Lectures and essays on the science and practice of surgery. Part 1, Clinical lectures on venereal diseases / by Robert McDonnell.

LECTURES AND ESSAYS

ON THE

SCIENCE AND PRACTICE

OF

SURGERY.

BY

ROBERT McDONNELL, M.D., F.R.S.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND;
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PART I.

DUBLIN:
FANNIN AND CO., 41, GRAFTON-STREET.
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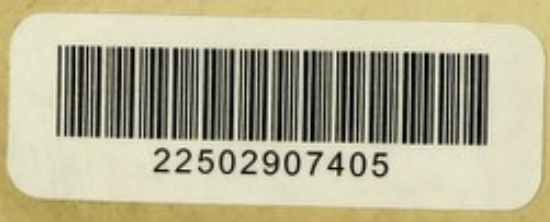
1871.



Part 2 on spinal cord (1874)

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PART I.

CLINICAL LECTURES ON VENEREAL DISEASES.

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PREFACE.

The author has been frequently solicited by his pupils to publish his lectures in a form which would place them within the reach of those who have not ready access to the medical journals in which many of them originally appeared.

Although gratified by the request, he hesitated to comply with it from the feeling that some of what he had written was designed simply for students, while a part aimed higher, and was designed to introduce to the notice of his brother practitioners something which he conceived to be of scientific as well as practical novelty. He now proposes to overcome this difficulty by publishing his Lectures, as well as his practical and scientific Essays, in separate parts, so that those who please may obtain any one part which may have a special interest for them.

The author has always agreed with the illustrious Marshall Hall in thinking that "to be good practitioners, we should strive to be good physiologists," and he attaches an extreme value to the works of those who like Marshall Hall, Robert Todd, Sir B. Brodie and others, are in themselves connecting links between science and practice. The best preparation for the study of the phenomena of disease is the careful study of the phenomena of life and health.

Practitioners are every day becoming more learned in physiology, and more anxious and better able to apply physiological ideas to the practice of their art ; therefore they may be the more willing to excuse the apparent incongruity of a work consisting, when complete, of physiological and practical elements apparently little related to each other. Each part, however, the author hopes to make more or less complete in itself.

14, Lower Pembroke-street,
Dublin, January, 1871.

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LECTURES

ON

VENEREAL DISEASES.

LECTURE I.

GENTLEMEN,

The range of your studies offers few subjects at once so interesting and so perplexing as that of venereal diseases. The commonness of these complaints, the formidable aspects they not unfrequently assume, invite your attention; while you must be struck by the difference of opinion which exists, and has long existed, even among the greatest writers who have treated of this subject. The teaching of the leading syphilographers of France, Germany, and England are far from being in harmony with each other. This work which I hold in my hand, the recently published report of a committee appointed to inquire into the pathology and

treatment of the venereal disease, strikingly attests what difference of opinion still exists among British surgeons upon this subject. You yourselves are well aware how varied is the doctrine inculcated in different hospitals; nay, even in the same wards, you often find that the surgeon you follow to-day holds views different from him you may follow to-morrow.

In this hospital you have excellent opportunities afforded you for studying these complaints; for in the year 1820, when the Lock Hospital of this city was, at the request of the government, closed against the reception of male cases, provision was made in this hospital for the treatment of male venereal patients, and this practice is still continued.

It is only of late years that it can be said that venereal complaints have been studied with anything like scientific accuracy. It was a saying of our forefathers, *si in dubio, suspice venerem*, and what Hunter wrote nearly one hundred years ago is indeed applicable to-day, "There is even at this day hardly any disease that the practitioner is puzzled about, but the venereal comes immediately into his mind;" and this tendency to regard every obscure symptom as

in some way connected with venereal disease has been one of the greatest obstacles to its elucidation.

