying the surprise that his appearance would give me, and it was in reality with great difficulty that I recognised him.

I treated the brother of this patient for a stricture ; all his family is, like him, subject to hemorrhoids : did there exist then, here, a pre-disposition to the genito-urinary affections, as there did to hemorrhoids ?

However it may be, masturbation had certainly already debilitated the spermatie organs, when the blennorrhagia appeared, and it becomes necessary to take this into consideration.

In consequence of injections, the inflammation very soon extended itself to the testicles ; a little later, the discharge is suppressed, and the bladder, with the kidneys, become inflamed. Here is then another case in which the disease extended itself equally in the direction of the urinary and spermatie organs, and that too with the same degree of energy.

The frequent emission of urine, and the spasmodic contractions of the bladder, enable us to explain the pollutions produced by the convulsive contractions of the vesiculæ seminales, during the emis-

sion of urine and defecation. It was not then the compression of the vesiculæ seminales that caused the evacuation of semen. The patient had a diarrhœa or very easy stools.

I do not pretend to deny the influence of this compression in many cases; but it is a mistake to believe it to be the only cause of the seminal losses that take place during defecation. On a more close examination, it would soon be remarked that these losses are often provoked by diarrhœa, and are not always noticed in the most violent efforts of defecation: besides, the vesiculæ seminales are not compressed by the urine, when the bladder contracts in order to finish its expulsion; yet seminal losses frequently take place at that moment.

We must admit, then, that the vesiculæ participate in the irritation of the rectum and bladder, and that they contract simultaneously. This connection can be easily conceived of, when we reflect that the same arterial trunks, the same nervous plexus, are distributed to the reservoirs of the semen, urine and fecal matters.

Cauterisation did not produce immediately a very evident amendment; but must we conclude that it had no influence upon the cure? I think not, and for this reason.

At the beginning, the patient tried the hydro-sulphurous baths: after the tenth bath, he was compelled to give them up, the symptoms became so much exasperated under their influence: yet, after the cauterisation, they produced only advantageous effects, and the succeeding year they finished the cure. Results so opposite, can only be attributed to the decrease of sensibility in the mucous membrane of the urethra, and this modification cannot have been effected in any other way than by cauterisation.

We see again in this case, anti-venereal remedies obstinately administered, although the patient had only a simple blennorrhagia: they did more injury than the injections and copaiba.

No. 28.

Feeble constitution—Precocious excesses—Blennorrhagia—Syphilis—Diurnal pollutions, cerebral symptoms, &c.—Failure of the ordinary means—Cauterisation—Hydro-sulphurous baths—Cure—Relapses—Consecutive venereal symptoms—Anti-syphilitic treatment—Definite cure.

The following case was sent me by a distinguished practitioner, whom I had the happiness of raising from a deplorable situation; it is perhaps rather long, but the valuable details with which it is filled, have prevented me from abridging it.

"I was born very feeble, with an inguinal hernia: I was subject during my infancy, to a very copious and obstinate purulent otorrhœa, especially of the left ear. I became strengthened, however, by habitual exercise in the open air, a substantial diet, and frequent river baths: at 13, I was as robust as most of my comrades.

At that epoch, an ardent but wary young girl, aroused in me premature erections, and abused them to assuage her desires, until

the time when seminal emissions inspired her with fear. I taught in my turn her younger sister all that I knew. These precocious enjoyments developed factitious wants that led me to masturbation, when it was impossible to satisfy them otherwise.

At 16, I contracted a blennorrhagia, that I carefully concealed, and which disappeared slowly under the influence of cooling drinks, warm baths, and a strict regimen. The running re-appeared twice the same year, after an immoderate use of new beer: from that time, it has been often renewed, in consequence of a forced march, a cold, or a ride on horseback.

At 18, I had an assignation with a woman that I loved much, but I experienced such a degree of agitation, that it was impossible for me to profit by it. I attributed this catastrophe to the excess of my passion; but I was deeply chagrined by it, and became very suspicious of myself.

I was more fortunate the next year with another woman; but I paid dear for the excesses I committed during that night: the next day my running re-appeared with violence: there came on then an inflammation of the testicles: the epididymis of the right side remained engorged for five or six months.

From that time my health became more and more deranged; I had jaundice, paroxysms of fever, wandering pains over the whole body, and derangement of the stomach: I became very susceptible to cold, to heat, to moisture, and to every sudden atmospheric change. The feeble state of my health induced me to give up a military career, and led me to the study of medicine.

Arrived at Paris, I perceived that the moist cold of the streets, and dissecting amphitheatres, readily brought on a return of my running: that the sitting attitude, too long continued, heated the perineum, causing there a weight and darting pains.

These phenomena increased to such a degree, that I thought I had the stone: I felt a constant pain in the fossa navicularis; I urinated very often and with pain; the last drops of urine were stringy, glairy, and produced at the neck of the bladder a sensation like that of a red hot iron. I was determined to be operated upon, but Professor Boyer before sounding me, prescribed baths that allayed the irritation. The vacation arrived, and exercise dissipated all these symptoms.

The following year, I studied night and day to prepare myself for the *concours*: my digestion became deranged: I had a diarrhœa accompanied with violent tenesmus: on going to stool, I often rendered semen in abundance. Too much prepossessed to give to this circumstance all the attention that it merited, I wished to continue my studies; but I experienced vertigo, ringing in the ears, and syncope; I could no longer comprehend any thing: I was obliged to forego all occupation: it appeared to me every moment that I was going to have an attack of apoplexy.

The third year, I was subject to palpitations that made me think of an aneurism of the heart: still later, I experienced pains in the

chest, an obstinate cough, and I became persuaded that I was consumptive. In fine, after my reception, I went home emaciated, with a yellow complexion, and very melancholy. The movement of the carriage brought back again my gleet.

A short time after my arrival, I contracted a venereal disease, that I treated with mercurial pills. This treatment finished the ruin of my health, and I discontinued it as soon as the external symptoms had disappeared. Then came on a chronic gastritis, accompanied with an obstinate constipation and profound hypochondriasis.

The flatuosities that tormented me, made me seek solitude; when I retained them, I experienced very soon a general movement in the abdomen: I felt them accumulating in the stomach, and distending it beyond measure; it appeared to me that a hand of iron was producing a kind of internal strangulation, that closed the whole passage: the movement of the diaphragm was prevented by the violence of the pains and distension of the belly; I felt as if about to be suffocated; my face became purple; a copious sweat covered my whole body; at length this strangulation ceased, and I was delivered: but I did not get rid of the fatigue and icteric tinge for several days.

For two years I combated this chronic gastritis by leeches, baths, injections, and the most severe vegetable diet; I indeed lived for eighteen months upon milk: all without success. I felt a constant desire to eat, and as soon as I had taken food at all substantial, I was overcome by the labour of digestion.

At length I remarked that I passed semen in the violent efforts produced by constipation; and very soon I assured myself that I lost it also in urinating.

Then only I understood the cause of all my troubles; I hastened to obtain the translation of Wickmann by Dr. Sainte-Marie, I read it with avidity, I learned it by heart, and I thought myself saved; but I was still to experience many disappointments.

The fresh water baths and cold hip baths produced an injurious impression upon the bladder and the vesiculæ seminales; when I entered the water, I felt these reservoirs contract spasmodically, and the urine that I was obliged to render contained an abundant and flocculent cloud, owing to the presence of a great quantity of semen.

Cold lotions produced only a momentary effect.

Cold injections excited an insupportable tenesmus in the rectum, accompanied with pain and weight; they favoured the expulsion of the fecal matters by inducing contractions of the rectum; but these spasmodic contractions were very soon followed by those of the vesiculæ seminales, and with an abundant loss of semen. I can hardly describe how much these cold injections injured me.

The ice that I took internally in great quantity gave tone to the system for a short time; it stopped the constipation and provoked energetic erections, but it very soon brought on an inflammation of

the bladder and prostate, which manifested itself by a painful heaviness in the region of the rectum, by cutting pains behind the pubis, a frequent and irresistible desire to urinate, and a very abundant glairy and puriform sediment, that adhered strongly to the bottom of the vessel.

The applications of ice upon the loins and perineum were followed by the same results.

Cinchona, Spa water, and tonics produced good effects for a day or two, but they very soon increased the irritation of the bladder and canal; they brought back the constipation.

Attributing to the pressure of the fecal matters the seminal losses that took place during defecation, I resolved to employ the process resorted to by Professor Boyer for fissures of the anus: consequently I myself divided the sphincter before a glass, with a lithotome that I had made for this purpose. The expulsion of the fecal matters became more easy: but the seminal losses were not diminished by it.

I applied cauteries to the loins and perineum, to combat the pains seated about the neck of the bladder: I tried urtication and even acupuncture, in order to stop the spasmodic contractions of the vesiculæ seminales, that I felt very distinctly, especially when I was seated: they threw me into despair, for they announced an inevitable pollution. These different methods succeeded for a short time, but their effect was never durable.

I often made use of injections, with a decoction of poppy heads, to calm the irritation of the genital organs and to procure a little repose.

No language can describe the anxiety and despair that these long sleepless nights caused me. Dreams the most frightful, ideas the most black, led me incessantly to the contemplation of suicide. It was always with terror that I saw the moment arrive for going to bed, and I looked for the approach of day as a relief. It was against this torment in particular that I employed narcotic injections; but they increased the torpor of the rectum and the relaxation of the genital organs. Besides, they excited violent pains in the head and disturbed the digestive functions; they increased the habitual somnolency that tormented me by day and rendered me incapable of any serious occupation.

It was in this state of complete nullity, in every respect, that I arrived at Montpellier in 1824, deeply disgusted with life.

The cauterisation that you practised upon the prostatic portion of the urethra was rapid, and did not cause so much pain as I expected; for twenty-four hours only the emission of urine was painful and accompanied with some drops of blood. Besides, this *frank* pain, although much more acute than that I had before experienced, appeared to me much less disagreeable, being accompanied with a feeling of vigour that gave me courage.

From that moment a complete revolution took place in my whole body. From that time I commenced a new existence; it

appeared to me that a thick cloud had been dissipated from my brain.

At the end of eight days my urine was limpid, its emission took place with energy; the stools were passed with facility, and were no longer accompanied with seminal losses. I felt a vigour in the canal, the bladder, and the rectum, that gave me confidence. Sleep returned. I could very soon eat every thing, and my appetite was voracious. The erections had an energy that I had never before observed.

A short time after I took the waters of Bagnères de Bigorre; they did not produce the effect upon me that you expected from them; they caused a great dryness of the skin, diarrhœa, and tenesmus; they recalled the irritation of the bladder, and with it the pollution; but the waters of Cauterets dissipated all these accidents, and I preserved, for the remainder of the year, the improved state of health produced by the cauterisation. From that period, Spa water, ice, and cold applications did me also much good.

In the spring of 1825, I had a return of the vesical and prostatic irritation, which I attributed to the influence of the season. The second cauterisation that you then practised was as efficacious as the first, and the waters of Barèges did me still more good than those of Cauterets.

In 1826, I experienced, (always in the spring,) a slight return of the old symptoms. This time I cauterised myself, and I went to the baths of Aix en Savoie, where my health became again re-established.

In fine, in 1827, I had another relapse at the approach of spring. There came on a hard and painful swelling of the left breast, that increased in a slow and insensible manner. I knew not how to account for this swelling, which was a source of great anxiety to me, when an excrescence in the form of a cauliflower came on at the base of the gland, which reminded me of the chancre that I had had in the same place. The pills of Sédillot, which you prescribed for me, dispelled the swelling of the breast and the excrescence of the gland. But I still took the muriate of gold and the syrup of sarsaparilla, that you recommended as an additional precautionary measure.

Since then my health has continued good, and I ought to say also that at the present day it is more robust than at any other period of my life. I could certainly do, in every respect, what I could not have done at twenty years of age. The erections are more energetic, the ejaculation is not hurried; it is accompanied with sensations which, for vivacity, were before unknown to me. My intellectual functions have acquired a new vigour: if they had been in as good a state when I was upon the seats, my career would not probably have been so limited.

However, I esteem myself very fortunate in being delivered from the frightful disease that for twenty-one years poisoned my existence. I am the more surprised at it, as I must have been hereditarily predisposed to it.

After having studied upon myself the general symptoms that accompany diurnal pollutions, I soon observed them upon my father, and I learned that for the last thirty years he had experienced abundant seminal losses on going to stool; losses of which he had never suspected the character or seriousness, and to which I attributed the infirm state of his health for the last thirty years.

In fact I have had the happiness of curing him by accompanying him to Aix, and although he was sixty-five years of age, he experienced a physical and moral improvement that still endures. I ought to add that I resemble my father in a striking manner. I should have thought my history incomplete if I had not made mention of these facts in relation to him."

Here is again a case that proves the importance of particular facts to the study of the obscure and varied diseases with which we are occupied.

We have not as yet met with so many causes concurring to produce or keep up diurnal pollutions.

Independently of the hereditary predisposition, which it is difficult not to admit in this patient, there existed an original weakness of constitution that could not be completely eradicated. Premature enjoyments and excesses in masturbation must have had a fatal influence upon an individual poorly able to sustain them. A blennorrhagia concealed and badly treated left also an impression upon the genito-urinary organs still more serious; the slightest cause reproduced the discharge; the inflammation eventually extended to the testicles by the way of the excretory ducts, and afterwards to the bladder and kidneys.

From that time the life of the patient became one of the most wretched. He experienced successively symptoms of almost all diseases without suspecting their true cause. At length he contracted a venereal disease that finished the ruin of his constitution.

Yet he eventually triumphed over the influence of all these causes. This result, remarkable and complete, is well suited to encourage patients and practitioners in difficult cases.

Cauterised three times, the patient believed himself cured each time, and the next year experienced new difficulties, less serious than the first, but still of the same nature, which did not disappear definitely until after an anti-venereal treatment. It was, then, in this case, indispensable.

I have already remarked, in several instances, how disposed patients and physicians are to believe in the existence of a latent venereal virus in cases of pollutions preceded by blennorrhagia, and how fatal an influence this prejudice exercises upon the treatment. It was necessary to point out this dangerous tendency, but it would not be less injurious in some cases to go to the opposite extreme, and suppose it never to exist.

This patient had had a chancre upon the penis; he had abopted but a very incomplete treatment, because his constitution would

not bear mercurials: at a later period there came on a tumour in the left breast, then an excrescence where the chancre had made its appearance; it was not possible from that time to overlook the consecutive venereal symptoms. The effects of the treatment have satisfactorily proved that the relapses were owing to the existence of a syphilitic virus, although it had not yet manifested its presence by any characteristic symptom.

What conclusion must we draw from all this? that the practitioner ought to rid himself of all exclusive ideas, of prejudices of every character; that in doubtful cases he ought to be guided by the antecedent, and especially by the co-existing symptoms; that he can, when every thing else fails, try cautiously an exploratory treatment; but this he ought to renounce as soon as he perceives any bad effect from it. Anti-venereal remedies have certainly been abused in a deplorable manner, but this is not a reason for proscribing them.

It is well to remark that the patient bore perfectly well this second treatment, although he could not go through with the first. This, then, is because a favourable change had been effected in his constitution; it had repaired its powers, and his organs had lost their susceptibility. The same has happened in regard to the use of ice, tonics, cold baths, &c. These means at first only exasperated the chronic inflammation of the genito-urinary organs. But when this inflammation had yielded to the influence of cauterisation and sulphurous baths, they acted with the same beneficial results as have been observed in cases of simple weakness of the organs.

It is owing to their not having made this important distinction, that Wickmann, St. Marie, &c., have advanced general propositions, the application of which is often injurious.

I could report many other cases of the same nature; but there are some in which blennorrhagia plays only a secondary part, and which will be better placed elsewhere; others are too incomplete to present any interest after those just read.

These deficiencies are owing to different causes; sometimes the patients left before the termination of their treatment, sometimes they have had relapses of which I have not exactly learned the causes and effects; in fine, in some cases the cure was certainly prompt and permanent, but I neglected to complete the history of the disease by a detail of the treatment and its results.

I depended upon these documents because I knew they were in my portfolio; but when I wished to use them, some years had elapsed, a multitude of new facts had presented themselves; I found that I could no longer trust to my memory, and I did not wish to abandon myself to my imagination.

Among the cases that I the most regret not having finished at the proper time, are those, particularly, of two students, who, in consequence of an intense blennorrhagia, had a swelling of the

testicles, accompanied with bloody nocturnal pollutions. These two facts have remained deeply impressed upon my memory, on account of the terror that the presence of blood in the semen inspired in these patients, and especially on account of the inferences that I drew from them as to the manner in which the inflammation is transmitted from the urethra to the testicle.

I am certain that a single cauterisation was sufficient to effect a cure, but the notes relative to these two patients containing nothing in reference to it, I am unwilling to supply the deficiency.

Causes. I have said that the cause of the pollutions was the most important circumstance to be considered, and this truth will become more evident as we advance; but it often happens that several causes have acted simultaneously or successively, and that we are not able to establish clearly which it is that has exercised the greatest influence in the production of the seminal losses.

Blennorrhagia is the most energetic, the most direct of all these causes; it is also the one whose action it is the most easy to appreciate: this is why I have first reported the cases in which blennorrhagia acts the most prominent part. Yet when we examine them separately, with some attention, we very soon remark that the running was preceded, accompanied, or followed, by grave circumstances, capable, in themselves, of provoking seminal losses; it is important, then, to investigate them: the following are the most remarkable.

One of these patients, of a poor constitution, had probably an hereditary predisposition to diurnal pollutions since his father was affected by them (No. 28); another was of a distinctly marked lymphatic temperament (No. 10); several were born feeble, delicate, and nervous; their health had been deteriorated from infancy by a bad regimen, a too sedentary life, &c. (Nos. 20, 24, 25, 26); others had darts eruptions (Nos. 13, 22, 24), hemorrhoids (Nos. 24, 27) or varicoceles (No. 22).

The greater part abandoned themselves to excessive coition (Nos. 11, 19, 26), to masturbation (Nos. 12, 22, 24, 25, 26, 27), or else to alcoholic drinks (No. 13).

The blennorrhagia was sometimes neglected by patients too timid to confide in any body (Nos. 1, 28), or too careless (Nos. 13, 14, 16, 25) and too much occupied to pay suitable attention to it (No. 23); at other times the treatment was trammelled by imprudence or excesses (Nos. 23, 26); oftener it produced injurious effects from its very nature (Nos. 10, 11, 14, 15, 20, 27).

Several of these patients had two blennorrhagiæ (Nos. 10, 18, 21, 23, 25), four (No. 16), and even seven (No. 19), before experiencing pollutions.

I ought, however, to remark here, that the frequent reproduction of these runnings is not always owing to new infections (No. 16), as patients and many practitioners are disposed to believe: this is proved by the facility with which these discharges are reproduced

without there having been any coition (1, 18, 26, 28). This disposition is, besides, easily conceived of when we consider the development that the capillary system of the mucous follicles must preserve in consequence of prolonged or repeated inflammations.

These cases almost always terminate in pollutions. It is almost inevitable, in fact, that this disposition of the prostatic mucous membrane should extend, sooner or later, to that of the spermatic vessels. True, we must not take for semen the mucus that habitually moistens the urinary meatus of these patients: but we must also guard against treating too lightly their apprehensions in this respect, since these chronic catarrhs of the urethra accompany so often seminal losses; it is an indication that we ought not to neglect.

These pollutions were kept up in a very evident manner by the venereal virus; indeed they did not cease entirely until after the adoption of an anti-venereal treatment (No. 28).

In other cases they did not appear to experience any influence from the venereal virus, nor from the means employed to combat it (Nos. 19, 26).

These means were used also with a greater number of patients who never had any thing but gleet (Nos. 10, 12, 20, 22, 27).

In fine, in a still greater number of cases, anti-venereal treatments, either useless, too energetic, or too often repeated, produced a deplorable increase of the irritation of the genital organs, and determined the appearance or aggravation of the seminal losses (Nos. 10, 14, 17, 21, 22, 27).