But, with regard to syphilis, as in the working out of many other scientific problems, the chief difficulties which have obscured the field of investigation have been the preconceived notions which possessed the mind of the investigator. For, in the first place, maladies which we now-a-days regard as several distinct diseases were formerly confounded with each other, because they were all supposed to have one and the same origin—to spring from one and the same poison. In the second place, it was an idea handed down from master to pupil for centuries, that unless stayed in its progress by the most active treatment, syphilis was a complaint which would go on slowly but surely from bad to worse. Beginning like a snowball rolling down the mountain side, it would end in the avalanche sweeping all before it ; commencing, in fact, in a little sore not bigger than a pea, that it would by degrees attack the glands, the throat, the skin, later the bones and vital organs, and finally, " having retreated to its last citadel, the head, and like a skilful

general broken down the bridge behind it," it would bring down the few hairs which still remained with sorrow to the grave. The natural result of this belief regarding the progress of syphilis was that it was attacked in the most furious manner by the most violent remedies, and the monster-malady was so defaced and disfigured, as to be made a thousand-fold more hideous than nature had made it. Under these circumstances it was difficult to recognize the true features of the complaint. It was as though an astronomer should attempt to map out the spots upon the sun when the sky was overcast by clouds, or an artist to take a likeness from a distorted image seen reflected in a silver dish-cover. Thanks, however, to the researches of later times, many of the clouds have been cleared away, although much remains for you yet to do. One group of investigators has placed in their true light the several distinct diseases which until lately were confounded together ; while another, by studying the progress of syphilis when allowed to run on in its own course, not interfered with by the action of so-called specifics, has tried to give us a correct image of the monster in his natural

state. It is true, Caliban is an unsightly beast at the best, yet he appears now-a-days to be a less formidable enemy to contend with, than when it was more the fashion to goad him into fury with weapons which, in general, only for a time subdued him, and often only enraged without overcoming him.

In collecting the evidence upon which our judgment is to be formed upon this subject, we must be guided—

Firstly, by the opinions of persons who have given close attention and study to the subject :

Secondly, by facts, observations, and experience recorded by truthful observers :

And, thirdly, by the facts and cases which have occurred under our own eyes. We shall first examine the opinions of some of the most distinguished writers of the present day, and in doing so I shall draw my evidence for the most part from the report already alluded to, from the recently published work of Lancereaux, and from the works of Lee, Virchow, and Diday.

The illustrious Hunter, as you are no doubt aware, was led by observation and experiment to the erroneous conclusion that gonorrhœa

and chancre were the effects of the same poison.

Later, Mr. Abernethy fell into the equally great error of believing that diseases which got well without the use of mercury were not syphilitic.

As some confusion has arisen among writers on this subject from the nomenclature of these diseases, I would propose that hereafter clinical teachers in this country should adopt the names used in the report of the Venereal Committee. According to this report, venereal disease presents itself in two forms—gonorrhœa, and sores or ulcers. Of venereal sores or ulcers there are two species, one of which affects the constitution, while the other does not. They are termed *syphilitic* and *simple.*

It is a pity that the term "small pox" is pre-occupied. If we could call the syphilitic sore the "great," and the simple venereal sore the "small" pox, we should at least have good Saxon words to indicate the formidable proportions of the one disease as compared with the other. Indeed they might be very well designated on this principle—"the big and the little pox"—were it not that in truth we have too many names already.

We find then in actual existence three venereal diseases: 1st, gonorrhœa; 2nd, the simple venereal sore; and 3rd, the syphilitic venereal sore.

Gonorrhœa.

Of gonorrhœa I speak merely to say that the opinion of Hunter, as to the identity of gonorrhœa with other venereal diseases, is now I believe universally abandoned. Even before his time, in 1767, Balfour maintained that gonorrhœa and syphilis were distinct maladies, and this view was afterwards advocated by Ellis, Duncan, Bell, and Bosquillon.

It remained, however, for Hernandez, Cockburn, M'Gregor, Hennen, and Guthrie to establish this proposition, which has been verified, and, in short, clearly demonstrated as a fact, by the experiments of Ricord and Rollet. The co-existence of urethral chancre with gonorrhœa, or the fact of an urethral chancre being mistaken for gonorrhœa, was, no doubt, one of the chief causes which rendered it difficult to establish, with absolute certainty, a fact which now appears to us so very simple.

The simple venereal sore.

The *simple* venereal sore which, by various writers, has been described as *false syphilis*, *local syphilis*, *soft chancre*, *suppurating chancre*, *non-infecting chancre*, *chan-*

croid, chancrelle, is now regarded as a local disease incapable of infecting the constitution. Its influence, in fact, never extends beyond the inguinal glands. It is, however, eminently contagious, producing sores like itself. It is the most common form of venereal sore. Very often several such sores occur upon the same subject. The pus which gives rise to it retains its influence for a long time. Ricord has inoculated successfully with pus preserved for seventeen days. It begins in a pustule; its edges are perpendicular, as if punched out. For a time it tends to spread superficially. It secretes pus freely, and, generally speaking, is as soft as the parts around it—so much so, that if the eyes were shut, one could rarely discover by the touch the situation of the sore. But descriptions of it are unnecessary. You must learn its appearance from seeing and examining it, and of this you have opportunities every day.

The Syphilitic sore.

The *syphilitic* sore—which is also known as *true syphilis, the Hunterian chancre, indurated or hard chancre, the non-suppurating chancre, the infecting chancre*—is the disease which is the forerunner of constitutional

syphilis. From the names which have been given to it, you may infer some of its most marked characteristics—that it was recognised and described by Hunter; that it has often hardness at the base; that it does not suppurate easily; that it infects the system; that it alone is really deserving of the name of syphilis. The hardness around its base is its most marked characteristic. Any one familiar with this symptom could diagnose it blindfold. Although its most marked symptom, *yet this peculiar hardness is not always present.*

Fortunately for mankind, this—the big pox—is less common than the simple venereal sore.

According to the report of the Venereal Committee, the proportion is about four simple to one syphilitic.

Puche found in 10,000 sores,

8,045 simple sores,
1,955 syphilitic.

Fournier has seen in 341 sores,

215 simple sores,
126 syphilitic.

It appears to be agreed therefore, on all hands, that the simple ulcer is much the commoner disease; for these statistics harmonize

very well with those of our own naval and military authorities. In short, it may be stated in general terms, that out of every five persons who come to consult you, having ulcers on the genitals, not more than one will have that kind of sore which is the forerunner of secondary syphilis.

Three forms of syphilitic sore.

The syphilitic sore is said to occur under three forms. Firstly, that of a dry papule; secondly, the chancrous erosion; and, thirdly, the hard chancre. I have already told you that the hardness, although an important symptom of the syphilitic sore, *is not one which is invariably present;* if it were so, the diagnosis of true syphilis would be a comparatively easy matter. But the truth is that, in the first two forms just mentioned the characteristic hardness is wanting, and this is, no doubt, one of the causes why the infecting form of the disease was so long confounded with the local one.

You may ask, then, are we able in practice to distinguish with certainty the simple from the syphilitic sore? Can we, when we see a patient for the first time suffering from a venereal sore, say whether that sore will or

will not be the forerunner of constitutional syphilis? In answering this question, I say without hesitation, that it is not possible for any man, however skilful or experienced he may be, to pronounce with certainty whether it will or will not be followed by constitutional symptoms; but, on the other hand, you may often make the diagnosis with the highest degree of probability. If, for instance, you find the characteristic hardness which forms if not an invariable, at least a most important, symptom of the syphilitic sore, you may say to your patient that the chances are about a hundred to one that he will some time hence suffer from secondary syphilis, and this opinion you may form with almost absolute certainty if you find that the hard sore is accompanied by a hard gland which rolls like a marble beneath the skin in the groin. If, on the other hand, you find several sores free from hardness, suppurating freely, you may give your patient good hopes that no constitutional disease is in store for him; and you may be more hopeful still if you find in the groin a bubo, which, instead of being hard and indolent, runs rapidly forward to suppuration.

Let me advise you, however, in such a case not to give your patient any positive assurance that secondary disease will not follow. Tell him that he has a disease with the characters of the simple venereal sore ; that you have every reason *to hope* that his constitution may escape scot free. But no positive assurance—*crede experto.* Do not be rash, or you may rue it. Be hopeful—nothing more. We cannot make the diagnosis with certainty.

If, on the other hand, circumstances enable your patient to fix positively the date of his impure contact ; and if a fortnight or three weeks have elapsed between that time and the day when he perceived the sore, even although there is no hardness, you will regard the affection as probably syphilitic, and almost certainly so if you have a hard gland in the groin.

Of the three forms in which constitutional syphilis has been observed to commence—

I. Dry Papule.

1st. The dry papule appears to be the rarest, as it is likewise the most likely to escape observation.

II. Chancrous erosion.

2nd. The chancrous or chancriform erosion (which was no doubt the patchy excoriation of Carmichael, and the

superficial primary syphilis of Wallace, the parchment chancre of Ricord, the venerola vulgaris of Evans, the condylomatous affection of Rinecker, the superficial erosion of Langlebert,) is according to Bassereau and Diday the most frequent form in which primary infecting syphilis manifests itself.