Cases of this nature often present great difficulties in the diagnosis, and their solution is of the greatest importance in the treatment; but I cannot attend to it here. In the mean time, those who wish to consider the subject more attentively, can consult the cases I have just cited, and particularly the reflections at the close of No. 28.

The anti-venereal remedies were not the only therapeutical agents that produced injurious effects; those indiscriminately employed for blennorrhagiæ from the mere force of habit were not less fatal; among them must be especially reckoned the astringent injections (Nos. 18, 20, 27), copaiva (Nos. 14, 15, 17, 18, 23, 27), cubebs (No. 11), tonics and bitters (Nos. 10, 15, 20), prematurely used or in too large doses.

All these means acted in a manner more or less stimulating to the genito-urinary organs; it is then easy to conceive that their untimely or immoderate use must favour the extension of the inflammation to the mucous membranes that are continuous with that of the urethra.

I am far from wishing to proscribe the use of them; I even acknowledge, willingly, the advantages we derive from them in the treatment of blennorrhagiæ, when we have suitably combated the inflammatory symptoms; for a moment arrives in the case of the mucous membrane of the urethra, as in that of all others, where

tonics and astringents are perfectly indicated ; but in the profuse manner in which they are every day used, they certainly do more injury than good.

In fine, the seminal losses were often exasperated by the very means employed to combat them, and here I do not wish to speak alone of anti-venereals, &c., but of the means lauded by those persons themselves who have written upon pollutions : the cold baths, ice, tonics, bitters, and sulphurous baths, are of this number (Nos. 10, 12, 15, 21, 25, 27, 28).

I very well know that these remedies have not proved injurious, like those for blennorrhagia, simply from the indiscriminate use that has been made of them : but since we are endeavouring to appreciate the causes which have aggravated the seminal losses, we must not overlook these unfortunate effects.

To sum up the whole, it is indeed the blennorrhagia that has exercised the greatest influence upon the production of seminal losses in all the cases that I have reported up to the present time ; still it has very rarely been sufficient to bring on alone this unhappy termination.

The accessory causes that contributed to it are each, separately, susceptible of provoking more or less grave seminal losses ; they must, consequently, exercise too great an influence to be overlooked ; but they were numerous and variable ; they succeeded each other or were combined in so many ways, that there are no two cases which exactly resemble each other.

The more we advance, the more we shall see how far we are from being able to describe pollutions as simple identical affections ; how important it is to consider them in all their bearings, and to keep an account of all the circumstances that have concurred in their development. It is in practice that we feel strongly the necessity of weighing every thing, before establishing the diagnosis, the prognosis, and especially the treatment.

But let us return to the blennorrhagia which is at present under consideration, and see in what manner it must act in order to determine pollutions.

Mode of action.—In all these patients, the urethra had preserved an excessive sensibility, especially in the prostatic region ; they felt there habitually pain, weight, heat, or cutting sensations, and painful ticklings ; these sensations were exasperated by the passage of the urine.

Catheterism exercised with the greatest care, always caused them acute pains and spasmodic contractions, violent enough sometimes to resemble strictures. The catheter was especially arrested near the neck of the bladder, and often it did not penetrate it until a long time had elapsed : it appeared to the patients that it was passing over parts that were denuded ; they became convulsively agitated, and all the power of their will was not always sufficient to prevent them from committing imprudences : the countenance became cadaverous, and the whole body covered with a profuse sweat : as

soon as the catheter was withdrawn, there ordinarily flowed out a perceptible quantity of red, *rutilant* blood.

These different phenomena, more or less marked in all these patients, clearly indicate that the mucous membrane of the urethra had preserved an excessive sensibility, especially in the prostatic region : several are even of a nature to lead us to believe that it was fungous, very vascular, and excoriated.

Some of these patients experienced symptoms that indicate more positively an affection of the prostate, such as perceptible swelling of that organ, feeling of weight in the rectum and perineum, darting pains at the neck of the bladder, behind the pubis, &c. (Nos. 11, 14, 15, 22, 25, 28). In one of them, the inflammation of the prostate even terminated in suppuration (No. 18).

In many others, the testicles were swelled, inflamed, and painful (Nos. 10, 11, 22, 24, 25, 27, 28).

The cords of the spermatic vessels also sympathised in the state of the testicles, (Nos. 10, 11, 22, 24, 25, 28). In fine, in three cases, the seminal losses were bloody and puriform (No. 21).

Thus, in all these patients, the blennorrhagia had left in the urethral mucous membrane a vivid irritation, a morbid sensibility, more marked in the region of the prostate, the principal seat of the ancient disease. In many cases, the inflammation had extended its influence even to the testicles, by the way of the excretory ducts, which must render it probable that the spermatic organs preserved the same susceptibility as the urethra.

The same phenomena manifested themselves in regard to the urinary passages : their resemblance is remarkable in more than one respect.

Several of these patients had acute inflammations of the bladder (Nos. 13, 14, 21, 27). Others had symptoms of chronic cystitis (Nos. 11, 15, 19, 24, 28). In some the inflammation appeared to extend even to the kidneys, if we can judge of it by the pains, the spasms, and draggings experienced in that region ; by the changes observed in the urine, &c. (Nos. 10, 11, 21, 22).

These symptoms are the only ones that permit us to appreciate the state of those organs situated beyond the reach of our senses ; but analogy comes to confirm the inferences that we draw from them. After having proved in the most unequivocal manner, the existence of orchitis, we can under the same circumstances believe in that of nephritis, seeing symptoms that it would be difficult to explain in any other way.

Besides, the examination of bodies have proved that these analogies were not deceitful ; since grave and varied alterations have been found in the kidneys, that could only have been produced by inflammation.

All these patients, without exception, passed in the 24 hours, a greater quantity of urine than in the healthy state : so that when the kidneys have not been actually inflamed, they have suffered a

greater or less degree of irritation, or at least excitation, sufficient to increase perceptibly their functions.

The testicles are found in the same condition; for even when they have not been the seat of any inflammation or pain, their activity has been augmented; the semen has not only been expelled involuntarily, but it must also have been secreted in greater abundance than usual, else the seminal losses could not have been so frequent; the weakness and exhaustion would not have pursued so rapid a course.

The urine was not only more abundant, but had also changed its nature; leaving out of consideration the pus or mucosities that might be found in it, it was paler and more watery; it contained less urea and uric acid.

The semen had likewise lost its odour, its colour, and consistency; it was less elaborated.

In fine, all these patients experienced frequently, a desire to urinate, on account of the irritable state of the bladder: some could not retain their urine more than half an hour, or an hour (Nos. 11, 13, 14, 15). With all the desire was imperious, irresistible; the spasmodic contractions of the bladder overcame all the effects of the will: the emission was precipitate and convulsive.

These phenomena furnish an exact idea of what takes place on the part of the vesiculæ seminales, during diurnal pollutions: some patients even feel distinctly those fatal contractions that announce inevitable seminal losses (No. 28). Others were not sufficiently informed on medical topics, to give an account of them; but their description of symptoms would show that they experienced the same phenomena, even though analogy did not lead us to admit their existence.

This analogy is, however, striking, since it was especially during the expulsion of the last drops of urine, that these losses took place.

In fine, the two orders of symptoms have, in general, become ameliorated or exasperated at the same time, and under the influence of the same causes.

This remarkable resemblance is explained in the most simple manner, since the blennorrhagia has its principal seat in the prostate, where the spermatic and urinary organs join each other.

This method of investigating these two orders of phenomena, enables us also to ascertain better the cause and *modus operandi* of pollutions.

Treatment.—It is not astonishing, either, after what has been said, that cauterisation of the prostatic surface should have produced more direct and more powerful effects than all the other therapeutical agents.

It is well known with what promptitude and efficacy nitrate of silver modifies fungous injected and engorged tissues, the results of a prolonged inflammation. These effects are especially evident in scrofulous cases and in chronic ophthalmiæ. A short time after, the tissue becomes disengorged, contracts upon itself, becomes pale, and

acquires a new energy that effectually protects it from relapses, to which the patients are exposed, when the cure has been obtained by other means. It was this that led me to employ the nitrate of silver against chronic inflammations of the vagina and neck of the uterus, that induce so many leucorrhœas; against chronic catarrhs of the bladder, so rebellious to all other treatment; and I have always had reason to be satisfied with it.

Cauterisation produced the same effects upon the prostatic portion of the urethra; it has essentially modified the organisation and sensibility of the mucous membrane, and this change has very soon shown itself in the organs placed under its immediate influence.

Until the present time, a relaxation of the ejaculatory ducts has been considered as the only cause of diurnal pollutions, and this exclusive idea has caused the greatest injury; but it would be falling into an extreme equally erroneous and fatal, to attribute all seminal losses to irritation alone of the spermatic organs.

We have seen that one of these patients was cured by tonics alone (No. 11), another, by antiphlogistics (No. 10). I shall have occasion to report other cases of the same nature, but these are the most uncommon. There exists almost always, at the same time, in the spermatic organs, irritation and weakness, an excessive sensibility and little tone. This is also what we observe in chronic affections of all the mucous membranes: we might even say, that, in general, the organs and the individuals are the more susceptible to impressions the weaker they are.

In almost all cases of diurnal pollutions, these two states are observed simultaneously, but in different degrees: it is this in reality that disconcerts practitioners and throws the patients into despair; for antiphlogistics and tonics, emollients and stimulants, repose and fatigue, produce good or bad effects in the same individual, according as irritation or weakness predominates at the moment.

Cauterisation has the advantages of combating at the same time these two orders of symptoms: by destroying the surface of the engorged tissues, it changes their morbid susceptibility; resolution produces there a firm contraction, that gives them a new energy: this is the reason why cauterisation induces oftener a definite cure.

But when the disease has existed for a very long time, the genital organs participate in the general debility of the economy: after the chronic inflammation has disappeared, it is necessary to aid the relaxed tissues in regaining their former energy: nothing then contra-indicates the administration of tonics of every description; they finish the cure commenced by cauterisation.

This explains how cold baths, sulphurous baths, ice, &c., have succeeded with individuals to whom at first they had been injurious, (Nos. 22, 23, 24, 25, 26, 27, 28.)

Symptoms.—In examining the mode of action of blennorrhagia in the production of pollutions, I have already mentioned the symptoms peculiar to the cases I have reported: as to others, they

have presented nothing that we do not observe in all seminal losses; I could not therefore discuss them in this place, without exposing myself, hereafter, to useless repetitions.

I shall only further observe how insidious are the general phenomena provoked by these fatal evacuations, since they lead to the belief in cerebral affections, gastrites, diseases of the heart, urinary calculi, &c.

The first cause of these symptoms must be sometimes very difficult to discover, since two of these patients studied medicine to ascertain it; for ten and fifteen years they were incessantly occupied before suspecting it (Nos. 20, 28): we may judge from this of the number of diurnal pollutions that are overlooked.

CHAPTER IV.

CUTANEOUS AFFECTIONS.

No. 29.

Fourteen years of age—Scabies during ten months—After its disappearance, pain in the epigastrium—Tumour upon the left testicle—At a later period, chronic inflammation of the bladder—Diurnal pollutions—Hypochondriasis—At the age of twenty-eight, cauterisation—Prompt cure.

The following case was reported by the patient, a student of medicine: I have omitted those portions only that referred to myself.

"I enjoyed good health till the age of fourteen: at that period I had the itch; for ten months it was proof against all the remedies employed. Scarcely had the eruption disappeared, when I began to feel an acute and lancinating pain in the epigastrium, which afterwards became dull and extended. The itching that I felt over the whole body appeared to have become transported entirely to the head; especially so when I exposed myself to cold and moisture, or when I had the head uncovered. The scalp became covered with small pimples, which, breaking, were converted into quite extensive scabs.

A hard tumour of the size and figure of a bean developed itself upon the left testicle: it lasted eighteen months.

Digestion was performed with difficulty; my complexion became darkened; my shoulders saillant; the epigastric region was so tender that the weight of the bed clothes could not be borne; when I stood up it appeared to me that I had a ball suspended within.

The college vacation having arrived, I consulted the family physician, who attributed all that I felt to a too rapid growth. But little satisfied with his explanation, I went to seek out a bonesetter (*rebouteur*) well known in that region, who pretended to set the breast bone, applied a plaster, and dismissed me as I came.

This state of things lasted till my eighteenth year: at that

period I felt a slight pain in urinating, and was very costive; but the pain in the epigastrium diminished and I regained a little flesh.

At the age of twenty-two, in consequence of domestic troubles, and perhaps also under the influence of some excesses with women and of late hours, I experienced the following symptoms:

Increasing emaciation; lassitude from the least exercise; skin yellow, dry, and of a dirty appearance; heat acrid to the touch, especially in the palms of the hands and soles of the feet; formication over the whole body when I began to sweat; habitual feeling of heat internally; constant pain in the epigastrium and hypochondrium; obstinate constipation; digestion slow and laborious, accompanied with a development of gas, acid eructations, or an odour of rotten eggs; sometimes cold and clammy sweats, especially when I had taken some pungent or acid substance, or had met with the least difficulty, for I was extremely irascible; impossibility of long enduring hunger; difficulty of retaining urine; during its emission, pain at the base of the gland and contraction of the neck of the bladder; after cooling, urine red, muddy, containing a sediment brick coloured, with a large quantity of a flocculent substance held in suspension; venereal desires, but almost complete impotence; after the least erection, running from the canal of a gluey and transparent matter; on going to stool, abundant evacuation of a white serous matter slightly opaque; scabs and itching of the head; humming in the ears; loss of memory; slowness in the perceptions; self dissatisfaction; excessive timidity; disgust for all amusements except for solitary walks; profound melancholy without cause; discouragement; countenance sad and contracted; exacerbation of all these symptoms after riding.

I consulted different physicians, among whom I ought particularly to mention two distinguished professors of this faculty. All regarded my condition as nervous, and told me that I was a hypochondriac; but some advised demulcents, baths, a vegetable and milk regimen, exercise, and relaxation; others prescribed bitters, tonics, alterations, sulphurous preparations internally and externally, an issue, &c.

All these remedies were without effect, or rather, they exasperated my troubles, and I began to lose my hair.

Weary of this painful situation, I endeavoured to contract the itch again, either by inoculation with the virus, or by wearing the shirts that the diseased had just taken off; but not a vesicle made its appearance.

I was in this state, in my twenty-eighth year, when I heard you develop the history of my disease in one of your lectures. * * * You cannot imagine the pleasure I experienced in following you in the exposition of the numerous symptoms and diverse treatments of pollutions: I recognised myself at each word; I felt my hopes renewed. On leaving, I carried away with me the deep conviction of an approaching cure. * * *

The next day, June 10th, 1826, I went to visit you. * * *

The introduction of the catheter caused acute pain and determined spasmodic contractions of the canal, particularly on approaching the bladder.

You thought that the cauterisation would subdue the chronic inflammation, which induced the seminal losses, the cause of all my difficulties. * * * * *

Your prognosis was fully verified, for eight days after that happy cauterisation I felt myself a little stronger; my limbs were already more free; my urine became clearer; I began to retain it a little longer; my countenance expanded and assumed a more cheerful aspect; my complexion became clearer. I had a nocturnal pollution, which had not happened for a great length of time.

At the end of three weeks, I found myself in a new state. For ten years I had not felt so well. The functions of the brain, stomach, bowels, bladder, and genital parts, were performed with a new energy; my skin lost its yellowish and earthy colour; the internal heat, formication, &c., became dissipated.

Nocturnal pollutions, however, became very frequent: since the 4th of July to the present day, the 12th, I have had four: notwithstanding that, my strength increased daily. I hope that a second cauterisation will finish the cure of a disease that all other treatment has only exasperated."

I could not now say whether I yielded to this desire for a new cauterisation; but certainly I did not feel the anxiety caused in the patient by the appearance of the nocturnal pollutions.

When they succeed to diurnal pollutions, they indicate an evident amendment in the state of the genital organs: they prove, in fact, that the semen is no longer expelled, as formerly, in an almost continuous manner. Thus, this patient experienced from that moment a rapid improvement in all the functions, an increase of vigour, which under any other circumstances would be inexplicable.

The desire for a new cauterisation was not only owing to the fear of nocturnal pollutions, but also to a species of reverence for the agent that had produced results so prompt and satisfactory. This sentiment was even expressed with an enthusiasm that would have appeared suspicious or ridiculous, if I had allowed the least trace of it to remain.

Besides, this eagerness for cauterisation is experienced by many patients who have just witnessed its effects, and I have been often obliged to resist it. We must only decide to return to it when there is much left to desire; when all amendment has for a long time ceased: as long as it is making progress, however slow it may be, there is room to hope that regimen, exercise, and the moderate use of the organs, will eventually confirm the convalescence.

The prompt cure of this hypochondriasis treated for so long a time with so little success, by so many different means, proves sufficiently that it was owing to diurnal pollutions. But to what cause must these seminal losses be attributed?

After the disappearance of the cutaneous affection, there came on symptoms of a chronic inflammation of the stomach, then of the bladder; a tumour developed itself upon the left testicle, &c. We know the connection that exists between the skin and the mucous membranes: I have shown in what manner the affections of the urethra extend to the testicles: it is then easy to conceive how the irritation became extended to the spermatic organs, and in what manner it provoked spasmodic contractions in the vesiculæ seminales.

What proves further that the diurnal pollutions were really kept up by a chronic inflammation, seated near the neck of the bladder, is the pain that the patient experienced in that region; the frequent desire to urinate and the nature of the urine; the sensation produced by catheterism; and especially the prompt cure produced by cauterisation.

No. 30.

Cutaneous affections—Repeated gonorrhœas, &c.—One cauterisation—Cure.

M. N., of a spare habit and irritable constitution, subject to frequent and varied cutaneous affections, had in his youth some temporary gleets that always disappeared very soon. Afterwards he married and remained faithful to his wife.

Yet these discharges reappeared several times, varying in intensity and duration; alternating with darts eruptions more or less acute, sometimes with numerous boils; succeeding, at another time, to an eruption of pimples upon the head, that had lasted a long time and left cicatrices similar to those of smallpox. At other periods, obstinate ophthalmias or violent rheumatic pains came on, during the absence of these cutaneous affections.

Several times some slight excoriations became irritated to a troublesome degree, and a simple wound of the leg confined him several months to the bed.

In 1820, in consequence of enormous and numerous boils, there came on an inflammation of the urethra more intense and more painful than usual: I found M. N. in a state of extreme prostration, accompanied with great anxiety, excited by tormenting suspicions as to the nature of that abundant and greenish discharge, in every way similar to that of intense blennorrhagia.

Knowing the constitution of the patient, I thought that this inflammation depended upon the general cause that had given rise to so many others. In fact, it yielded promptly to an antiphlogistic and derivative treatment.

I prescribed afterwards ptisans of burdock, of bitter-sweet, &c.: at a later period, the use of the hydro-sulphurous thermal waters. M. N. went successively to Caunterets, Luchon, and Arles, (near Perpignan.)

At the end of three years his general health was improved, but the inflammations of the urethra still appeared from time to time,

particularly in winter, when there was no irritation of the skin or other organ. Then he became dejected, restless, changeable, melancholy, and little capable of serious occupation.

He was strongly desirous to rid himself of these periodical discharges that empoisoned his existence. I had already employed, with success, cauterisation in some cases of inveterate blennorrhagia: I proposed the trial of it to him, with the hope of essentially modifying the mucous membrane of the urethra; he submitted to it with eagerness, and the result exceeded my hopes.

For twelve years M. N. has not perceived the least trace of these discouraging gleets, although he has travelled much and has not subjected himself to any particular diet or privations. But he very soon perceived changes much more important.

His venereal desires became more intense, more imperious; the erections assumed a new energy; the ejaculation no longer took place precipitately, as before. He is, at fifty-five, more vigorous than he was at twenty, and capable of doing habitually what he would have regarded then as an excess: this new regimen, far from diminishing his powers, appears to augment them. It is also since that epoch that he has had children.

This single cauterisation, then, produced a real revolution in the genital organs, of which the effects still continue at the end of twelve years.