III. Hard chancre.

3rd. The indurated chancre, which, according to Lee, is the commonest form of infecting syphilis, is the least likely to escape observation, and certainly that in which the ultimate consequences of the disease may be foretold with the greatest certainty.

Many persons seem to think that the questions—

a.—Has the syphilitic sore a period of incubation ?

b.—Is it true that the syphilitic sore cannot be inoculated on the subject that already has one ?

c.—Can a syphilitic sore be "aborted," (and the progress of the disease cut short) by being cut out, or burned out with escharotics ?

are questions only interesting in a theoretic point of view. They are, however, eminently

practical. On the answers to these questions our opinion must be formed, our reasoning must be based.

For if it be true that the syphilitic sore has a period of incubation—(*i.e.*, a period of some weeks elapsing between the day of infection and that on which the sore appears) if it from that time is not re-inoculable on another part of the patient, if it is not abortible, then it follows, as clearly as possible, that in such case the *so-called primary lesion* is not really the primary lesion. The initial lesion must be that which takes place *on the day of infection*, and at the time when the sore becomes apparent the constitution is already engaged; from that time the enemy is no longer threatening our shores; he has crept in unknown to us and made good his footing; he already holds the avenues leading through the frame, and the chancre is, as it were, the standard already floating on the citadel.

Let us, then, examine carefully into these questions. The simple sore appears early, within three or four days after intercourse. The syphilitic sore comes on at a later period from the probable time of infection. Has it what is called a period of incubation?

A.—Question of Incubation.

Question of incubation.

The question whether there be any fixed or definite period between the exposure to contagion, and the time when the sore makes its first appearance, is one of great scientific interest, and I believe one of great practical importance also. Although we have some valuable evidence upon the subject, the question may be said, however, to be one which is still *sub judice*. It appears to be of much practical importance, because if it be established that a period of some weeks must elapse between the exposure to infection and the first appearance of the disease, it becomes probable that when the disease actually becomes apparent in the form of a chancre the system is already infected. Analogy would lead us to suppose that such a period of incubation does exist, as we know it does in small-pox, measles, and such complaints ; and it must follow as a corollary, assuming a term of incubation really to exist, that when the disease makes its appearance in the tangible form of a chancre, it is already past the hope of remedy by an abortive treatment. Thanks to inoculations practised

upon hitherto healthy individuals, the incubation of syphilis, which was for a long time denied by a celebrated school, has had some light thrown upon it in these latter days. However unjustifiable such inoculations may be, we may at least profit by the facts which have been thus developed.

Let me first define precisely what is meant by "the period of incubation." By the period of incubation I wish to be understood the time which elapses from the moment of the impure contact, when the virus of syphilis is applied to the surface, until the sore, which is the forerunner of what is usually called constitutional syphilis, makes its appearance.

This period obviously corresponds with what is ordinarily called the period of incubation in other diseases.

A healthy child spends an evening in company with children who have just had the measles —it is taken home, and does not meet with any other playfellows; at the end of a week it sickens, and measles declares itself in due course. This week is the period of latency or incubation.

A man comes to town on the first of the month; he has connexion, and goes back to the

country the following day ; he washes himself, and, on examination, finds no sore existing ; days elapse, and he has no cause of uneasiness ; circumstances preclude any possibility of doubt as to a second source of infection, yet, after a number of days, a sore makes its appearance. The days which have elapsed from the impure contact up to that on which the sore declares itself is the period of incubation.

I am thus precise in defining what I wish to be understood by the period of incubation in syphilis, because I find that some authors attach a different meaning to the term. They apply it to the period between the time when the syphilitic sore is observed, and that at which the secondary phenomena declare themselves. That is, as though we regarded the time from the sickening of the child up to the appearance of the rash of measles on the surface as the latent period ; but this is not so. The latent period is in fact a period of apparent health, during which a stealthy enemy is stealing into the system ; and the immense practical importance of the subject, as regards syphilis, turns upon this, that admitting that there is a true period of incubation, the chancre is not really the primary

or initial lesion at all. The initial lesion occurs on the night of the impure coitus, and the chancre is the first of a series of constitutional symptoms. The chancre is in syphilis what the rigor, nausea, etc. are in erysipelas, and other febrile diseases. It is the first of what are now-a-days called deuteropathic phenomena ; but the original, primary, initial starting point is the reception of the poison—the moment of the impure contact.

It was Alphonse Cazenave who first propounded the doctrine of the incubation of syphilis, in his *Traité des Syphilides*. He says "Syphilis is a general disease from its commencement, which dates from the very moment at which the infecting contact occurs, as in all diseases which are virulent (toxæmiæ), and consequently general." Chausit and Vidal were among the earliest supporters of this doctrine, which is now admitted by a small number of competent observers.

Although it is absolutely impossible, in by far the greater number of cases, to fix, with anything like the precision which science requires, the exact date of the "infecting contact," yet, in the practice of everyone, cases will now and then turn up in which, by chance, circumstances ful-

fil the requirements of science with rigid accuracy. Such cases have an extreme value. One single such case may serve to establish a new doctrine.

Since my attention has been directed to this subject several years have elapsed, and many cases of syphilis have passed under my notice, yet in only five instances have exceptional circumstances offered the precision desired.

Of the facts stated in the following cases I have been able to satisfy myself with a degree of certainty equal to testimony given on oath:—

CASE I.

A. B., aged 24 years, had been for some weeks residing in a country part of England, under circumstances which precluded the possibility of infection. On June 27th he went to London, and had sexual intercourse. He came to Ireland the day after, and dwelling in the country in the midst of his family led an exemplary life. When bathing on July 23rd, he observed a small sore. Not believing it possible that it could be connected with coitus near a month before, he did not at first feel any alarm. On July 31st he came to consult me. The sore

was then a chancre with induration. In due course secondary symptoms followed.

This patient was in the habit of bathing, and he is himself of opinion that he observed the sore on the day on which it first appeared. As to this there can be no certainty; but he is absolutely certain that for more than a fortnight after his return home there was no abrasion or excoriation of any kind.

CASE II.

C. D., a young surgeon, 25 years of age. Had the dates fixed, as follows, by the accident of being at sea and touching at a sea-port :—

Had connexion September 22nd. First noticed the sore on October 19th. Chancre became indurated, and secondary symptoms supervened in February following.

CASE III.

E. F., 26 years of age. Had connexion on December 8th. He came under my notice on December the 14th, suffering from gonorrhœal discharge, and covered with an eruption produced by balsam of copaiva, which he had himself taken with the hope of curing the go-

norrhœa. He got well of this eruption in a few days, and went to the country, where he lived with strict propriety. On January the 9th he again came to me, having a sore on the outside of the prepuce, and two sores behind the corona glandis. The sore on the prepuce had a hard base, like that round a boil. The other sores had as well marked hardness around the base as I have ever seen. Secondary symptoms supervened on February 11th.

CASE IV.

G. H., aged 20 years. Had connexion on December 12th (having at the time gonorrhœa, in consequence of which there had been no connexion for some weeks before). Chancre was first observed on January the 21st, the interval being spent as Christmas recess in the domestic circle in the country. The patient states positively that there was no source of contagion after December 12th, and that he, in consequence of having some remains of gonorrhœa, attended to himself, so that the sore could not have been overlooked at most for more than a few days. Secondary eruption and sore throat on February 27th.

CASE V.

J. K., age 22. Was quartered at Aldershot, and had been suffering from illness (abscess). Went to London, and on December 1st had connexion, the first time for some weeks; after this got an excoriation on the right side, behind the glans penis; this got well with water dressing. From that day until he came to me on January 8th is quite positive that no connexion of any kind took place. A chancre existed when I saw him, and this, he states, he first observed on January 4th. He is certain that this sore has not appeared at the site of the excoriation, but at a corresponding point on the other side, behind the glans penis. This patient came to Ireland from London; had been living in a remote part of the country until he came to see me.

The five cases here mentioned are the only cases in which, during years of attention to this subject, I have been able to get hold of my facts with the rigid precision which scientific accuracy requires. In each one of these cases the moment of connexion was known; for some weeks

before there was no other source of contagion; accident made sure that no infection could be communicated from the time of the impure contact until the sore declared itself, that is, until it was observed. Now it is obvious that a sore may exist, and for a time escape observation. The most anxious and observant patient will notice it first, so that we must always allow that in such case it will not be possible to fix the period of incubation to a day.

Yet these cases on the whole correspond very accurately with those observed by others. A period of about one month has elapsed from the time of impure connexion up to the day when the sore was observed (27, 28, 33, 41, 34 days respectively).