In order to have a complete idea of the important change that must have taken place in the cauterised membrane, it is well to remark that M. N. has remained exposed to the same cutaneous eruptions, and that they alternate, as formerly, with ophthalmias, attacks of gout, wandering pains in the chest, abdomen, &c.; but that, since then, the urethra has not been a single time the seat of these wandering inflammations, which continue to attack all the other organs.

Thus, although the first cause acts continually upon the rest of the economy, the organ cauterised is found, for twelve years, uninfluenced by it.

Again, if we judge from the preceding cases, and especially from the general symptoms that attended these repeated inflammations of the urethra, they must have provoked diurnal pollutions, which the patient himself never suspected: this explains the new energy of the genital organs, in spite of the advanced age; the increase of vigour of the whole economy, notwithstanding the more frequent repetition of the venereal act.

In fact, the cauterisation not only put an end to the disposition to urethritis, but it also destroyed a powerful and continual cause of debility that was undermining imperceptibly the constitution of the patient, unsuspected by himself.

No. 31.

Pustular herpes of the face and chin—Urethritis not contagious—Nocturnal and diurnal pollutions—Cauterisation—Probable cure.

For the following case, I am indebted to the kindness of M. Willeaume, Surgeon in Chief of the Military Hospital of Education, of Metz.

"George G., aged thirty, baker, unmarried, given to masturbation from the age of eighteen to twenty-five, affected with pustular herpes of the face and chin, had for two months, an urethritis without infection. He has been subject, for seven or eight years to nocturnal pollutions, sometimes with, sometimes without voluptuous dreams; he renders from time to time, on going to stool, a few drops of semen, especially when he has not had any pollutions for a long time.

As soon as he falls asleep, he has erections that last all night, but he has none by day. In addition, habitual state of languor and weakness; easy digestion but moderate appetite; belly sometimes distended, sometimes contracted; sleep quite good, but headach on awaking; progressive emaciation. The patient pretends to have remarked, that his blood is more fluid and watery than formerly: he complains of pains in the chest.

Introduction morning and evening, for a quarter of an hour, of a hollow bougie into the canal; at the end of fifteen days, but little amendment, only the pollutions appear more rarely.

Slight cauterisation of the prostatic portion of the urethra; but little pain.

Since then I have not seen the patient, who lives seven leagues from this place. WILLEAUME."

This case is doubtless very incomplete, but we may calculate upon what it contains: it is then very certain that the urethritis was not the result of an impure coition, and that it caused nocturnal and diurnal pollutions.

Thus, this is of the same nature as the preceding cases; every thing inclines us to think that the result was the same, since the patient did not return for additional advice.

No. 32.

Herpes about the genital organs—Two blennorrhagiæ—Nocturnal and diurnal pollutions—Twenty-four sulphurous baths—Cure.

The following case is from a student of medicine.

"At the commencement of 1824, there came on a herpetic eruption of the scrotum: it extended rapidly, and formed, about the genital parts, a zone of about four fingers in breadth. On the least departure from regimen, it assumed a reddish aspect, secreted a humour of a very strong odour, and gave rise to a troublesome itching. Baths, whey, vegetable juices, and the sulphuretted cerate, only procured me momentary solace.

In the month of June, 1824, four months after the appearance of the tetter, I contracted a gonorrhœa: the inflammation was very slight: I treated it with baths and emollient broths: I wished then to take the copaiba, but I was obliged to give it up the third day, on account of the great irritation that it caused in the digestive organs. Some days afterwards, the running diminished a good deal, but did not stop entirely: there remained an oozing of a colourless, gluey matter, forming at the opening of the glans a crust that I was obliged to take away in order to give passage to the urine.

Not knowing then the importance of that chronic discharge, I neglected to observe its character; but I recollect very well that, during defecation, the semen often escaped in abundance.

In the month of January, 1825, I contracted a second gonorrhœa, more intense than the first; very acute pains were first felt in the fossa navicularis; afterwards they became concentrated in the prostatic region. At the end of several days, the inflammation was accompanied with general reaction.

I submitted them to an absolute diet: at the end of eight days the local and general symptoms abated, and very soon the running ceased entirely.

I had almost become pleased with having had this second disease, seeing the chronic discharge that had tormented me for seven months disappear in this manner; when, in the month of February, I made mercurial frictions upon the genital parts, with the view of preventing a syphilitic affection.

These frictions caused the herpetic eruption that I had had for a year to disappear; but very soon the former running reappeared, accompanied by the following symptoms:

Itching of the anus; contraction of the sphincters; arterial beating in the inferior part of the rectum, especially whilst seated, after eating or defecation; very obstinate constipation; urine depositing, upon cooling, an infinity of small whitish flocculi, forming by their union an abundant cloud, suspended in the midst of the liquid; continual oozing of a matter similar to semen, forming a crust that closes the orifice of the urethra; seminal loss during defecation, so abundant that I could sometimes collect a nutshell full of it; nocturnal pollutions, accompanied with temporary pains, but sufficiently acute to awaken me suddenly; extreme sensibility of the canal during catheterism, very acute pain when the catheter arrives at the prostate; retina extremely sensible to the impression of light; spasmodic contraction of the inferior eyelid; same state of the adductor muscle of the thumb of the left hand; ringing in the right ear, more considerable in the evening than the morning; laborious digestion; abundant flatuosity."

At the bottom of this case, I find the following note in my hand.

"Twenty-four sulphurous baths, with an ounce, an ounce and a half, then two ounces of sulphuret of potash: at the end of two months, complete cure."

It is possible that the two gonorrhœas may have been contracted, as usual, by the action of the contagious virus; but that is not probable, since the suppression of the perineal herpes was followed by the return of the discharge.

Again, the mucous membrane must have been very susceptible, since the copaiva, given in the ordinary dose, determined, at the end of three days, a great irritation in the digestive organs. It is remarkable, also, that the withdrawal of this medicine should be followed by an evident decrease in the discharge.

This susceptibility of the mucous membranes is very common in darts affections; it explains the frequency of non-contagious inflammations of the urethra among these patients.

The disappearance of the perineal herpes was also followed by the return of the nocturnal and diurnal pollutions; but this time the irritation, more intense than ever, did not confine itself to the mucous membrane of the genito-urinary organs; it extended to that of the rectum; for the patient experienced itchings of the anus, contractions of the sphincters, and throbbings in the inferior part of the intestine. This coincidence still further confirmed me in my doubts of the contagious character of the previous runnings.

However it may be, it was that which determined me to have recourse at once to the sulphurous baths. In fact, cauterisation of the urethra would not have had any influence upon the irritation of the rectum, and the continuance of that state of the intestine would have been sufficient, probably, to keep up the pollutions. Besides, the prompt and complete cure of the patient proves that the indication had been well appreciated.

It is remarkable that it should be the fear of a venereal affection that should have again been the first cause of the most grave symptoms: this is one fact more to add to all those that I have already pointed out.

No. 33.

Tinea—Herpes—Diurnal pollutions—Sulphurous baths—Cure.

A young man, aged about thirty, travelling agent for a commercial house, affected with tinea in his infancy, and later with herpes of the perineum, came to consult me in the month of October, 1826, for diurnal pollutions that he experienced on going to stool and at the end of the emission of urine: he was constipated and felt a great heat in the rectum and bladder; he urinated often and with a very short jet; digestion was badly performed; he was tormented with wind; his head and limbs were very feeble; he slept but little and badly; he was considered as hypochondriacal.

I prescribed for him the artificial sulphurous baths whilst waiting for the season of the thermal waters. After the eighth bath, I increased by one half the quantity of the sulphuret of potash.

I did not see him again for two months, after which he came to announce to me that he was cured; he had taken a bath every two days, and had stopped after the twenty second—

His countenance was open and gay; he had gained strength and flesh; all the functions were well performed.

This patient was constipated; he experienced great heat in the rectum and bladder; he urinated often, &c. Thus, the irritation was not limited to the genital organs; cauterisation could not have acted upon the intestinal mucous membrane: it was this that led me to employ immediately the sulphurous baths; their action was as prompt and efficacious as in the preceding case.

No. 34.

Lymphatic temperament—Cutaneous eruptions very varied, alternating with different affections—Habitual bad health—Hypochondriasis—Pollutions misapprehended during twenty-five years—Hydro-sulphurous baths—Cure.

M. D., of a well marked lymphatic temperament, was subject, during infancy, to chilblains and scabs of the head; he had numerous scrofulous abscesses of the neck. From puberty, his health had improved; however, he was subject to ophthalmia, pains of the ears, frequent, rebellious, and variable cutaneous affections, that alternated with pains of the throat, or chronic affections of different mucous membranes.

Married at 21, he has only known his wife; he had never given himself to masturbation; never committed excesses of any kind, unless, perhaps, the first months that followed his marriage. He has had several children, of whom three are living, but afflicted with cacochymia.

From the age of 30, there came on darts eruptions upon the face, neck, arms, legs, scrotum and perineum; sometimes acute and moist, sometimes dry and scaly, changing place with great facility; they have often been replaced by small pimples, that spread over different parts of the body, exciting intense itchings; at other times they have been succeeded by boils for whole months together. M. D. went through twenty modes of treatment to rid himself of these annoying eruptions: extracts, alteratives, purgatives, syrups, and tinctures of every kind: the whole without success, but attended with much inconvenience to the digestive organs.

Gradually his health became deranged in a more serious manner; he experienced, successively, symptoms of pulmonary catarrh, of gastro-enteritis and chronic cystitis: he was subject to frequent rheumatismal pains.

He was also tormented by an obstinate constipation, that alternated with diarrhœa. His digestion became gradually deranged; he became subject to very frequent windy colics. His abdomen was always distended with wind: he was obliged to pass it as soon as it presented itself, else he was sure to be ill. When these colics seized him, he appeared to be on the point of suffocation; the blood rushed to the head; the face became livid; then the whole went off with an explosion of flatuosities that lasted several hours.

He often affirmed that he felt these winds running between skin and flesh, when he was unable to rid himself of them.

From that period he ceased to go into company, and only saw some very intimate friends; gradually he became hypochondriac and humoursome. An excellent young man at heart, he was often censorious and peevish: in other respects, of a great weakness of character, and very exalted sensibility. A story of interest, the recital of a feat of courage or self devotion, caused him to weep from sympathy; then, an instant after, he appeared excessively susceptible, especially to whatever appeared to him to be an act of injustice, a neglect of duty.

His countenance was often injected: he complained of frequent dizziness, against which they had employed leeches to the anus, foot baths, &c., the whole without success.

At length his limbs grew weak; he was forced to give up his frequent walks, from which he formerly derived benefit.

These symptoms were regarded as imminent indications of apoplexy. They wished to apply leeches again to the anus; but the patient refused, because he had never been benefited by them.

It was under these circumstances that I was called; the patient was then 56 years of age.

I was unable, for several days, to discover the true cause of these various symptoms, so long was the history of all these diseases, and so complicated the language of the patient. At length he spoke of a dartre that had covered the whole scrotum, and extended to the perineum and margin of the anus. I asked him, then, if he had never experienced seminal losses on going to stool.

I ascertained, very soon, by the detail into which he entered, that he had been subject to them about twenty-five years, without suspecting them. He had always thought them mucosities or glairy matters, and had never attached any importance to them. Besides, these losses were not habitual, nor equally abundant: he was often exempt from them for several months. As well as he could recollect, it was especially when he was tormented by cutaneous eruptions, that he was free from them; he thought, even, that they were his humours that were passing off by his urine, whenever he saw these spermatic evacuations re-appear: he experienced, at those times, heat and irritation in the rectum and bladder, that he could only allay by injections.

Since the appearance of these losses, his erections and venereal desires had been continually diminishing; he had not had any for several years, which he attributed, simply, to the progress of age.

His urine was sometimes troubled or flocculent for twelve or fifteen days; then it became limpid for an uncertain period.

All these circumstances were too clear to leave the least doubt as to the nature of the disease. I induced the patient to take some natural hydro-sulphurous waters: he went to those of Vernet, near to Perpignan.

After seven or eight baths, there came on intense itching of the

skin, especially of the legs; a multitude of small pimples became developed there, that oozed out, for a month, such a quantity of reddish serosity, that the patient was obliged to envelope the limbs, twice a day, with several thicknesses of linen. At length this discharge diminished gradually; the epidermis became detached in flakes over the whole surface of the body.

During this time a complete metamorphosis took place in the whole economy: the stools became easy and regular; the appetite increased rapidly; the seminal losses disappeared; the stomach digested, indiscriminately, all kinds of food, and bore the strongest wines: the erections re-appeared: in a word, M. D. experienced, at 56, a real return of youth.

Here are, then, seminal losses that for twenty-five years were misunderstood; and during all that time the unfortunate subject of them passed for an imaginary sick man, a hypochondriac; they ridiculed his mania for injections, drugs, &c., without taking pains to ascertain the cause of it. I hope that serious attention will be given to these long sufferings: if they do not always terminate in death, they at least empoison life.

How did this patient so long endure this disease? Because it was not continuous. The seminal losses first took place, probably, only when the irritation became seated upon the genito-urinary organs, or upon the rectum.

At last, however, they resulted in seriously endangering his life, and all began to believe in the existence of a cerebral affection, or, at least, in indications of apoplexy.

No. 35.

Pimples of the face—Dartre of the anus—Repeated gonorrhœas.

Here are some passages from a very long case, of which I have not been able to find the result.

"The acrimony of my blood manifested itself early, by numerous and suppurating pimples of the face.

"At 18, they disappeared, in consequence of a journey, and were replaced by a violent dartre of the anus.

"At 21, after several balls, there came on a running of some drops of but slightly coloured matter; M. Cullerier told me that it was only in consequence of becoming heated: it went off at the end of twenty days. That fatal running has been, however, the source of all my troubles. When it had disappeared, I felt acute pains in the canal and bladder; they became redoubled, and lasted an hour or two after I had urinated.

"Several physicians attributed them to a dartrous humour seated upon the neck of the bladder and canal. M. Dubois prescribed baths for me, vegetable juices, sulphuretted preparations, and a strict regimen, which ameliorated my condition. Some months after, I saw a woman. Eight days after, I had another running

more violent than the first, accompanied with acute pains, with inflammation of the testicle, and with a return of the *élancemens*. For a year, I took successively about a pound of strong mercurial ointment; nine bottles of the extract *de Laffecteur*; an enormous quantity of sarsaparilla; then two bottles of the liquor of Van Swieten, without being able to cure my running, and without seeing the eruption about the anus diminish. A year afterwards, I put a blister upon the arm, which did me a great deal of good.

"At 31, after having had connection, during the whole winter, with the same woman, there came on in the spring a third running, similar to the preceding. This, I was certain, was not owing to a new infection." * * * * *

I thought it important to report this fragment of a case, as a new example of the influence of the darts eruptions upon the mucous membrane of the urethra, the bladder and rectum.

We see here, again, the disposition obstinately to combat these discharges by all known anti-venereal remedies.

These errors are so grave and so frequent, that I am not willing to neglect any opportunity of mentioning them.

No. 36.

Periodical tetter—Blennorrhagia—Acute pericarditis, caused by the nitrate of potash—Relapse owing to sudorifics, &c.

M. S., of a nervous temperament, experienced, from youth, a slight herpetic eruption, the return of which took place periodically every winter.

At 32, greenish discharge, in consequence of a suspicious coition; emollient drinks, to which M. S. adds a great quantity of nitrate of potash: in three days he consumes an ounce of it. From that moment, symptoms of inflammation of the bladder, urine very frequent and bloody; then purulent and infectious; acute pain; weight in the prostatic region. (Repeated leeches, bath, blisters, &c.) No change.

Remarkable amelioration produced by the copaiba; but diarrhœa, eruption of pimples and boils, with pulmonary catarrh, succeeded.

After the administration of the syrup of Cuisinier, and of the decoction of sarsaparilla, return of the vesical symptoms; irritation of the genital organs, diurnal pollutions, spasmodic contractions of the canal resembling a stricture. Cauterisation without success, sulphurous baths; sensible amendment.

Having lost sight of this patient, I was unable to learn how this affection of the genito-urinary organs terminated; but I thought it necessary to mention here the principal circumstances of this case, on account of the deplorable effects produced by the nitrate of potash, and the relapse caused by sudorifics.

No. 37.

Hereditary tetter—Gastro-enteritis—Cystitis—Itching of the anus—Pollutions.

M. P., given to masturbation at the epoch of puberty, experienced, two years after, an herpetic eruption, hereditary in his family; it was combated for six weeks by purgatives administered every other day; the tetter disappeared, but was replaced by a gastro-intestinal inflammation, that diminished as soon as the tetter re-appeared.

The year following, the use of the same purgatives brought on a return of the same troubles. The use of the waters of Bourbonne was followed by nocturnal pollutions, which diminished when the eruption became extended to the face and arms. After the trial of cress and the depurantia, there came on seminal losses on going to stool, itching of the anus, urine troubled, depositing a sediment, and excessive emaciation.

I advised this patient to use the hydro-sulphurous thermal waters, in all their forms, and particularly the ascending douches, on account of the itching that he experienced in the anus. I have heard nothing more from him; but the case appeared to me worthy of preservation.

We see here, at two different times, that purgatives repel the tetter, but bring on a gastro enteritis; and that the return of the herpetic affection eventually establishes the health: still later, pollutions are excited by the use of the waters of Bourbonne: they diminish under the influence of a new herpetic eruption, and are finally exasperated in a remarkable manner by the cress and depuratives.

When shall we take into consideration the peculiar constitution of each patient, the susceptibility of his different organs, and the action of medicines upon each of them?

Causes. These cases are sufficient to prove the close connection that exists between the genito-urinary mucous membranes and the skin, especially with that of the scrotum and perineum (Nos. 32, 33, 34).

These relations are not more intimate or more special than with other membranes of the same nature; they depend upon the same cause, the analogy of structure, and functions of the mucous and cutaneous tissues; in several of the cases that I have just reported, the genito-urinary organs have even been the last affected (Nos. 29, 30, 36); the law is then general; but the question here is only in reference to seminal losses.

However, the cutaneous affections have not alone assisted in their production. I have already said that the causes of pollution rarely act in an isolated manner, as it is necessary to suppose when

we study their influence: we must then consider all the important circumstances that have contributed to this unhappy result.

I have reported, in the preceding chapter, numerous examples of blennorrhagiæ complicated with herpetic affections that it was necessary to combat with special remedies (Nos. 22, 24).

In the greater number of the cases which we have just read, there existed runnings more or less abundant, more or less often repeated (Nos. 30, 31, 32, 34, 35). It may appear improper that I should separate cases so strongly resembling each other, but I have been determined in so doing by the predominating character of one or the other disease.

I have arranged, moreover, among the cutaneous affections, the cases in which it was not demonstrated to me that the running was the result of an infection. It is sufficient, in order to remove all doubts on this point, to examine with a little attention the circumstances under which these discharges developed themselves, with what facility they have been reproduced, what resistance they have opposed to the ordinary methods of treatment, and with what promptitude they have yielded to the sulphurous baths.

There is certainly no reason why an individual afflicted with cutaneous affections should not be exposed to the action of the blennorrhagic virus, and, on the contrary, there are many why he should be more easily infected; but too generally we confound the runnings, to which such persons are disposed, with ordinary blennorrhagia, or, to speak more exactly, we never think of questioning patients on this point, and if they speak of old cutaneous affections that disappeared at the same time, we ridicule them, without stopping to consider their importance; we prescribe the anti-blennorrhagic remedy that we have invented or adopted for all cases. It is not empirics only who act thus, but practitioners of good standing and well informed, who have not reflected upon these particular cases, sufficiently common, however, to merit a serious attention.

One of my friends, annoyed for a long time by prurigo, that he took to be the itch, had recourse, in order to rid himself of it, to an empiric, who anointed the whole body. Scarcely was he cured, when he brought to a termination an affair of gallantry about which he had been for a long time engaged. Some days afterwards, he had an abundant and greenish discharge, accompanied with pains, and all the symptoms of a violent blennorrhagia. I did not hastily adopt his suspicions; I caused him to be covered with flannel from head to foot: at the end of a few days the vesicles reappeared, and the discharge subsided of itself.

I have at this moment under treatment a patient who, at 14, had pityriasis of the head: it disappeared at 19, and was replaced by a chronic inflammation of the pulmonary mucous membrane. After the cure of this catarrh, there appeared, without any known cause, a pain at the neck of the bladder, accompanied with itchings, darting pains like to thrusts of a lancet, and weight in the rectum: then succeeded a gleet; the spermatic cords became swelled and painful,

as well as the testicles, and the patient now has diurnal pollutions, with all the difficulties consequent upon it.

I find the following in a letter of consultation that I have lately received :

"Having had the itch at 10 years of age, and at a later period, dartrous eruptions of the face, neck, &c., up to the present time I have not seen any women. Yet at 18, the following day, after having read an obscene book that heated my imagination, I was seized with a swelling of the testicles, of such a character that we were obliged to resort to bleeding, baths, and emollient cataplasms to combat the inflammation.

"Two years afterwards, having sought to obtain the favours of a young person, without being able to succeed, I experienced the next day a copious discharge of greenish matter, that lasted nearly nine months, without acute pains, but of such an acid nature, *qu'elle brulait mes chemises.*"

After such facts, it is right to look twice before pronouncing upon the nature of a discharge attacking an individual afflicted with cutaneous disease; especially when its suppression has already been followed by inflammation of some other mucous membrane.

We must recollect, however, that these patients, like others, are exposed to the blennorrhagic infections, and that it must have with them even a more peculiar character of virulence and obstinacy. It must then favour a good deal the disposition that these cutaneous affections have to become concentrated upon the genito-urinary organs, and to provoke seminal losses.

Again, we find here, as in the preceding chapter, anti-venereal remedies that are useless, excessive, and injurious. In one case, mercurial frictions, used to prevent a syphilitic affection, dispel some dartrous eruptions, and are followed by the most serious consequences (No. 32); in another, external and internal remedies, violent and repeated, are employed without any better motive or success (No. 35): finally, sudorifics, the syrups of Cuisinier, &c., bring on an unlucky relapse (No. 36).

Nitrate of potash, taken in large doses, determined an acute cystitis (No. 36). With another patient purgatives dispelled an hereditary dartre; the waters of Bourbonne brought on pollutions; cress and depuratives caused cystitis and increased the seminal losses (No. 37).

These diverse methods of treatment acted either by suppressing suddenly a cutaneous eruption, or by exciting direct irritation of the genito-urinary organs. In every case they have powerfully assisted in the production of seminal losses.

Mode of action.—In what manner do cutaneous affections act in producing pollutions?

It is sufficient to cast the eye over the cases that I have just reported, to see that they have acted by being transferred to the mucous membrane of the genito-urinary organs.

Thus these patients experienced inflammations of the urethra, repeated a greater or less number of times (Nos. 30, 31, 32, 35, 36); acute cystitis (Nos. 36, 37), or chronic (Nos. 29, 32); vivid irritation of the bladder (Nos. 33, 35); inflammations of the testicles (No. 29), of the prostate (Nos. 32, 36); and pains in the spermatic cords.

We find then, in these patients, the same symptoms as among those whose pollutions were owing to contagious urethritis. Thus, the metastasis of these cutaneous affections to the urethral mucous membrane has produced the same effects as the blennorrhagic virus. The irritation must have extended itself in the same manner along the spermatic ducts.

Irritation of the rectum.—But several of these patients experienced phenomena in the region of the rectum that have not been observed in any case in the preceding chapters; these consisted in great heat, dartings, itchings, and throbbings, extending to a greater or less height into the intestine (Nos. 32, 33, 34, 35).

These symptoms indicate that the dartrous affection had extended to the mucous membrane of the rectum, as well as to that of the genito-urinary organs. This complication must have had a powerful influence in the production of seminal losses, by provoking an obstruction of the sphincters and a spasmodic contraction of the rectum; hence would result an obstacle to the passage of the fecal matters, and a disposition also to a contraction of the vesiculæ seminales.

I shall return very soon to the causes of pollutions having their seat in the rectum: In the mean time I will only observe that these symptoms ought not to be confounded with those excited by the irritation of the prostate.

In both cases there may be constipation, feeling of weight, heat and uneasiness in the rectum; but when these symptoms arise from a dartrous affection, there are superadded intolerable itchings, accompanied with burning sensations at the margin of the anus: if we examine these parts, we find them red, excoriated, and humid: separating the folds of the skin, we find oozing out a mucous and sometimes purulent matter; the portions of the mucous membrane that the eye can perceive are in the same state: in a word, the margin of the anus bears unequivocal traces of a dartrous affection.

This distinction is important to be established, because, in the first case, cauterisation of the prostatic portion of the urethra may stop the chronic inflammation of which this part is the seat, and with it the symptoms that depend upon it: in the second, the symptoms that have their seat in the rectum are owing to a peculiar affection of the mucous membrane. It is true that this affection is similar to that of the urethra, and that it is dependent upon the same cause; but the cure of the urethral inflammation would not have any influence upon that of the rectum, and we shall see that this last is sufficient to excite or keep up seminal losses capable of materially affecting the health.

Treatment.—The only means that have been employed with success in cases of this nature, are cauterisation and the sulphurous waters.

CHAPTER V.

RECTUM.

In the preceding chapters I have explained the causes that may produce an influence upon the spermatic organs, through the medium of the mucous membrane of the urethra: I am now going to investigate such as may act upon the vesiculæ seminales by way of the rectum.

No. 38.

Seminal losses from mechanical obstacle to defecation—Incision of the obstacle—Prompt and complete cure.

Nicholas G., of a strong constitution, *conducteur de diligence*, had at twenty-five years of age, a chancre, some warts, and a bubo. Without ceasing from business, he treated this violent syphilis with the sublimate in solution and mercurial pills. Notwithstanding the fatigue caused by repeated journeys, all these symptoms disappeared at the end of six weeks. But a short time afterwards, he experienced some difficulty in defecation; this difficulty gradually increased, so that for four or five years this function could only be performed by means of considerable efforts; the fecal matters were passed flattened like a riband from four to five lines in breadth, by one in thickness.

From that time the health of Nicholas G. became gradually deranged: his appetite diminished; his digestion became laborious and accompanied with a great quantity of wind; emaciation and weakness increased from day to day; there was a loss of memory; and the functions of the genital organs underwent the same changes. When I saw the patient, the venereal desires were almost null; the erections remained incomplete; the penis no longer acquired the same development and the same firmness as formerly; coition could take place but very seldom, and the ejaculation was a long time delayed; sometimes even it was impossible, and never accompanied with any vivid pleasure.

The union of all these symptoms could not fail to make me suspect the existence of seminal losses. In fact, the patient informed me that, for four years, he had invariably passed semen at stool, and that this evacuation was, in general, in proportion to the efforts that he was obliged to make in order to expel the fecal matters: also that, in order to preserve them in a loose state, he had confined himself to a vegetable and milk diet. He had tried very often to take injections, but had never been able to succeed.

These abundant losses had so exhausted the patient, that he appeared to be sixty years of age, although but thirty-four.

I encountered, at two inches from the orifice of the anus, a stricture half a line in thickness, nearly circular, having an irregular opening in the centre that would only admit the extremity of the index finger. It was a kind of diaphragm that opposed the discharge of the fecal matters. This membrane was thin, flexible, and indolent: it was evidently a cicatrix.

I divided it crucially with a straight probe-pointed bistoury, that I introduced flat along the index finger. These incisions were of but little extent, but I enlarged them by introducing the finger deep and by pressing strongly in the direction of each wound, until the rupture of the membrane reached the wall of the intestine. Four flaps were thus formed, the reunion of which I took care to prevent by the frequent introduction of the finger.

This operation gave but little pain and caused only a trifling loss of blood. I taught the patient to introduce into the rectum a rod of box wood, of a size sufficient to dilate the incised membrane: I recommended him to introduce it as far as possible, to leave it but a short time in a place, but to renew its application several times a day.

The employment of this simple means was sufficient to procure the separate cicatrization of these four flaps. From that moment the expulsion of the fecal matters took place without difficulty, no longer causing any seminal loss, and all the functions soon resumed their normal state, although Nicholas G. had again commenced his employment as *conducteur*.

This case gives a clear idea of the influence that constipation may have upon the production of seminal losses during defecation.

Here the only cause of the disease was the membranous obstacle situate above the sphincters: the escape of the semen must have been caused by the mechanical pressure exercised by the intestine upon the vesiculæ seminales, during the violent efforts that the patient was obliged to make, in order to force the fecal matter through a narrow opening. As soon as this barrier was destroyed, the seminal losses ceased, and with them all the symptoms consequent upon them.

The effects of the compression, wholly mechanical, of the vesiculæ seminales by the rectum, manifest themselves then, in a perfectly isolated and altogether incontestable manner, which is more rare than we are apt to believe it to be.

Coition was very long; the ejaculation much retarded; sometimes, indeed, it was utterly impossible, and was never accompanied with any very vivid pleasure, because the vesiculæ seminales contained but little badly elaborated semen: but they were not irritated; the ejaculatory ducts were neither weakened nor relaxed. In almost all cases of diurnal pollution, the ejaculation is, on the con-

trary, very rapid, because the spermatic organs are irritated or relaxed, if both these states do not exist at the same time.

No. 39.

Seminal losses brought on by a chronic diarrhœa—Kept up afterwards by a mechanical obstacle to defecation—Ablation of the schirrous tumour of the anus—Prompt and entire cure.

M., of a strong constitution, entered the military service at 17; was in actual service during his 18th year, consequently had to undergo many sufferings and privations: he committed excesses also of every kind. His health however underwent no alteration.

In 1814, M., aged 35, contracted a blennorrhagia that he neglected; the discharge diminished, but did not disappear entirely till 1816, the period at which M. retired from service and led a regular life.

In 1820, M. married, and became discreet in the enjoyment of its privileges. But, having become porter of a club, he passed a great many nights almost without sleep. In 1824, he was suddenly seized with severe colics, that decreased much under the influence of emollient injections, repeated baths and a strict regimen, but did not entirely disappear.

Two years afterwards, he had a severe hemorrhage from the large intestine, accompanied with a very painful tenesmus, and he remarked that he passed semen during the violent efforts of defecation.

This hemorrhage allayed the pains: but a dysentery remained, that kept up the tenesmus, as well as the seminal losses, and forced out several hemorrhoidal tumours, inverting the mucous membrane of the rectum. From that time the health of M. became more and more deranged: he lost his gaiety and activity, ceased to feel venereal desires, and felt his sight growing weak at the same time with his memory and his physical powers: finally, in 1827, he found himself compelled to give up his occupation as porter.

In 1827 and 1828, the dysentery diminished in intensity: in 1829, it became intermittent and rare: finally, in 1830, it was replaced by a most obstinate constipation, that became in its turn the cause of seminal losses, and increased the swelling formed by the rectum and some hemorrhoidal tumours. This swelling became irreducible, hardened and irritated by the friction, and finally assumed a scirrhous character. Its presence alone was an obstacle to defecation.

M. entered the hospital Saint Eloy the 28th March, 1831, in the following state:

Aged 51; extreme emaciation; face pale and yellowish; skin hairy, hair black; excessive weakness; very great excitability; profound melancholy; habitual hypochondriasis; digestion painful especially after the use of animal substances; defecation obstructed by a red hard border five or six lines thick at its base, projecting an

inch and occupying half the circumference of the anus : seminal losses during the efforts necessary for the expulsion of the fecal matter : emission of urine followed by the discharge of a glairy, limpid and stringy matter : no erections for a long time : absence of all venereal desire ; *frequent vertigo*, blindness and ringing in the ears ; flashes of heat over the head from the least cause.

The border of which I have spoken nearly resembled a large cock's crest ; remains of old hemorrhoidal tumours existed in its neighbourhood : it was then caused by the escape of internal hemorrhoids, that had dragged out a portion of the mucous membrane of the rectum ; the contraction of the sphincters had opposed its return and increased the tumefaction ; the friction had provoked the repeated inflammation of this tissue, and its degeneration.

The base of it occupied more than half the circumference of the anus, and extended above the sphincters ; it was six lines thick ; its consistence was schirrous : there exuded from its surface a sanies of a well marked cancerous odour ; some points had even begun to ulcerate ; it was evident that there was no time to lose, if we wished to remove this tumour : the patient had determined to be operated upon, and with this intention he had even addressed several distinguished practitioners ; but they refused to undertake it on account of the depth to which the disease had extended.

By exercising a slow and gradual traction upon the tumour, I saw that I could draw out the healthy portions of the mucous membrane, and consequently could remove the whole of the disease : as to the hemorrhage, I thought it would be easy to arrest it by cauterising the parts, as they were divided.

The 25th of March, having drawn out beyond the sphincters, the base of the tumour, I commenced its removal by an incision practised upon the healthy mucous membrane, and I cauterised immediately the bottom of the wound with a hot iron, thin and rounded ; then I dissected the base of the tumour, proceeding with the deepest parts, and cauterised them as they were exposed, before a new dissection should allow them to retract above the sphincters, making use of the parts not yet separated, to retain the bleeding surface within sight. After the entire removal of the tumour, the greater part of this wound, charred by the hot iron, ascended between the sphincters and even much above them.

After some inflammatory symptoms, combated by bleeding, baths, emollient drinks, &c., suppuration took place : the recent swelling of the inguinal glands disappeared, and cicatrisation gradually took place, without accident.

I have only to remark, that during the first days the patient could not empty the bladder without the assistance of the catheter, and that for some time afterwards he urinated very frequently.

The 1st of May, the cicatrix was almost formed ; the fecal matters had resumed their ordinary consistence, and were passed every day with facility ; for a long time their expulsion had not occasioned any seminal losses : the patient had resumed his gaiety

and his energy, his appetite had returned, and digestion was performed with facility: his strength and embonpoint increased daily.

About the middle of the month, the erections re-appeared during the night; they became afterwards more and more frequent and prolonged; the cerebral functions followed the same progress in their re-establishment; the blindness and congestions disappeared, and M. left the hospital the 24th of May completely cured.

Three years afterwards, being at Clermont as president of the medical jury, I received the visit of M. He expressed his gratitude to me some time before I could recognise him; the history of his operation could hardly set me right, so much had his countenance, radiant and animated, changed its expression. I need not say, that he had resumed his conjugal habits and his service as porter.

The cicatrix of the anus was then pliant, and in no way interfered with defecation.

The last part of this resembles exactly the preceding.

The results of this operation abundantly prove, that the seminal losses were, for a long time, only kept up by a mechanical obstacle to the expulsion of the fecal matter. But the diarrhœa that had caused the escape of the hemorrhoids and the development of the schirrous tumour, was also accompanied with frequent seminal losses.

At that period, the vesiculæ could not be compressed by the fecal matters, that were liquid and remained barely a few minutes in the rectum: the seminal losses that took place during defecation, could not be owing to the mechanical compression of the reservoirs of the semen, we must then of necessity admit that the vesiculæ seminales participate in the irritation of the rectum; that they contract at the same time with it, and that they are influenced by the tenesmus caused by the arrival of the fecal matters into its cavity.

This case then presents us with a remarkable instance of the double influence that the rectum exercises over the vesiculæ seminales: of a nature essentially vital at the commencement, it became at length purely mechanical. These two orders of phenomena produced the same results; but they were sufficiently distinct not to be confounded one with the other. It is not so in many cases where their simultaneous action has not been well appreciated.

It is also remarkable, that the patient should have been unable to empty the bladder for several days after the operation, and that at a later period he should have experienced a frequent desire to urinate.

These two phenomena prove the close connection that exists between the margin of the anus and the neck of the bladder. This case appears destined, then, in all its bearings, to demonstrate the influence of the rectum upon the genito-urinary organs.

No. 40.

Hemorrhoids from the age of puberty—At the age of 28, obstacles to defecation—Pollutions—Cure.

M. A., of a sanguineous temperament, of an ardent disposition, at the age of 15 indulged for some time in masturbation: very soon afterwards he had an hemorrhoidal flux, which he regarded as a consequence of this fatal passion, and gradually corrected himself of it before his health had become deranged by it; but his piles tormented him a great deal, especially when he became a soldier. They diminished, however, after a campaign in Spain, where the patient suffered much from the heat.

Having returned home, and begun to lead a less active life, he thought that by care he should be able to rid himself of them, but the reverse took place: being better nourished, and leading a sedentary life, he found his hemorrhoids increased both in number and volume. Every stool was followed by a more or less copious loss of blood; the tumours that existed above the sphincters came down, and formed externally a tender voluminous border, that could only be returned by means of slow and continuous pressure.

At length these hemorrhoidal tumours, irritated and swollen, became an obstacle to the escape of the fecal matters. A still greater quantity of intestine appeared externally, and returned with still greater difficulty. From that time the patient perceived that, in the efforts of defecation, he often lost a greater or less quantity of semen. His health gradually declined in a sensible manner: he grew weak; his digestion became deranged; his sleep became disturbed, and fatiguing rather than refreshing: his disposition became soured; he often experienced confusion of the senses and vertigo, and sometimes syncope.

At first, emollient injections, baths, and demulcents, appeared to be of some service to him; but he very soon perceived that they increased the relaxation of the parts and favoured the prolapsus of the rectum, and the seminal evacuations.

This state of things had lasted more than four months when he came to consult me. He was only 28 years of age, but appeared to be 40; his muscles were well developed, yet he was without strength or energy.

At first I soothed the irritation with injections of the decoction of poppy-heads. A few days afterwards I caused injections to be made into the rectum with the poplar ointment, then some more stimulating, of balsam; at the same time, I administered internally cinchona and chalybeates.

Gradually the mucous membrane assumed more tone, and became disengorged; the hemorrhoids became less sensitive and less voluminous; indeed the greater part eventually wasted away; the prolapsus of the rectum at first diminished, and then disappeared. The seminal losses continued to decrease, and also the symptoms dependent upon them.

This case resembles a good deal the preceding; only the prolapsus of the intestine could always be completely reduced; the hemorrhoids also had not yet become degenerated; it was, however, the commencement of the same disease, and had already begun to produce the same effects. The obstacle to the evacuation of the fecal matters caused seminal losses during four months, which were beginning to affect the constitution.

It is rare to see hemorrhoids supervene at the age of 15; I cannot, however, believe with the patient, that onanism alone caused their development: it is probable that there existed in him a strong predisposition to hemorrhoids. I do not even suppose that his temporary misconduct in boyhood had any influence in producing his seminal discharges, so long a time had elapsed between these two periods; besides it was easy to account for the appearance and cessation of these pollutions, without it being necessary to go back to such remote causes. We must then regard this case as a new example of the influence that obstacles which prevent the expulsion of the fecal matters may have upon the vesiculæ seminales.

No. 41.

Precocious hemorrhoids—Hæmaturia—Cerebral symptoms.

I find among my notes a consultation letter recently received, of which I must here relate the principal circumstances.

M., of a nervoso-sanguineous temperament, having a fair skin and florid countenance, passed from college into the office of a notary, and continued to lead a very sedentary life. From his youth, he had been affected with piles, which easily gave rise to copious evacuations of blood. Of a sensitive and even timid character, he has never experienced any very strong passion, nor committed any excess, unless it be in the labours of the study. He has never had any children, although he has been married for 20 years.

In the summer of 1819, having made a long journey on foot, he experienced the first attacks of hæmaturia, which have often returned since that time, whenever he has taken a moderately long walk. There came on also very soon a frequent desire to urinate; his urine, often troubled, was not however bloody, except after exercise.

From that time, the patient became still more sedentary, and his strength progressively diminished. One day, while at church, he fell into a state of syncope, attended with an entire loss of his senses, but he very soon came to himself again, and was able to return home on foot without manifesting the least appearance of paralysis in one part more than in another.

He afterwards experienced many similar, though less severe attacks; being for the most part confined to a sinking away of the limbs under the weight of the body, without being accompanied with a complete loss of semen. One day, he was seized whilst

writing, with a sort of numbness of the fingers of the right hand, which prevented him from finishing his sentence. On another occasion, the thumb of the same hand became stiff, and again prevented the patient from writing. But these accidents were always of short duration, and produced no other results: the right side of the body never retained any permanent trace of paralysis which could lead to the supposition that it was more affected than the other.

In consequence of a slight diarrhœa, blood was discharged per anum in a greater quantity than usual; this evacuation put an end to the hæmaturia for a whole winter: the urine only continued to be more frequently passed than in health.

It was also observed that the mind and memory of the patient grew weak in the same proportion with his muscular powers.

The following year, in the month of May, the patient was found stretched upon the floor in his study: his intellect was much confused; he only replied in incoherent and badly articulated words. A large venesection was practised and leeches were applied to the neck: the patient was able the same day to get up and pass several hours in his arm chair.

Since that time his intellectual faculties have remained almost completely extinguished: he no longer thinks of his office as notary, for which he had formerly a sort of passion; and he is insensible to the attentions of his wife whom he had dearly loved, and to the interest manifested by his best friends. Morose and taciturn, his only replies are yes or no, when his clerks wish to speak to him about business: if he endeavours to say more, he becomes confused and altogether unintelligible.

Although he was formerly remarkably neat in his person, he now passes his urine and fæces in his clothes.

The legs and arms are feeble but are equally free.

The practitioner who addressed this letter to me did not doubt that there existed a chronic cerebral affection: he only wished to learn my opinion as to its nature, and the means for remedying it: this prepossession is evident also from the manner in which the facts are presented. They did not however appear to me decisive, and I urged my brother physician to direct his attention to the condition of the spermatic organs, informing him of the reasons that led me to suspect diurnal pollutions.

These ideas must have appeared very strange to him, for he never replied to them; which, for the sake of getting at the truth, I very much regret.

Now that I have just been obliged to review many cases of this kind, I am convinced that I was not mistaken; but all discussion upon this point would be useless. I only desire that this case be compared with those preceding it, and with another that I am going to report (No. 44); and that Nos. 1, 2, and 20 be again read.

However it may be, this patient, like the last, was subject to piles

from his youth, which indicates an uncommon predisposition to this disease. There existed an intimate connection between the mucous membrane of the rectum and that of the bladder, since the patient had frequent hæmaturia when his hemorrhoids bled but little; for he ceased urinating blood all one winter, in consequence of an unusually large hemorrhoidal flux.

I regret very strongly at this time that I did not sooner think of studying the influence hemorrhoids have in producing seminal losses. I am persuaded that it must be very powerful and very common, not only on account of the obstacle that hemorrhoidal tumours present to defecation, but also from the intimate connection of the verge of the anus and inferior part of the rectum with the prostate, bladder, and vesiculæ seminales; a connection which is reciprocal, and of which I shall very soon give numerous and striking proofs.

The character, habits, &c., of hemorrhoidal subjects, the control that this disease exercises over their minds and actions, all lead me to believe that with them it ought to be looked upon as a matter of more importance than simply a mass of tumefied capillary vessels. What confirms me still more in this opinion is, that I have never seen the same disease produce in woman the same serious consequences.

But I shall advert to this subject again: in the mean time, I refer all to the excellent treatise of Montègre.¹

No. 42.

Scrotal darte—Hemorrhoids—Blennorrhagiæ—Difficulty in urinating—Fifteen cauterisations—Anti-venereal and anti-dartrous treatment, blisters, iodine, meager diet, &c., without success—Incision of a fissure of the anus—free emission of urine, &c.—Prompt cure.

Paul B., of Marseilles, master packer, aged thirty-four; robust, of a bilious-sanguineous temperament, had had hemorrhoidal tumours for six years, when he contracted three blennorrhagiæ in a short space of time: the last was followed by difficulty in the emission of urine; it could only be passed drop by drop, accompanied with acute pain.

Several practitioners, consulted in succession, thought they recognised the presence of a stricture in the urethra, and in consequence practised fifteen cauterisations at intervals more or less remote from each other. The patient not experiencing any improvement from them, was submitted to a very long and complicated anti-venereal treatment, without any better effects.

It was then thought that the obstacle to the escape of the urine might have some connection with a dartrous affection of the scrotum that had disappeared without any known cause: with this view they administered all the usual remedies for this affection:

¹ Des hémorroïdes. Paris, 1819.

blisters were applied to the thighs with the hope of recalling the cutaneous eruption: these means, like all the others, produced no beneficial effects.

The patient could not urinate without the assistance of the catheter: he experienced pains near the neck of the bladder, and a sensation of weight in the rectum; he suffered much in going to stool; and the expulsion of the fecal matters took place only by means of laborious and long continued efforts. Another physician, having introduced a catheter with the greatest facility into the bladder, attributed all the symptoms to a schirrous engorgement of the prostate, of the size of a hen's egg. (Venesection from the arm; three applications of leeches to the perineum; meager diet, composed of biscuit, dry figs, and milk.)

The object of this treatment was to diminish the volume of the prostate by the emaciation of all the organs. It appeared to produce some amendment in the symptoms; but this disappeared as soon as the patient gave up this severe regimen; which the physician attributes, in the document expressing his opinion, to the return of the engorgement of the prostate, in consequence of the return of the embonpoint.

Be it as it may, the patient experienced the same pains in the anus and at the neck of the bladder: it appeared to him that these parts were bound as with a grapple that prevented the passage of the fecal matters and urine. (Preparations of iodine in frictions and internally.) No change.

The 15th of June, 1830, four distinguished practitioners were agreed in consultation, upon regarding it as a cancerous affection of the prostate, and only prescribed palliatives. A short time afterwards, the patient finding his sufferings increasing, came to Montpellier.

I found him pale, emaciated, and in a state of extreme physical as well as mental weakness; he presented all the symptoms of profound hypochondriasis. I introduced a catheter into the bladder with the greatest facility, and found nothing extraordinary in the size of the prostate; I observed only that there existed upon the surface of the rectum several soft, irregular, and movable tumours, which I regarded as internal hemorrhoids, and that the more as there existed others between the sphincters and the verge of the anus.

But these hemorrhoids were not sufficient to explain the extreme difficulty in defecation, and the inability of the patient to pass his urine without the aid of the catheter, &c. I examined the prostate then several times, and I still remained convinced that it presented nothing extraordinary in its volume, form, or consistency.

At length, at the end of six days of unsatisfactory research, I discovered a fissure of the anus, the visible part of which terminated in a fold of the mucous membrane, concealed between two hemorrhoids.

Without pretending to explain, by this fissure, all the symptoms

observed during three years, I thought it necessary to begin by removing it; the patient eagerly consented to it, and I performed, upon the instant, the section of the sphincters.

Some hours after the operation, the patient had a copious stool, and, what is very remarkable, he emptied his bladder entirely, without experiencing the least difficulty or the slightest pain. The next day he had three equally easy stools, and the emission of urine took place, as the day before, without the assistance of the catheter.

From that time, all the functions were performed with facility and regularity: cicatrisation took place in a few days, and the strength was soon re-established. When M. B. departed for Marseilles, a remarkable change had already taken place both in his physical and moral condition.

On reviewing this case, I am convinced that this patient experienced seminal losses on going to stool, and that it was to them that the weakness, hypochondriasis, &c. ought to have been attributed. But no mention is made of them in my notes, and I am unwilling to add any thing to them.

Omitting this, the case is still very remarkable. It is impossible not to attribute to the fissure of the anus all the symptoms observed for three years in the region of the urinary passages, when we find the division of the sphincters followed by the cessation of the pains referred to the neck of the bladder, and by the free and easy emission of the urine.

It is rare that this connection between the margin of the anus and the neck of the bladder presents itself in a manner so clear and striking; but it is easy to find numerous proofs of it when we observe carefully the reciprocal influence that these organs exercise, the one upon the other. (Nos. 18 and 37.)

There did not exist in Paul B. any stricture of the canal, or any affection of the prostate when I first examined him: I do not pretend to affirm that these organs had always been in the state in which I found them; but why did the retention of urine still exist?

For six days the patient did not cease from his enquiries as to the cause of this singular phenomenon; as I could not account for it in a satisfactory manner, I always replied, I don't know, and then made a new examination. If his physicians had not been in any greater haste to admit an hypothesis, they would have examined him with more attention and perseverance, and would probably have found the fissure three years sooner.

No. 43.

Blennorrhagiæ—Constipation—Fissure of the anus—Seminal losses during defecation—Profound hypochondriasis—Inclination to murder and suicide—Diarrhœa—Spontaneous cure of the fissure, seminal losses, &c.

At 24 years of age, Felix B. contracted a blennorrhagia, attended with weight in the prostatic region; several applications of leeches

and baths calmed the pain and reduced the running to a limpid oozing.

The patient then made a journey in a carriage by the side of a young person that excited in him energetic and prolonged erections; very soon afterwards, the left testicle became enormously swollen and very painful, and the oozing from the urethra increased.

Having arrived home, the patient applied some leeches, and took many hip baths; the size of the testicle diminished, but the oozing continued.

For three or four years this testicle remained very sensitive; it swelled several times, or became very painful in consequence of venereal desires a little prolonged: the oozing from the canal was also increased by them. The influence of spring alone, caused, also, for four years, a return of the same phenomena.

To put an end to them, Felix B. took the extract (rob) of Laffecteur. After the second bottle, he became obstinately constipated; very soon defecation became excessively painful, and the fecal matters were besmeared with blood. Then the patient renounced the extract and returned to the injections, but experienced no relief from them; when the evacuation took place, it appeared to him that razors, burning hot, were cutting the anus.

This condition had lasted several months, when the patient experienced vertigo after having been to stool; then he had, when walking or labouring, sudden and fugitive cerebral congestions: his strength failed rapidly; his mind became affected; he fell gradually into a profound melancholy; gloomy ideas, that he endeavoured to banish from his mind, beset him incessantly and caused him to seek solitude and obscurity; there he groaned in secret over his sad condition, and often poured forth an abundance of tears. He had a horror of suicide, and yet an evil genius always seemed urging him to it; the sight of pointed bodies, of cutting instruments and fire arms made him tremble, and caused in him a desire to kill, which he could only get rid of by subjecting himself to some acute pain, by pinching, for example, strongly some part of the body.

Buried in his melancholy thoughts, he spoke to nobody, and if the objects of his affection sought to divert him from them, he only replied roughly to their officiousness. He perceived his venereal desires progressively diminish; but it was not that which most troubled him, it was his mental condition; he had a horror of doing wrong, and yet felt urged to it in spite of himself; thus, he loved dearly his wife, and yet took pleasure in tormenting her and seeing her weep.

Struck with these contradictions, that he could not comprehend, his mind became so far deranged that he believed himself possessed with the devil, and passed whole hours in prayer in order to defend himself against temptation.

A sensation of hunger tormented him incessantly; he ate frequently and with avidity, but his digestion was painful and

laborious. Notwithstanding numerous applications of leeches, the repeated use of baths, demulcent drinks, &c., the symptoms became aggravated in an alarming manner. His sufferings were never greater than on leaving the bath.

One day, after having been to stool, wishing to see if his fecal matters were still besmeared with blood, he noticed upon the ground a considerable quantity of whitish and viscous matter that he thought was semen. To make sure of it, he made it a habit to urinate before going to stool, and then to cap the gland with a piece of paper: it rarely happened that he took it off without finding in it a certain quantity of seminal matter: he observed, also, that it produced in the canal a sort of tickling accompanied with heat.

After having passed six months in this deplorable condition, the patient was seized one day with a violent indigestion, caused by a salad of cucumbers; a profuse diarrhœa followed, which lasted about fifteen days, and increased much the weakness; but, after its disappearance, the fecal matters gradually resumed their natural consistency and were ever after passed without pain or appearance of blood; the seminal losses, caused by the efforts of defecation, no longer took place, and all the physical and normal symptoms mentioned above, gradually became entirely and spontaneously dissipated.

For several years past, Felix B. has enjoyed the best health; all his functions, without exception, are perfectly performed.

M. B. student in medicine, heard me one day in my clinical course expose the diverse symptoms which may arise from seminal losses, and the varied causes which may produce them: then only did he understand the nature of the singular disease that had been to him a source of deep despair, and he spoke to me about it on leaving the amphitheatre: I desired him to write down his recollections of it, and to give me his notes: and it is from them that I have compiled this case. The scrupulous accuracy of which, I think, I am able to guarantee.

Blennorrhagia brought on inflammation of one of the testicles and induced an irritability of the genital organs; it must, consequently, have predisposed them to the production of seminal losses; but what immediately determined their appearance was very evidently the constipation caused by the use of the extract of *Laffeteur*.

Very soon afterwards the symptoms developed themselves which ordinarily accompany fissures of the anus, then those which belong to diurnal pollutions.

This is probably what took place. In consequence of one of these prolonged states of constipation, a hard and copious stool distended beyond its natural limits the mucous membrane lining the sphincters, and a rupture took place. From that time, the attempts at defecation having become painful, the patient delayed it as much

as possible; the accumulated and hardened fæces in their turn increased the rupture; for it is thus that fissures of the anus are ordinarily produced and kept up. The diarrhœa, that lasted fifteen days, gave an opportunity for cicatrisation to take place without any further rupture.

In this way we can easily account for the appearance and cessation of the seminal losses, as well as for the extraordinary symptoms that tormented the patient for six months.

I have already shown hypochondriasis under many different forms as a sequel of diurnal pollutions; but never before has it presented itself with symptoms like these now under consideration.

This young man, naturally of a good and amiable disposition finds himself beset during the whole of his sickness with the most frightful propensities, at which his mind revolted so much, that the loss of his health was nothing to him in comparison with the pain that he experienced from them. His reason must have indeed been shaken through despair, for him, incredulous as he was, ever to be led to admit the intervention of the devil, as the only possible way of explaining this impulse to evil! And he must also have had strong faith in it thus to pass whole hours in prayer.

To what, however, was the aberration owing that could produce such terrible results? to how many reflections ought such a fact to give rise as to the morality of the acts of the sick man, when at the very time the seat of the disease does not appear to have any connection with the brain?

Fissures of the anus must often give rise to more or less abundant seminal losses. The silence of authors upon this point proves nothing, since, notwithstanding the zeal with which I have for a long time investigated all the causes which may give rise to pollutions, I myself have so seldom improved the opportunities that I have had of interrogating these patients upon this subject.

When I think of the violent efforts that they make in going to stool, of the acute pains and spasmodic contractions of which the rectum is the seat, of the great disturbance that so slight an excoriation induces in all the functions of the economy, I cannot prevent myself from believing that fissures of the anus often provoke abundant seminal losses.

The patients dread going to stool because this function renews all their pains, the fecal matters accumulate in the rectum and there become hardened. When at length the irritated bowel contracts in order to expel them, they become engaged in the opening of the anus and produce the fissure: the sphincters, irritated by this additional pain, contract spasmodically, in spite of the will of the patient; a struggle takes place then between this muscular ring and the intestines, aided by all the abdominal muscles. The efforts are so violent and so prolonged that the respiration is suspended and the countenance becomes injected and livid; it appears as if the blood would burst out through all the pores.

It is difficult to believe that the vesiculæ seminales escape all compression at such a time.

We must also take into consideration the pains seated near the verge of the anus and the spasmodic state of all these parts; for these phenomena react more or less upon the genito-urinary organs.

In fine, fissures of the anus are very soon followed by changes, in the physical and moral condition of the patients, too great to be exclusively attributed to the pain.

I have seen young men arrive at the hospital in a state of weakness and dejection that contrasted strongly with their florid complexion and volume of muscle: it was especially on the day that they had been to stool that they felt themselves faint, wearied and discouraged. They had ordinarily lost all venereal desire; the erections were feeble, of rare occurrence, and incomplete.

I regret not having made a collection of these cases, but I recollect perfectly these circumstances, and every thing inclines me to attribute them to seminal losses already complete.

Be it as it may, it is a subject for investigation that I point out to the attention of practitioners.

No. 44.

Equestrian exercise—Constipation—Pollution—Impotence—Violent and repeated cerebral congestions, &c.—Ascending douches—Cauterisation—Sulphurous baths, hot and cold dashes upon the loins and perineum—Cure.

M. de B. came to consult me in the month of May 1834, for a cerebral affection, upon the nature of which some distinguished physicians were not agreed, but which they considered as being very grave.

He was of medium stature, had a large chest, strongly developed muscular system, thick brown hair, thick beard, and a full and florid countenance.

Notwithstanding these appearances of vigour and health, I very soon observed that his knees were slightly bent, and that he could not remain standing without continually shifting the weight of his body from one limb to another: his voice was feeble and thick; his tongue was embarrassed and only articulated sounds in a very confused manner; his attitude was timid, and his mien uneasy and suppliant: he had been married fifteen days.

His mother-in-law and young wife, who accompanied him, informed me that within this time he had had several cerebral congestions, (*coups de sang*) during which his face became strongly injected. The first time, the physician, called in the night, hastened to take away about three pounds of blood, which prevented apoplexy; still further bleedings and several applications of leeches had arrested other congestions but did not prevent their return. The patient had also become subject to vertigo, and could no longer look up high without danger of becoming ill; his limbs had become weakened to such a degree that he had several falls whilst walking

upon very level ground : his ideas had lost their clearness, and his memory was often at fault.

The two families being dismayed by these symptoms, came to Marseilles. Several distinguished practitioners were agreed as to the existence of a grave disease of the brain, without being able to explain its nature : the majority however decided upon a softening of the brain (*ramollissement du cerveau*): my name had been mentioned in the course of the discussion. The next day they decided to bring the patient to me.

The appearance of his countenance during the whole of this conversation, the coincidence of these congestions with the time of his marriage, and the bad effects of blood-letting, made me wish to have a private conversation with him.

As soon as we were alone, I questioned him as to what had taken place : he understood me perfectly, and informed, me stammering, that the unexpected appearance of menstruation at first prevented all intercourse, and that afterwards, he found himself completely impotent. He attributed his catastrophe to the presence of the menses, to the cerebral congestions and loss of blood that they had required, &c.

But all this was only the illusion of self-love, for I very soon arrived at the first cause of this impotence, and found that it arose, as I had all along suspected, from diurnal pollutions.

The following is what I obtained in answer to my questions.

At 16 years of age, M. de B. was possessed of one of the most robust constitutions, and of an ardent and passionate disposition. Placed at college, he there contracted the habit of masturbation : at the end of three months, he had very frequent nocturnal pollutions, pains in the chest and troublesome palpitations, that warned him of the danger he was running ; he corrected himself of it and returned home.

Having become free, he subdued his impetuous temperament by the most violent exercises, such as hunting, and especially by riding on horseback ; he also became passionately fond of agricultural pursuits. This new mode of living so completely re-established his health, that he was constantly annoyed with energetic and importunate erections, against which he usually employed cold lotions and river bathing, even in the most inclement seasons, &c.

He had never committed any excesses with women, and was free from any blennorrhagia or syphilitic affection.

In 1831, his erections were rather more moderate ; and he became costive, which he attributed to the exercise he was taking, especially to that of riding.

In 1832, he experienced a numbness and formication in the feet and legs.

In 1833, there came on frequent blindness of vision and flashes of heat in the face ; which he attributed to the increased constipation. At the same time, the erections became more and more rare, less energetic, and at length incomplete : the ability for intellectual

labours diminished; the cerebral congestions increased in frequency and intensity; the countenance became habitually high coloured, and the head hot: an almost constant pain became seated about the orbits; his character became restless and peevish.

The family physician attributing all these symptoms to plethora, practised several venesections that produced no amendment.

In the month of March, 1834, a marriage of convenience was essayed between M. de B. and a charming young lady who resided in the country about two leagues from the city; in order to visit her and to superintend the management of his estate, he was obliged to take long and repeated rides: as the time of marriage approached, they became so frequent that he passed most of his time on horseback. His costiveness was still further increased; M. de B. went forty days without going to stool: he rendered in one collected mass a great quantity of semen, although the penis was not in a state of erection. He had already noticed this circumstance several times, but attributing it to his excessive continence he was but little disturbed by it. His urine habitually muddy, was passed slowly and with difficulty; it deposited an abundance of a thick and flocculent matter.

He saw the moment of his happiness arrive with a vague sensation of uneasiness, for which he could not account: he loved his affianced strongly; yet he felt when near her more embarrassment than pleasure.

I have already mentioned what took place and what I had noticed: I ought to add, that having examined the genital organs, I found them, contrary to expectation, very strongly developed; the penis was of uncommon dimensions; the testicles were large and firm, only the scrotum was a little elongated: the patient experienced in all these parts a singular formication and numbness; it appeared to him as if they were bound with iron: these sensations increased when lying by the side of his wife; the penis even diminished in volume, shrunk and retreated towards the pubis the more he endeavoured to excite an erection.

The assemblage of all these symptoms could leave no doubt as to the nature of the disease; it was evident that all idea of cerebral affection must be abandoned, and that the diurnal pollutions must be referred to the costiveness, as well as all the symptoms resulting from them.

The first indication then to be fulfilled, was to overcome the constipation; I even hoped that this would be the only one: the age of the patient, the vigour of his constitution, and the remarkable condition of the genital organs, led me to suppose, in fact, that the cure would be prompt and easy: this, however, did not take place in so simple a manner.

The next day the patient commenced the use of the ascending dashes (*douches ascendantes*); he was put upon a vegetable regimen and iced milk.

The first dashes produced the evacuation of an immense quantity

of fecal matter, hard as stone: it was not until after the sixth that they assumed the ordinary consistency. I lowered the temperature of the water then to 77° Fah., then to 68° ; the last dashes were given at 60° .

After the twelfth I suspended the further use of them, and from that time the stools took place regularly every day, without the least effort.

During this time the countenance of the patient lost its livid appearance, and assumed a natural colour; the confusion of the senses gradually diminished and at length disappeared entirely; the legs became stronger, and the standing posture could be longer endured without inconvenience; he took some very long walks without fatigue; the voice regained its strength; the eye resumed its vivacity, and all the movements acquired a greater degree of assurance.

At the end of fifteen days, the seminal losses had completely disappeared during the defecation, but the urine was still muddy. The erections had become sufficiently energetic to make the patient believe that he was cured: yet when he essayed the proof, the rigidity of the penis gradually subsided or else the precipitate ejaculation suddenly put a stop to it. The use of ice and cold lotions did not produce any better result.

At the end of a month, I determined to practise a cauterisation of the prostatic portion of the urethra, in order to act more directly upon the orifice of the ejaculatory ducts. When the inflammation had subsided, the erections became more complete and more energetic; yet the ejaculations were still too much hurried to permit the accomplishment of the act.

The period of the thermal waters having arrived, I sent the patient to Aix en Savoie, where I saw him again a short time afterwards. He had not derived any evident advantage from the use of the waters, either by bathing in, or drinking them. I prescribed then the water dashes, alternately very hot and cold, upon the loins and perineum. The cock was changed when the sensation of heat or cold could no longer be endured; this operation was stopped at the end of 20 or 25 minutes, with the cold dash: afterwards the skin remained injected for several hours.

The effect of these dashes was decisive: after the first, the erections resumed a character of vigour that reminded the patient of his former trouble from them. He was at length able to accomplish the object of all his desires, notwithstanding his apprehensions and the extraordinary disproportion of the parts.

He still continued for some days the use of these dashes. When he left, the genital functions were as completely re-established as all the others: only (and this is very remarkable) the ejaculation has become extremely tardy since the use of these dashes.

I have perhaps gone into very minute details; but this subject is connected with the most serious interests of society, with the happi-

ness and repose of families. I confess, also, that I was deeply interested in the situation of a young man whose misfortunes were unmerited, and could not have been foreseen; of a young girl also of sixteen, forced to enter into a delicate intimacy, yet resigned to all through love and duty.

It is evident, that the seminal losses were owing to constipation.

The patient had been given to masturbation: pollutions succeeded these excesses, but did not last but three months, and the health, temporarily deranged, was very soon confirmed under the influence of the most violent exercises. M. de B. was even annoyed for several years by venereal desires that must have been very energetic, if we may judge from the means he resorted to in order to overcome them.

From that time he did not commit any excess; he had neither blennorrhagia nor syphilis: there is then only the constipation, in the whole history of his life, which can explain the seminal losses.

But to what must this constipation be attributed?

From all the information that the patient gave me as to his mode of living, I am convinced that it must be attributed to his riding on horseback. In fact he sometimes passed whole days mounted either for hunting or superintending the management of his estates. As the time of his marriage approached, these rides became more frequent and longer: the constipation then lasted *forty days*. The weakness of the legs, the confusion of the senses, &c., increased in the same proportion. This influence of riding upon the margin of the anus and rectum is indeed very common and easy of explanation.

This case recalls involuntarily the well known opinion of Hippocrates upon the impotence of the Scythians, an opinion that must have been based upon facts analogous to this. I shall return again to this subject; but as we were investigating the causes that may act upon the vesiculæ seminales through the medium of the rectum, I was desirous of citing a striking instance of the influence of this mode of riding.

M. de B. accustomed to rich food, of a distinctly marked sanguineous temperament, had a large chest, thick muscles, and a very florid countenance; it is not astonishing that they should have bled him often to overcome the cerebral congestions to which he was subject; that on the night of his mishap, the blood should have rushed to his head with still greater impetuosity; that all should have believed him to be in imminent danger of apoplexy; and that afterwards they should have attributed the weakness of the legs, the frequent falls, and vertigo, to a disorganisation already advanced of the cerebral substance. All this is certainly very natural; yet there was no foundation for it, and I had suspicions of it from the first moment, although the patient was brought to me for a cerebral affection.

Why had I this impression? Because I had already seen many analogous cases; because there is in all these patients, in the eyes,

voice, attitude, and countenance, something timid and bashful that no language can exactly describe, but which we acquire the habit of discerning without stopping to account for it.

Be it as it may, the case is well adapted to render us circumspect. I confess that venesection appeared well indicated, but they never produced any good effects, either immediate or remote: indeed, on examining them more closely, it would have been apparent that the symptoms increased a very short time afterwards. But preconceived opinions throw a thick veil between objects and the most piercing eyes. (Nos. 1, 2, 20, 41.)

It is this prepossession, especially, that I should like to do away with. It is sufficient, to create a doubt, to remember that we may be entirely deceived in the very cases that appear to be the most evident; and no doubt is a great step towards truth.

The ascending dashes put an end to the constipation; but this was not sufficient to effect a cure. The seminal losses diminished and even ceased during defecation; but the urine remained muddy, and the erections incomplete. Ice, cauterisation, and the use of the sulphurous waters were not sufficient to effect the cure.

There could not, however, exist any serious lesion of the genital organs. We cannot then attribute this continuance of the disease to any thing but the relaxation of the ejaculatory ducts, caused by a long habit of allowing the semen to escape in a passive manner; which shows the importance of checking this habit as soon as possible.

The cold and hot dashes upon the loins and perineum produced a sudden and decisive change: I have obtained the same results in similar cases. I shall return again and again to the mode of administering them, &c.; but in the mean time I ought to say that they have never succeeded with me when there existed any irritation in the genital organs.

No. 45.

Considerable and prolonged exposure to cold—Incomplete paralysis of the rectum—Seminal losses during defecation—Application of galvanism—Cure after the ninth trial.

M. V., captain of infantry, aged 29 years, had five or six blennorrhagiæ, then a chancre, for which he took a good deal of sublimate.

After this treatment, he left Metz in 1822, to go to Spain. Having arrived at Lyons, he was detained there, for three weeks, by a disease, the most prominent symptom of which was an obstinate constipation, accompanied with fever.

During the rest of his journey, he was obliged, for the first time to wear a suspensory bandage in order to support the weight of the left testicle, the veins of which were varicose: in other respects for the remainder of the campaign, he experienced no inconvenience but that caused by the hemorrhoids.

After having borne very well the fatigues of warfare, M. V., on his return to France, suffered for a whole night from the severe cold, being but thinly covered. The next day he experienced in the lower extremities acute and lancinating pains, which were soon replaced by a sensation of cold principally referred to the hypogastrium, and to a space below the left coxo-femoral articulation.

From that time there was developed a new series of symptoms. The patient perceived that his limbs were growing weaker every day; he became subject to costiveness that was more and more obstinate; it appeared to him that the powers destined to the expulsion of the fecal matters were struck with paralysis: he felt in the distended bowel a sensation of elastic reaction, rather than that of a muscular contraction. Abundant seminal losses accompanied these efforts of defecation.

A great disturbance of the system followed the accumulation of the excrements. There no longer existed any venereal desire, the erections were of rare occurrence and incomplete, the root of the penis was flaccid and could be bent in any direction; the gland alone remained rigid. Coition could take place but seldom, and that only under the most favourable circumstances; it was always followed by a still greater weakness. Digestion was laborious; the wind, accumulated in the intestines, distended the abdomen, and gave rise to pain in the epigastrium and hypochondria. The skin was habitually dry.

The patient wanted to take exercise in order to favour the transpiration; he was in a constant state of agitation, because, whenever he stopped to rest for a few moments, he felt himself suffering from the cold. His disposition had become very irritable.

The suspensory bandage incommoded him; he removed it in order to take rather a long walk; he had no sooner returned than a considerable engorgement of the left testicle came on. Five applications of leeches were unsuccessful in procuring its resolution.

About the same period the sublimate was given in solution for the purpose of removing some pretended venereal excrescences of the anus, which were in reality nothing but the remains of hemorrhoidal tumours. These different remedies increased in a perceptible manner, the weakness of the legs and the derangement of the digestive organs.

When Capt. V. came to the hospital, I was struck with the extreme pallor of his countenance and the flaccidity of all his tissues. His form was round, the cellular tissue very abundant and slightly infiltrated, especially that of the lower extremities: the skin was white, thin, transparent and habitually cold; the pulse small and feeble. I very readily ascertained that the tumour of the testicle was nothing more than an ordinary hydrocele.

From the succession and *tout ensemble* of the symptoms, I inferred that the action of intense and prolonged cold had left a deep impression upon the inferior portion of the medulla oblongata; as

I had observed in other cases that I had seen. The debility appeared to me to be the predominating symptom in this patient and there was no appearance of irritation in the rectum or genito-urinary organs. Consequently, I concluded to submit the parts affected to the influence of galvanic shocks.

The first application took place the 11th of February, a current being established for twenty minutes between the sacrum and hypogastrium, then between the two thighs for the same length of time. The shocks were quite feeble, because there were only 60 drops of sulphuric acid to a pint of water. Yet the next day the patient felt less cold and numbness in the left limb and genital parts, and less difficulty in passing his urine; he also had a stool.

The 12th, second trial of galvanism upon the same parts, and for the same length of time, but with 80 drops of sulphuric acid.

The 13th, third trial with 100 drops; the shocks were stronger, made greater impression, and he continued to improve.

The 14th, fourth application of the galvanism with 140 drops of sulphuric acid. The current was established from time to time, between the loins and perineum, or surface of the hydrocele. The next day, an easy stool without injection, and a feeling of strength in the rectum; less numbness in the lower extremities, from the pelvis to the knee; same state of the legs and feet: perceptible diminution in the size of the hydrocele: more energetic erections: the patient is very gay notwithstanding the fatigue that these commotions have caused him, he speaks of them with pleasure, but wishes to have a few days' repose.

From the 15th to the 19th, suspension of the galvanism; no amendment during these four days.

From the 20th to the 24th, five other applications of galvanism like the preceding, but with a continually increasing quantity of sulphuric acid.

Free and daily return of the stools, without effort or seminal loss; erections frequent and complete; emission of urine easy and in a full and very long stream. Entire absorption of the fluid effused into the tunica vaginalis. Digestion strong; disappearance of the intestinal gases; re-establishment of the heat and strength in the lower extremities.

A short time afterwards M. V. rejoined his regiment and resumed his duties as before his sickness.

Four or five years afterwards, I again saw M. V. *chef de battalion*. He informed me that his health had not undergone any change.

This patient had five or six gonorrhœas and a chancre; he adopted several powerful anti-venereal remedies, of which one at least was useless and even injurious. These are indeed reasons why his case should have been placed among those treated of in the third chapter. But, on the other hand, he had had the piles for a long time; several of them had even been mistaken for venereal

excrescences, a mistake which is not uncommon; and the pollutions were owing to the distension of the rectum, which very much resembles the preceding cases (especially Nos. 39, 40, 41, 42).

It is probable that all these circumstances had some influence in producing the disease, since Captain V. had already had at Lyons an obstinate constipation; we must then take that into consideration: but the determining and characteristic cause was evidently the severe cold to which the patient had been exposed for the whole of one night. This is what gave to the disease a peculiar character, and one that we do not find elsewhere.

The first time that I saw this patient, I attributed the weakness of the lower extremities, the constipation, &c., to the seminal losses; but afterwards, in reflecting upon the sudden and indelible effect of this long exposure to cold, I recalled to mind cases of the same nature, in which this same agent had left a deep impression of debility in the parts that had suffered the most from it. I was struck with the general and truly characteristic state of the constitution, with the infiltration of the affected parts, with the temperature of the skin, &c.; and I thought that the pollutions arose from the distension of the rectum, and that this was kept up by the kind of torpor that the cold had caused in the nerves of the lower part of the spine.

It was this train of ideas that led me to think of galvanism, from which I had obtained the best effects in similar cases.

The result proved the correctness of the opinion; it was even more prompt and decisive than I had dared hope it would be.

This patient had a hydrocele, which appears to have been brought on by the repeated gonorrhœas, if I may judge from the numerous cases that I have reported in chapter II. But what is remarkable, is the rapidity with which the effusion disappeared under the influence of a few galvanic shocks. This effect proves clearly that it was the agent best suited to the occasion.

I must here report another case of the effect of cold, which is not less remarkable in other respects.

No. 46.

Intemperance—Prolonged exposure to cold—Chronic inflammation of the bladder—Pollutions, &c.—Cauterisation—Cure. Relapse—Same treatment—Same result. Remarkable influence of the bladder upon the rectum.

G., a soldier in the 4th regiment of light infantry, passionately fond of wine, taught fencing and dancing, which furnished him with the opportunities and means of indulging to excess. Yet his health had continued good till the age of 30, with the exception of a few gonorrhœas of short duration; when one day, being under the influence of wine, and covered with sweat, he entered the water up to his middle, and then left his clothes to dry upon him.

Some time afterwards, G. experienced quite an acute pain in the

lumbar region, a sensation of weight in the hypogastrium, a more frequent desire to urinate, and some difficulty in voiding the urine. (Camphorated frictions upon the loins, rest, strict regimen: momentary amendment.)

G. was not long in perceiving that he became fatigued sooner than formerly; that his legs were every day growing weaker, and he was obliged to give up his fencing and dancing. He continued however to do duty for eighteen months, but with even increasing difficulty: at length he became so infirm that he was obliged to leave the service.

Having returned home at 33 years of age, he became a tailor. He had worked at his trade but a short time, when he perceived that he passed semen without erection or pleasure. These pollutions became more and more common, and were accompanied with a frequent and irresistible desire to go to stool: it was with great difficulty that the urine was passed, and that only after very fatiguing efforts.

During the years 1830 and 1831, the weakness of the legs still increased; the digestion became laborious, and the genital organs fell into a state of complete relaxation.

In March, 1832, in consequence of some excesses in drinking, G. was attacked with a complete retention of urine. (Baths, emollient fomentations, drinks of the same nature). Strangury succeeded this state of things; and this was very soon followed by incontinence of urine.

In May, 1832, artificial hydro-sulphurous baths: no amendment.

In September, baths of Balaruc: same result.

The 4th of October, G. entered the hospital Saint-Eloy. Two moxas were applied to the loins; and afterwards four cauteries a little lower down.

The 1st of November, G. took some broth with wine: the next day there came on an intense irritation of the neck of the bladder (leeches to the hypogastrium, baths, camphorated mixture), the pains diminished, but the emission of the urine was preceded by the discharging of a milky fluid.

When I took charge of the hospital, I found the patient in the following state:

Aged 35; medium size, fair skin, face pale, hair black and sparse; voice feeble and a little thick; digestion laborious, especially after the use of animal substances; frequent desire to go to stool; the presence of the fecal matters in the rectum produces a painful impression, that causes their involuntary expulsion. The urine passes off every ten minutes, or at the latest every quarter of an hour, without the patient being conscious of it; it contains an abundant sediment of a greenish white appearance, flocculent at the surface, and is very readily decomposed. No venereal desires; not the least appearance of erections. The inferior extremities are so feeble, that they cannot support the weight of the body. The legs are the seat

of osteocopic pains, and the feet are constantly cold. The patient appears indifferent to every thing.

The 14th of November, slight cauterisation of the neck of the bladder and of the surface of the prostate; but little pain, no flowing of blood, burning sensation during the emission of urine.

The 22d, perceptible decrease in the urinary sediment.

The 26th, disappearance of the purulent mucosities.

The 28th, urine limpid, retained half an hour, but still passed involuntarily; fecal matters retained better; inferior extremities a little stronger.

The 29th, second cauterisation of the same parts, but more energetic; pain quite severe, followed with a burning sensation; urine bloody, and passed more frequently.

The 4th of December, the patient walks without the aid of crutches; his appetite and his gaiety are returning: the succeeding days, the urine and fecal matters are better retained.

The 11th of December, third cauterisation, commencing with the bladder and terminating at the bulb of the urethra.

The 18th, the patient retains his urine for an hour, and it is perfectly limpid: animal substances are well digested: the erections are returning: the legs have regained their former vigour: the face has become florid and animated: his gaiety has returned; the fecal matters are retained as in the healthy state.

The 20th, the patient feels so well that he leaves the hospital; his convalescence continues, and it even makes the greater progress the more exercise he takes.

In the month of February, 1833, G. made quite a long journey into a country covered with snow, and drank considerably of wine in order to warm himself. In the month of May, he entered the hospital in almost the same condition as the first time. I practised a fourth cauterisation like the last; it produced the same effects.

At a later period I administered tarred water and artificial sulphurous baths. At the end of two months all the symptoms disappeared, and the patient left the hospital perfectly re-established.

A long exposure of the inferior extremities to cold was followed, as in the preceding cases, by diurnal pollutions, by almost complete paralysis of the lower extremities; but all resemblance between the two cases is limited to this.

In Captain V. the cold acted especially upon the nervous system that arises from the inferior portion of the spine; it struck it with a sort of torpor, the effects of which were felt more particularly by the rectum: hence its distension by the fecal matters, the compression of the vesiculæ seminales, &c. There did not appear to be any irritation in these parts; therefore the galvanism produced a magical effect.

In the soldier, G., the cold produced its principal effects upon the bladder; the chronic cystitis, that resulted from it, extended its

influence successively to the vesiculæ seminales and rectum; the extreme weakness of the lower extremities was then only owing to repeated pollutions that were exhausting the patient: thus, cauterisation has produced the best results. I am convinced that galvanism could not have been borne.

Moreover, it is easy to conceive why, in this case, the cold should have acted upon the bladder, as intemperance must have predisposed this organ to it. The patient was drunk when he entered the water: at a later period, having taken a broth diluted with wine, he experienced a rapid increase of the symptoms; in fine, during the journey that he made in the midst of the snow, and which was the cause of his relapse, he often drank wine for the purpose of warming himself.

It is not, then, possible to separate this action of the cold from that of alcoholic drinks, of the effects of which, moreover, upon the urinary organs, it is easy to conceive.

I have already reported two other cases in which cold had an evident influence in the production of pollutions (Nos. 10 and 25); but this was manifested by very different phenomena, and, what is very remarkable, the means by which these four patients were cured were unlike in every respect: a fact which shows the indispensable necessity of multiplying particular facts, and of discussing minutely all the circumstances attending them.

In the case of the soldier, G., a phenomenon presented itself that proves, in the most evident manner, that the influence of the rectum upon the genito-urinary organs is altogether reciprocal.

The mucous membrane of that intestine was so susceptible, that it could not bear the presence of the fecal matters; as soon as they arrived at the same level with the bladder, they caused convulsive contractions of the muscular coat, that determined their immediate expulsion, in spite of the patient's will: the stools were not liquid. Mixed with copious mucosities, as in diarrhœa, they had but little consistency, because they were expelled as soon as they arrived at the inferior portion of the intestine.

No particular treatment had been adopted to overcome this irritation of the rectum; yet it diminished after each cauterisation, and disappeared with the inflammation of the bladder; the longer the patient could retain his urine, the more frequent the stools became. The will resumed its control over the two organs at the same time.

But if the inflammation of the bladder could have such an influence upon the rectum, it must have acted still more directly upon the vesiculæ seminales.

What did, in reality, take place when the patient was suffering from pollutions, that night and day came on, without either erection or pleasure, in the midst of the most perfect tranquillity? A certain quantity of semen entered the vesiculæ seminales and there determined involuntary and irresistible spasmodic contractions, like those of the bladder and rectum; the semen was expelled in the same manner as the urine and fecal matters, before it had acquired

the character peculiar to it after a longer continuance in these passages (Nos. 18 and 27).

We see, then, that all these parts are intimately connected with each other; that we must constantly contrast together the phenomena of which they are the seat, if we wish to obtain a just and clear idea of them.

They would be much deceived who should think that this influence of the genito-urinary organs upon the rectum is of rare occurrence; it is, on the contrary, habitual: only, it is unusual that it should manifest itself in so striking a manner.

I have not spoken of it until now, because I did not wish to complicate questions already quite obscure. But it is to this intimate sympathy that we must attribute the feeling of obstruction and weight about the margin of the anus, the habitual contraction of the sphincters, the obstinate constipation, &c., which are so often observed in patients affected with pollutions.

All those upon whom I practised a cauterisation about the neck of the bladder, experienced a sudden burning sensation at the margin of the anus and in the rectum; the next day they already felt more strength in the intestine, and the stools were very soon more free.

But I must not, at present, enter into more extended details upon this subject.

No. 47.

Diurnal pollutions overlooked—Cerebral congestions—Broken down constitution—Ascarides expelled in three days—Immediate recovery.

M. C., captain of engineers, aged 32, already nearly bald, excessively lean, and of an extreme paleness, had the eyes deeply sunken and usually surrounded with a leaden hue, a feeble and shrill voice, and a timid and embarrassed gait: he was extremely cautious, even about the most trifling matters. He had often consulted me about his health, but I never attached much importance to his complaints, because I attributed them to the melancholy complexion of his character.

However, in 1824, his digestion became deranged in an alarming manner, and was attended with the disengagement of a great quantity of gas; the introduction of broth into the stomach was followed by considerable oppression in the epigastric region and by difficulty in the respiration, which was especially felt in the direction of the œsophagus, and terminated in the throat. This sensation perceptibly diminished as soon as the patient was able to expel some of the gas. He felt himself oppressed with general debility, and experienced great lassitude of the legs particularly, which contrasted strongly with his constant desire for movement and the habit he had of taking long walks. He was subject to frequent attacks of vertigo, with congestion of the head, especially when he stooped or when he had been reading for a few moments; on this account he thought that he was menaced with apoplexy.

His habitual leanness had still increased, especially in the thighs; the testicles had sensibly diminished in size, and the genital organs were ordinarily cold. The pulse was feeble and soft; the tongue pale and moist; pressure upon the epigastrium did not cause the least pain.

I could not believe, with the patient, that there was any danger of apoplexy, nor that he was afflicted with gastritis. I attributed all the symptoms that he felt to excessive seminal losses, but he could not, in his turn, admit my opinion.

For a long time he had abstained from coition, through fear of endangering his health; and for a still longer time he had had a horror of masturbation: he was not subject to nocturnal pollutions, and never had observed that he passed semen either in urinating or in going to stool.

Yet I suspected, from some ambiguous replies, that he was intimate with a young person who lived in the same house, and this *liaison* might be as injurious to him as the abuse of coition. In order to remove him, I sent him to pass the hottest part of the summer at Vigan in the Cévennes, urging him to observe himself closely during defecation, and to give me an account of his urine.

Some days after his arrival, he wrote me that he had in fact noticed, after each stool, a discharge of thick, whitish, and slightly unctuous matter, having a very feeble spermatic odour, and staining the linen of a pale yellow. The greater the efforts he made, the more abundant was the emission: still it was not precisely during the evacuation of the fecal matters that the semen escaped, but when he was dressing himself: then he experienced an obstruction in the rectum and a very strong contraction, accompanied with itching and heat.

I was not then deceived: the symptoms were caused by excessive seminal losses. I did not, however, attach sufficient importance to the peculiar circumstances accompanying them, and contented myself with prescribing cold injections and lotions, a vegetable and milk diet, with the view of avoiding constipation, and giving tone to the genital organs. These different means produced no perceptible change in the seminal losses.

At length I received a very long letter from the patient, full of minute and interesting details; but upon one side I read as follows:

"P. S. I noticed in one stool some little worms, like those found in cheese. This reminds me to tell you that I often experience itchings in the rectum that I attribute to a herpetic affection: there is a slight oozing from the intestine, and the fecal matters are mixed with a certain quantity of purulent mucus: the circumference of the anus is engorged.

This has existed since 1818; it came on after a violent inflammation of the intestines, accompanied with colic and tenesmus, which were renewed in 1822."

The cause of the seminal losses was at length understood: I perceived also why it was not precisely during the expulsion of

the fecal matters that the semen escaped, but a little afterwards; for these losses were not produced by a mechanical compression arising from constipation; but were, in fact, the sympathetic result of the irritation caused by the presence of worms; and this is proved by the obstruction, very strong contraction, itching, and heat, which then took place in the rectum.

The patient took, for three days, four grains of calomel, fasting, and in the course of the day, three or four glasses of the decoction of *Mousse de Corse*; a warm injection followed by another extremely cold: once he took in lieu of it a demi-injection of warm milk, and a short time afterwards another, composed of a strong decoction of garlic: he pretended that he was better for it.

At the end of three days, perceiving no more ascarides in the stools, he discontinued this treatment for eight days; after which, he took, on going to bed, four grains of calomel, and the next day six drachms of sulphate of magnesia, which procured four copious evacuations, in which he observed nothing peculiar.

This is the manner in which Capt. C. concludes his last letter.

"My strength has already returned; my stomach performs perfectly its functions; the seminal losses have ceased, as has also the discharge from the rectum: the itchings and the dragging sensations that I experienced there have ceased."

From this time the ascarides reappeared every year, and even twice in one year; but Capt. C. treated himself: as soon as the least symptom announces the presence of worms, he rids himself of them in two or three days; so that his health is not deranged by them.

Supposing him always subject to their reappearance once or twice a year, he ought still to be considered as cured, since he can free himself from them by means equally simple and efficacious.

No. 48.

Masturbation at the age of nine years—Obstinate nocturnal pollutions—
Ascarides—Cure in eight days.

I am going to transcribe the letter which Henry B., sergeant of the corps of engineers, addressed to me, asking my advice. I prefer to give the patient's own language, rather than to arrange his ideas:

From the age of nine years I gave myself to the infamous and brutal passion of masturbation. I ceased these manœuvres at the age of fifteen, because I was fortunate enough to read Tissot's work on onanism. From this period I date the origin of the nocturnal pollutions.

There resulted from them an impoverishment of the whole body: troubles in the chest; continual pains in the middle of the back; the whole nervous system is attacked; my eyes are almost always red and surrounded by a leaden hue; there are times when they make little jumps as if they would leave the orbits. I have very often observed that after having had a pollution, I experienced

prickings, like those produced by ants, between the two last ribs, with acute pains in the belly and kidneys.

It is in the morning especially that I feel the most prostrated; I am, as it were, maimed; when I get up it appears to me as if my arms and legs were bruised; my lungs are oppressed; I am as it were in a state of asphyxia; I have every evening buzzing in the ears; I have lost my memory, and it is impossible for me to study, and I can scarcely do my duty. If my condition is not very soon changed, I shall be obliged to renounce a military career; this has lasted several years, and it becomes worse every day.

Here are the remedies that have been administered to me by different physicians: I took for a long time a ptisan made from the seed of melons, &c. (*les quatre semences froides*); the cinchone combined with oxide of iron; mineral water with Bordeaux wine; a spoonful of lime water in a glass of milk three times a day; Hoffman's liquor in a glass of water, in the evening, on going to bed. I took also many river baths and cold injections. I applied, in the most inclement season, snow and ice upon the kidneys and genital parts.

I have not derived any permanent advantage from these different means. Sal ammoniac dissolved in water has only irritated the genital organs.

HENRY B.

September, 27th, 1826.

This young man was twenty years of age; his countenance was fresh and very florid, his proportions announced vigour and health: it would have been difficult to divine the cause of the deep melancholy displayed in his features.

After numerous questions, I ascertained at last, that he had had worms from his infancy, that he discharged them at every stool, and that the surface of the fecal matters was often entirely covered with them: from the description he gave of them it was very easy to decide that they were ascarides, amongst which perhaps might be found a few trichurides.

I prescribed for him four grains of calomel morning and evening; the introduction into the rectum of half a drachm of mercurial ointment and injections of tansy.

Eight days afterwards he came to announce to me that his pollutions had ceased, and that a change had taken place in his whole existence.

No. 49.

Hypochondriasis—Impotence—Cerebral congestions—Ascarides—Cure in eight days.

A., gardener, tall, dark complexioned and quite well formed; married for two years, perceived that after having been married seven or eight months, he was becoming less and less inclined for the venereal act: he lost his appetite, his digestion became difficult,

laborious, and accompanied with pain in the epigastrium, with flatuosities and frequent vomitings.

Pills of cynoglossum, sedatives, and demulcents of every kind, were prescribed by a distinguished practitioner of Montpelier, in order to allay the irritation of the stomach: the general debility and impotence of the genital organs increased; there was joined to these a disposition to inaction and drowsiness, an habitual state of torpor and very frequent vertigo, which made other physicians fear a near attack of apoplexy: leeches were in consequence prescribed, but the patient, notwithstanding his trouble, always rejected them, well knowing, as he said, that he had not too much blood.

In 1833, he came to consult one of my students whom I have mentioned at the commencement of this work, very seriously telling him, *qu'on lui avait noué l'aiguillette* for more than a year. After many questions as to the cause of the impotence, M. E. Verdier at length ascertained, that the patient had been costive for a long time, that he experienced intense itching in the rectum, and then passed in his fecal matter great numbers of little worms like those found in cheese.

Concluding that these ascarides were the cause of seminal losses, which the patient had not observed; M. E. Verdier prescribed for drink an infusion of mint, some aromatic injections, then some others that were salt and cold, copious enough to ascend high and to be strongly expelled. These last injections caused the expulsion of a great number of ascarides.

The difficulty in the digestion ceased almost immediately; the erections soon reappeared, and coition took place a few days afterwards. His strength soon became repaired, and his gaiety and love for work returned. This change was the result of eight days' treatment.

No. 50.

Nocturnal pollutions resisting every thing for six years—Deplorable physical and moral condition—Ascarides—Prompt cure.

The following case is perhaps the most interesting that has ever been communicated to me by a patient.

The manner in which he has retraced the smallest circumstance of his torture during the best years of his life, will be an excuse for its length:

I was born robust, and of healthy parents: at the age of 11, I accidentally contracted, by myself, the fatal habit of onanism; but I very soon perceived its pernicious effects upon my physical and intellectual faculties.

A person, whose duty it was to watch over me, reading probably my misconduct in my face, gave me a sharp remonstrance that corrected me of it. Two months afterwards my health became

re-established. It continued in the most flourishing condition until my fourteenth year.

At that period the *Contes de la Fontaine* fell into my hands, excited my imagination, and brought back the injurious habit that I had lost for three years.

The next year, 1815, I found, unfortunately, in a corner of my father's library, *l'Arcin*, *Bocace*, and other works of the same nature, that I eagerly perused in secret. About this period I contracted an intimacy with a married lady, who, enjoying my inexperience, excited in me, by kisses and lascivious conduct, the most violent desires, without ever allowing me to gratify them.

All these causes of excitement had so much exalted my nervous system, that I could not look upon a woman without experiencing palpitations and tremblings in all my limbs. Until then, I had not had any involuntary evacuation of semen, and notwithstanding all the provocations by which I was surrounded, I still preserved sufficient control over myself to determine them but once a week, on Sunday.

The excitement that I felt in the genital parts was so strong, that I was forced to plunge my penis into cold water, to moderate the ardour. I was large and strongly developed for my age: my health was robust, only for some time past, I had lost my usual embonpoint.

The 25th of October, on awaking, I found myself for the first time inundated with semen, without having been conscious of its escape: it must be remarked that on the preceding day I had taken a long walk, and had exhausted myself in useless efforts with the person of whom I have already spoken.

During each of the eight following nights I had several pollutions, which threw me into a fearful state of prostration. My emaciation was perceptible and my appetite failed in the same proportion. I renounced all my duties; I became a walking skeleton; still I did not despair of my safety: I thought a difficulty like this would soon cure itself. How much I deceived myself.

A false modesty prevented me from confiding my condition to my father, and I found myself thrown upon my own resources, to combat my cruel malady: but from that moment it became the only object of my thoughts. Self-absorbed, I became abstracted from all surrounding interests to attend only to my cure.

I at first devised the plan of tying the prepuce with a string, so that the glans might not come in contact with the clothes. This means, like all those that I had afterwards employed, appeared to succeed for a short time; but eventually it produced no effect.

How many times have I found, on untying this string in the morning, the whole space between the prepuce and the glans filled with semen. When I thus found my health, my happiness, and my life escaping from me, I could not refrain from tears: a cold sweat covered me from head to foot, death stared me in the face; I desired it most ardently.

I searched the library of my father, not for obscene works which I avoided as the pest, but for books of medicine, from which I sought relief. On lying down, I placed about my bed several chairs loaded with folios, such as Hippocrates, Galen, Ambroise Paré, collections of theses, &c., and I read till late at night in these different authors all that related to my condition.

During the year 1816, notwithstanding all the means made use of, I had not less than four pollutions a week. I have had several every night, for fifteen days in succession, after which there would be a remission of three days. This was just enough to prevent me from dying. I was frightfully emaciated; I experienced atrocious pains in the vertebral column; all my movements were painful; it appeared to me that my joints were filled with chalk, instead of synovia: when I walked, I felt my brain tossing about in my head. During the whole winter, I remained near the fire; my extremities were always cold, and I could not warm them.

Desirous of acquiring a knowledge of the human frame in order to understand medical books, I went to a butcher's stall to take lessons in splanchnology, which led me to many very extravagant explanations. I read all that I could find upon *tabes dorsalis*, and it was from these readings that I drew my methods of treatment.

Until then I had slept upon a feather bed; I relinquished it, and substituted a folding chair upon which were nailed cross pieces of boards instead of a sacking. I laid upon these boards a single woollen blanket and a sheet.

I thought that I should prevent pollutions by avoiding to lie upon the back. After fruitless efforts to correct myself of this habit, I made a leathern belt, which I fastened round myself every night before going to bed. To the posterior part was attached a block of wood so prominent as to oblige me to lie on my side.

I also attributed my pollutions to the habit I had of sleeping with the thighs strongly flexed upon the pelvis, so that my genital parts, being compressed and rendered incapable of becoming freely developed during erection, were exposed to friction. With the intention of obviating this inconvenience, I fastened my feet with cords to the lower extremity of the bed; my limbs were then in a state of extension, I could only turn to the right or left, I was stretched out as upon a rack.

That I might have nothing to fear from the contact of the sheets, I made a kind of wicker cage, that kept them raised above the level of my pelvis. Thinking that if I could prevent myself from sleeping, I should never have any pollutions, I substituted a piece of rough wood for my bolster, which every moment bruised my head and interrupted my sleep.

I persisted in these means of torture for many years, because I feared a seminal loss more than all the bruises imaginable. There remained only sufficient activity of mind to invent new plans or to perfect those that I had already employed.

I devised, for example, the plan of tying the prepuce itself to the

hairs of the pubes, so that my penis, on becoming erect, might draw upon them and thus cause pain that would awake me. After a few trials, deriving but little advantage from it, this method was replaced by the following. I compressed my penis with a band that I rolled strongly about it from the root to the summit of the glans; so that it was surrounded by four or five layers of bandage.

It often happened that I succeeded by the use of these different means in breaking the chain of ideas to which I also attributed my pollutions. But, at other times, all proved of no avail, my ideas only changed the object without being less wanton, for women were not the only subject of my dreams. My imagination was sometimes besieged by the most disgusting images; it presented to me in lascivious positions the bitches, goats, &c., that I had noticed during the day: having one day seen two flies couple, I recollect that this became reproduced in the night, embellished with all the allurements of the imagination, and caused an abundant evacuation of semen.

Yet I avoided with the greatest care all books and images capable of exciting erotic ideas. I shunned the presence of women, and gave up riding on horseback or in a carriage, and the use of every heating substance. In the excess of my despair, I even had recourse to prayer, and I promised to become converted if I got well.

What most astonished my family, was the change that had taken place in my character. I had become sombre and ill-humoured: I always kept in the shade with my hat pushed down over my eyes, because a strong light hurt me. I spoke but little, and, notwithstanding my sufferings, made no complaint.

As nobody knew the cause of my acting thus, they did not fail to call me odd, hypochondriac, misanthropic, &c. In fact, I was indifferent to all the amusements of my age, and took an aversion to society, because I could not endure the comparison of the happiness of others with my own misery: I was not at ease then, because I felt a continual desire to change my position. If I found myself compelled to remain, it became a punishment to me, and I sighed only for the moment of returning to my solitude.

In 1817, the seat of my pains changed, but I did not become any happier on that account: the pains in my kidneys were replaced by dull and continual colics, especially after my meals. I had a prodigious appetite, which accorded with the idea that I must eat a good deal to repair my losses.

I had read in a medical book, that milk, eggs, and figs made a good deal of semen, and I gorged myself every morning with milk, eggs and figs. I had read that good wine was a sovereign remedy against debility, and I failed not to drink every day a great quantity of pure wine. After meals, I had acid eructations, that burnt my throat; I had colics and borborygmus; my abdomen was inflated with gas, and which again compelled me to avoid the presence of men.

I had diarrhœa during the whole year: when I went to stool,

where I sometimes remained an hour, I experienced tenesmus and horripilations, fugitive convulsive tremblings in the muscles of the thighs, arms, and even in the orbiculares of the eyelids.

Several times I wished to diet, or to diminish the quantity of my food; but I suffered so much from hunger, that it was impossible to accustom myself to this regimen.

Having read a work upon the good effects of cold baths, I took several in the Loire. But these immersions, even during the dog-days, were followed by colics: an icy coldness made me shiver all day; my constitution was so weak, that reaction could not take place.

At a later period, on going to bed, I enclosed my genital organs in a kind of tin box, fastened about the loins by straps, but if I thus avoided friction, I endured intolerable compression.

Afterwards, in order to awake at the moment of having a lascivious dream, I tied my penis, when in a state of relaxation, to my testicles. The pain caused by the erection awakened me, to be sure, but it compelled me to unfasten the string, and still the same accident occurred: I have even known it to take place at the moment when I was undoing the fastening, and that from the friction I was obliged to exercise about the penis.

At the same time I observed that the fulness of my bladder in the morning, exposed me to pollutions: I resolved not to drink any more in the evening; a privation the more painful, as I was exceedingly thirsty: I urinated before getting into bed, and I placed at my bolster an alarm clock, in order to arouse myself at pleasure for the purpose of emptying my bladder. This device was useful, but only for a short time.

In the daytime, I carried a mirror about me: I examined my dull and hollow eyes, and my leaden complexion: I counted the wrinkles in my forehead, and the projections in my skeleton.

Almost all my hair fell off, and that which remained, became so painful to the touch, that I thought I had the *plique polonaise*, (Plica.)

I went so far, as to smell every accessible part of my body, and I found them of a cadaverous odour.

I observed my urine and excrements very carefully. I noticed one day that a sandy sediment was deposited at the bottom of my night-vessel, and I immediately imagined that as much must have been formed in my bladder; I thought myself afflicted with the stone, and for a long time I attributed all my abdominal pains to this cause, as well as the cutting sensations that I sometimes experienced in the canal of the urethra.

I saw some little worms in my excrements: I believed them to be of the same nature with those which exist upon the remains of the dead, and, finding that I so much resembled a corpse, their premature presence did not astonish me.

I constantly experienced intense itching in the rectum, which I attributed to a *dartre rongeante* (Lupus). My nose also itched.

I had continual palpitations that convinced me I had an aneurism of the heart.

Disgusted with life, I attempted several times to destroy myself, but my strength always failed me at the moment of giving the fatal blow.

Abandoned to the most frightful despair, not knowing what would become of me, and seeing happiness in the classes of society inferior to mine, I wished to descend to them with the view of ameliorating my condition. I announced to my family that I wished to learn a joiner's trade. They consented; because they were already accustomed to what they called my caprice, and they knew my brutal obstinacy. In fact I cared for nothing on earth, and when I wanted to do a thing, no human consideration could prevent me from accomplishing it.

I learned then, for three months, to turn and to manage the plane. But very soon disgusted with this manner of living, I became successively carpenter, mason, and ploughman. I lived like these labourers, and took part in their toils, hoping to become robust as they were. I could, however, endure these rude trials but a short time.

The changeableness of my character was a problem to every body about me. If the pollutions diminished for two or three days, I became less gloomy and more sociable; but as soon as they returned I again relapsed into my love of solitude. They altered the tone and force of my voice: as soon as they diminished, my voice resumed its clearness and strength; then I took pleasure in reading aloud to the family; but when they reappeared, I was compelled to renounce this amusement, to the great astonishment of those who had been in the habit of listening to me and of whom I could not make confidants.

In stooping one day to pick up something from the ground, I felt a painful cracking in my left ear, followed by a ringing that has never left me since that time. This was not the case with the toothach, to which I have been almost continually subject for more than two years.

In truth, language fails me in describing all the horror of my situation. My sleep, disturbed by extraordinary and frightful dreams, was not refreshing: I arose in the morning feeling as if my limbs were dislocated and bruised by blows with a club. My bodily dejection led me to remain in bed; but if I yielded to this deceitful charm, I had soon to repent of it. With what pain did I see the light appear when I had had three or four pollutions the same night! I would have preferred to have been buried ten feet under the ground: the terror that seized upon my imagination caused a colliquative sweat that inundated me; I had scarcely strength enough left to undo the bands with which I had tied myself the preceding night.

How often have I, during these melancholy days, taken food unknown to any one, and gone to bury myself, from morning until

night, in some obscure corner ! There I poured forth bitter tears, and invoked death. If my eyes would allow me to read, I took with me J. J. Rousseau, Young's Night Thoughts, Elegies, and—of medical works—collections of post mortem examinations, for which I had a particular predilection.

In 1818, my pollutions diminished during the winter. I gained a little flesh, and gradually went into society, from which I had so long been estranged. They knew not the cause of this change : but it was not of long duration. At the return of spring, I relapsed into my former condition.

I attributed the temporary happiness I had enjoyed, to the application of a leathern ring, which fastened by a clasp, and was attached to the body by two cords. It had three iron points on the inside : my penis, when not erect, passed easily into this box : but when swollen, the space became too limited, and it pressed strongly against the points, which caused a pain that awakened me with a start. Immediately I undid the clasp, and my sufferings were allayed. When the erection had subsided, I replaced the ring, and so on.

Until this time I had experienced no difficulty in my chest : but having one day been exposed to a rain storm, I was seized on the next with an intense pleurisy, in consequence of which, for more than six months, I had an obstinate cough, attended with a slight hectic flush, and so much debility, that I could scarcely leave my arm chair. This time I thought myself consumptive, and I hoped it would soon terminate my sufferings. But I recovered a little during the winter of 1819 ; and this precious health again became the object of my most anxious solicitude.

In the spring, I had, as in the preceding year, a relapse of the pollutions, which threw me anew into the most deplorable condition.

In 1820, perceiving that no remedy could arrest my seminal flux, I thought of recurring to masturbation as a means of cure. I had always at least four or five pollutions a week, sometimes eight : I said to myself, "If I can regulate the course of nature so as to replace the involuntary losses, by others much less frequent, I shall be the gainer." In consequence I deliberately resumed habits of which I had felt a horror for five years.

This method succeeded very well for fifteen days, but, like all the others, I was obliged to relinquish it as soon as habit had destroyed its efficacy.

I then resumed the ring, in which I made some changes, because its points had successively ulcerated the whole circumference of the penis.

I again tried the river baths : they did me more injury than at first, because I was more feeble.

Having exhausted all the resources of my imagination, it only remained to try the effects of traveling. I requested permission to go to Montpellier, because I had read that that climate was favour-

able to consumptive patients, and my father consented. 'The confidence I had in this proposed journey gave me sufficient strength to perform it on foot.

Before closing, I ought to add that I was often menaced with attacks of apoplexy, and twice to such a degree as to lose my consciousness. Yet leeches applied to the anus or perineum always did me more harm than good.

A short time after his arrival at Montpellier, Mr. D. came to consult me, and interested me intensely by the ingenuous and animated description of all that he was able to recollect of his case.

I, at first, thought, with him, that his nocturnal pollutions were owing to an extraordinary sensibility of the genital organs, and to the precocious abuse that he had made of them: but, before undertaking any thing, I persuaded him to commit his whole case to writing, in order that nothing might be forgotten, and that the facts might be presented to me in better order. Some time afterwards he put into my hands the memoir that we have just heard, accompanied with designs, respecting the different machines in question. In reflecting upon it, I was struck with the fact of the existence of little worms in the fecal matters, which the unfortunate young man regarded as a proof of approaching death. I examined the anus, and found no traces of the *dartre rongeante* to which he attributed the great irritation he felt in the rectum: besides, this *dartre* did not explain the itching of the nose.

I then thought that these pollutions might have been kept up by the presence of the ascarides, and I persuaded him to direct all his attention to this subject: he immediately told me that he habitually discharged these little worms; that, several times, urged by the violence of the itching, he had scratched himself until he brought blood, and on withdrawing his finger he had found under his nail one of these ascarides alive. It was especially about ten o'clock in the evening, that he felt them descending into the inferior part of the intestine and even to within the sphincters.

Besides, his mouth was acid, and his pillow was wet by the great quantity of saliva that flowed from it during the night, &c.

Of all the remedies made use of with this patient, the calomel and cold injections were those followed by the most prompt and lasting effects.

At first, M. D. took his injections at a temperature of from eighteen to twenty degrees, then at fifteen, and even at twelve or thirteen degrees of the thermometer of Réaumur. His experience soon taught him that it was more advantageous to take them about ten o'clock in the evening, when the ascarides were descending towards the anus, of which he became aware by the increased itching. Besides, this was the time when they would have the most influence upon the pollutions.

But he also ascertained that to obtain all the desired effects, he must introduce into the intestine a great quantity of cold water, in

order to make it ascend as much as possible for the purpose of rapidly bringing away the highest ascarides, at the moment they became benumbed. Consequently he acquired the habit of retaining even three or four of these cold injections, and then of discharging them all at once. He thus brought away enormous quantities of ascarides, dead or benumbed, and this for several days in succession.

Anthelmintics, in injection or by the mouth, were less efficacious; besides, they were attended by inconveniences, as were also other purgatives.

A short time after the use of these various remedies, the pollutions decreased very rapidly and in a permanent manner. All the symptoms consequent upon them disappeared; his strength and embonpoint returned with incredible promptitude. But the pollutions did not entirely disappear until after the use of venery, and the influence of cold baths and gymnastics.

We have seen that on two occasions the patient was obliged to abandon river baths, because no reaction took place on leaving the water, even during the greatest heat of the dog-days. As soon as his constitution regained a little strength, he derived benefit from these cold baths: and after the expulsion of the ascarides, they were most efficacious in re-establishing his health: he also took them during the winter with great advantage.

Walking, likewise, did him a great deal of good. This is probably one of the reasons that led M. D. to the study of the natural sciences, which gave an object to his excursions. After having terminated, with distinction, his medical studies, M. D. undertook long and perilous journeys, which he made useful to the sciences. His labours bear the impress of an observing mind and of great ability; they have always been favourably received by the Institute.

Thus, for fifteen years, M. D. has remained perfectly well.

This case is a real drama, a drama complete and full of interest, in which we see a sort of fatality incessantly weighing upon the unfortunate being who struggles with courage and perseverance against unmerited ills.

He must have passed through all these trials; he must have written under the power of such a calamity; and he must have had this idea alone fixed in his mind, to be enabled to retrace all these circumstances with so much truth. The narrative of an uninterested observer could not approach it. These details unfold to us many of the mysteries of the human heart.

How many of these unfortunate beings are there in society whom we unfeelingly blame, when we ought to sympathise with, and especially to cure them!

Two of these patients, (Nos. 48, 50,) tormented with ascarides from their infancy, gave themselves up to onanism before the age

of puberty: they bitterly reproached themselves with it, and regarded this fatal habit as the cause of the pollutions which afterwards afflicted them. Far be it from me to attempt to diminish the just horror which this deplorable passion ought to inspire: but truth must outweigh every other consideration: these children were, in my estimation, more unfortunate than culpable.

In order that such a propensity should be established spontaneously, before the perfect development of the genital organs, they must have become the seat of a pathological irritation.

The presence of a stone in the bladder often excites, in boys, precocious erections and pains, which are felt in the fossa navicularis, and which they relieve by pulling at the end of the penis: this is why the prepuce in these patients is almost always of an extraordinary length. These manœuvres ordinarily lead them to habits for which they cannot be morally responsible.

The action of ascarides upon the rectum produces the same phenomena in a still more constant manner. I have often seen children, of two or three years of age, tormented with erections, almost constant, which were to be attributed to no other cause. This is a phenomenon so common that it has been mentioned to me by many nurses and old women: they even make use of a popular remedy, which, at least, proves that they understand the influence of these worms: they introduce into the rectum a suppository of lard, with the idea that the ascarides will come to feed upon it, and that they shall be able to extract them by drawing it out. There cannot then be any doubt as to the cause of these premature erections.

Children will be inclined to carry the hands to parts which are the seat of an inconvenient and almost continual pruritus; as they are, under similar circumstances, to rub the nose: but the sensation which results from frictions exercised upon such sensitive organs are far more intense; it must induce a much more irresistible tendency to it.

Why should one of these impulses, in these unfortunate creatures, be considered a crime more than another?

When reason comes with puberty, the patients may have sufficient control over themselves to resist this unhappy fascination, but then they experience pollutions that must still be attributed to the same cause that has produced the onanism; that is to say, to the irritation of the genital organs caused by the worms lodged in the rectum.

Ascarides even produce similar effects in the female. I have seen many little girls, of the most tender age, who were tormented with irresistible itchings of the genital organs, with copious leucorrhœa, accompanied with redness and excoriation of the clitoris and nymphæ, &c., which arose from the same cause.

It is then a constant and general phenomenon, since we observe it in both sexes.

The seminal losses which take place during défecation, in those

who are tormented with ascarides, cannot be attributed to the compression of the vesiculæ seminales, for constipation does not exist; besides this would not explain the nocturnal pollutions: it must then be admitted, that the continued titillation exercised upon the rectum and margin of the anus, by the ascarides, extends its influence to the genital organs, and gives rise to the spasmodic contractions of the vesiculæ seminales.

This is all that I wished to remark for the present.

To sum up the whole, it results from the cases reported in this chapter, that affections of the rectum induce pollutions, 1st, by determining a compression of the vesiculæ seminales; 2d, by creating irritation in them.

All the causes which oppose the escape of the fecal matters, and which favour constipation, act in the first manner. I have preferred reporting examples of mechanical obstacles placed at the margin of the anus (Nos. 38, 39, 42, 43), because in cases of this nature, the cause is perfectly isolated, and its influence palpable: but it is clear, that every physical action, like that which results from riding on horseback (No. 44), or in a carriage, from the sitting position a long time continued, &c., and that every medicinal impression, which tends to favour constipation, must have the same result. In all cases of this nature, the influence of the rectum upon the vesiculæ seminales, is owing to its distension by the fecal matters; it is altogether a mechanical action.

The other phenomenon is essentially vital. The diarrhœa (No. 39), the ascarides (Nos. 47, 48, 49, 50), the dartres of the anus (Nos. 32, 33), can only act in this manner. The same must be said of injections too hot or too cold, of certain drastic purgatives, &c.

But, in many cases, distension and irritation of the intestines act simultaneously upon the vesiculæ seminales. Hemorrhoids and fissures of the anus, are not only an obstacle to defecation, but they are attended with pains and spasmodic contractions, that must also be considered. An obstinate constipation is rarely exempt from heat and irritation in the rectum and neighbouring parts. Dartres of the anus are often accompanied by a contraction of the sphincters, which interferes with defecation.

We have seen also by cases 18, 27, and 46, that chronic inflammation of the genito-urinary organs, may, in its turn, give rise to an extraordinary susceptibility of the rectum, that prevents it from retaining as long as usual, the fecal matters, and that cauterisation of the genito-urinary mucous membrane, is sufficient to remove this irritation of the rectum; so that patients see their diarrhœa checked at the same time with their incontinence of urine and pollutions.

This influence is then, reciprocal, as it is between all the organs that are intimately connected together; it is then of great importance in the study of seminal losses; it plays, for example, a much

more important part than the purely mechanical compression of the vesiculæ seminales.

It is this reciprocal influence that I wished to point out in this chapter, by reporting simple and striking cases, in which each mode of action was isolated, and consequently incontestable; and I have often had occasion to refer to these characteristic facts, in order to give a clear idea of those which are more complicated and more obscure.

DESCRIPTION OF THE PORTE CAUSTIQUE OF SEGALAS.

The instrument is composed of three distinct parts,—1st. A conducting catheter *a*, *Fig. 1*, of gum elastic, graduated into inches, inserted at the lower extremity into a small socket of silver, *b*, and at the upper part into a silver tube, *c*. This tube is surrounded, at its upper part, by two discs soldered together, *d*, pierced with a small opening to admit the action of the thumb screw, *e*. The tube *c* has two grooves on the inside, in which slide the winged projections, *ff*, on the upper part of the protecting sheath, *Fig. 2*.

2d. A protecting sheath, *Fig. 2*, the upper portion of which only is visible in *Fig. 1*. This is simply a tube of silver having a longitudinal opening, *gg*, in its upper portion, through which the thumb screw *e*, *Fig. 1*, may act upon the wire or *porte caustique*, *Fig. 3*, and which limits the play of the sheath, *Fig. 2*. To the upper extremity are also soldered two discs perforated in the centre for the passage of the *porte caustique*.

3d. The *porte caustique*, a silver wire, to the lower extremity of which is firmly attached the platina spoon or cistern, *h*, by means of the twisted wires, *l*, thus rendering this portion of the instrument flexible and capable of revolving when curved. The upper extremity, *m*, is square, and to this portion is fitted the nut *n*, *Fig. 1*, and this is secured by the thumb-screw *o*, *Fig. 1*. The platina cistern *h*, *Fig. 3*, has a button or knob on its lower extremity that exactly closes the lower extremity of the tube, *Fig. 2*, and the caustic in the cistern is thus protected against the fluids in the urethra.

On account of this knob, after the sheath, *Fig. 2*, is inserted into the catheter, *Fig. 1*, the *porte caustique* is introduced from below upwards, that is, its upper extremity, *m*, is inserted into the lower extremity, *b*, of the other tubes, and after traversing their whole length the nut *n* is adjusted and the whole made secure by the screw *o*. Previous to this, however, the caustic is to be fixed in the

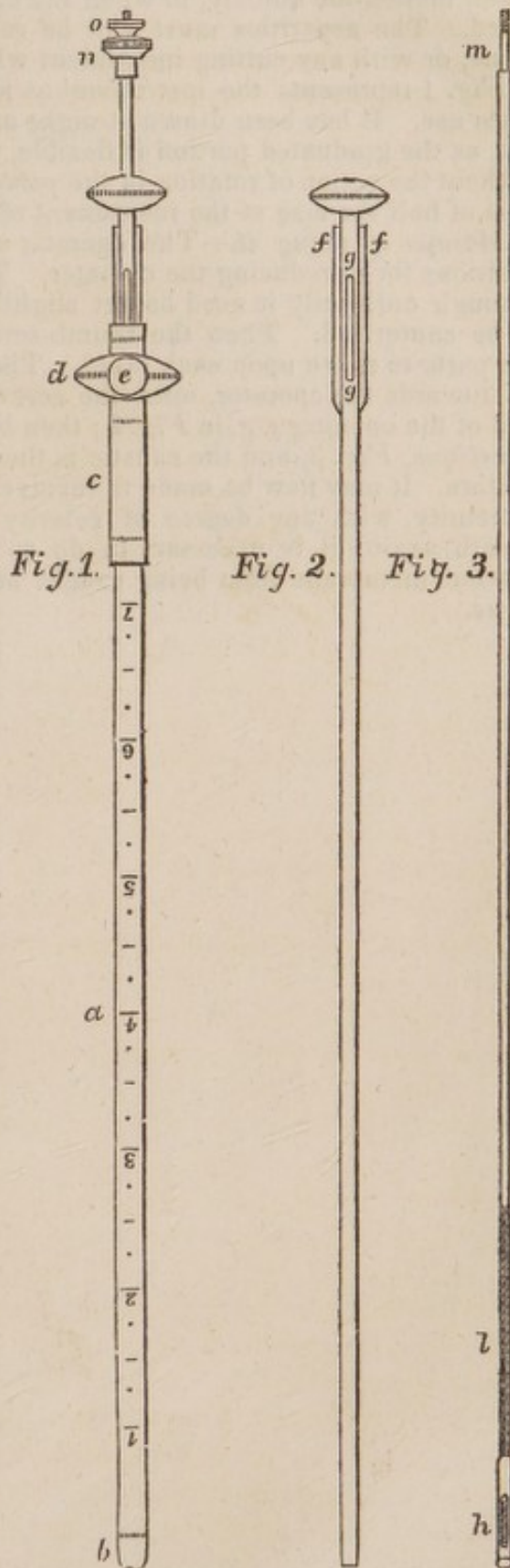


Plate representing Porte Caustique—half size.

platina cistern. A few particles of pure nitrate of silver are placed in it and the cistern is then held over the steady flame of a wax candle or spirit-lamp, to allow the nitrate to melt slowly, so as not to bubble up, as it will when melted too quickly, or when the cistern has not been well cleaned and dried. The asperities must now be rubbed down with a piece of pumice stone, or with any cutting instrument whatever.

Fig. 1 represents the instrument as it appears when adjusted for immediate use. It has been drawn straight merely for the sake of convenience, but, as the graduated portion is flexible, it can be bent to any desirable curve without the action of rotation in the *porte caustique* being thereby prevented. It is of half the size of the instrument of Ségalas.

Manner of using it.—The operator and patient are placed in the usual positions for introducing the catheter. The instrument is introduced curved (though ordinarily it need be but slightly so,) until it arrives at the portion to be cauterised. Then the thumb-screw *e* is loosened, which allows all the parts to move upon each other. The gum-elastic catheter is first drawn off towards the operator, until the screw comes in contact with the upper end of the opening *g g*, in *Fig. 2*; then both together are drawn off the *porte caustique*, *Fig. 3*, and the caustic is then in contact with the surface of the urethra. It may now be made to revolve, by acting upon the nut at its upper extremity, with any degree of celerity required. In drawing it into the sheath again, it is necessary to do so by a rotary motion to prevent the mucous membrane from being caught between the sheath and *porte caustique*.