In a case recorded by Chausit the period of incubation ran from the 21st April to May 19th —28 days. Lancereaux details the case of a law student—a friend of his—whose residence in the country, while passing his holidays with his family, after an impure connexion in Paris, fixed the time at about the same period. He has also observed cases in which 29, 31, and 35 days was the duration of the latent period. Sigmund's observations correspond tolerably

closely with these, so much so that those which he accounts as having an incubation period of six weeks, or that of Alfred Fournier of 70 days, must be considered exceptional.

Indeed even the case related by Bumstead, in which, under great anxiety, and the close observation which probably was the consequence of this, thirty-five clear days elapsed before any sore was noticed, must also be regarded as an unusually long incubation.

Let us, however, compare the results of these cases with the results of direct experiment by inoculation of healthy subjects.

In cases where inoculation with syphilitic matter has been experimentally performed (I refer to the cases of Wallace, Vidal, Necker, and others), the period elapsing from the day of actual inoculation up to that on which a chancre was found to make its appearance, varied from 18 to 35 days, giving a mean of 27 days. In cases of inoculation directly from infecting chancres, Nollet's case gives 18 days; Baerensprung's, 28 days; and Lindwurm's, 23 days.

These cases are of course the most important of all as regards absolute precision. Being

watched from day to day, they may be considered almost to fix the minimum period.

To ascertain that there is positively a latent period in syphilis is a fact of importance. It is obvious that in all such contagious diseases there must be disturbing causes which may tend to alter the length of this period—the venom of the virus, the source from which it is derived, whether from primary or secondary syphilis; the exact mode of its introduction, whether by simple application to the surface, or to a more or less deeply abraded surface; its introduction at the same time with some other virus, as that of gonorrhœa or the simple venereal ulcer. These are all subjects worthy of careful research; but it may be concluded from clinical observation, as well as experimental research, that syphilis probably has a true period of incubation, and that an infecting chancre is itself the first of a train of constitutional symptoms.

B.—Is it true that the Syphilitic Sore cannot, as a rule, be Inoculated on the bearer?

Question of auto-inoculability.

Upon this subject the evidence of various experimentalists is tolerably clear.

Ricord says inoculation with the virus of a syphilitic sore upon a person who already bears upon him such a sore is either without result, or it produces a sore *like* a simple chancre. This is, indeed, the foundation of Ricord's dogma, that a person can (as a rule) have syphilis only once.

In 1855, Clerc announced that it was not possible to re-inoculate the syphilitic sore on the bearer.

In 1856, Henry Lee made experiments on the subject in the Lock Hospital, London, and concluded "that the indurated chancre was not capable of being inoculated upon a patient whose system was already syphilised, in the proper acceptation of the term."

Fournier inoculated 100 patients from their own syphilitic sores, but only twice produced sores like the parent sores. Puche, Poisson, Nadau have arrived at a similar conclusion, viz.

"that the indurated chancre is not auto-inoculable more than twice out of 100 times."

Rollet and Laroyenne differ a little from this. They say, not more than six times out of 100.

From this testimony we may conclude that, as a rule, the syphilitic sore cannot be inoculated upon the bearer.

It is undisputed that the simple sore may be produced again and again.

C.—Is the Syphilitic Sore Abortible, that is, can we cut short the progress of the disease, and prevent the occurrence of constitutional disease by cutting out the syphilitic sore, or destroying it by escharotics?

In answer to this question, we have the following evidence :—

Question of abortability.

J. L. Petit, at the commencement of his practice, used to excise indurated chancres on the prepuce. He finally renounced this operation, as one which was found ineffectual in preventing secondary syphilis.

Diday has not succeeded in preventing constitutional syphilis by the destruction of the

chancre by chloride of zinc and other caustics, even as early as from three days to twenty-four hours after the sore became apparent.

Henry Lee's opinion on the subject is very decided. He says :—

In the treatment of syphilitic infection cauterization is of no avail, as far as the prevention of constitutional symptoms is concerned.

"The period of incubation which has elapsed before the disease manifests itself, forbids the idea that the poison can then be destroyed by the application of caustic to any particular part.

"Infecting sores that have been destroyed on the very day of their appearance have subsequently continued to spread, and have produced their natural consequence. Even if the infecting sore be cut out, the infection of the patient's system will not thereby be prevented."

The testimony brought before the Venereal Committee has induced them to conclude that "the application of local agents for the purpose of destroying the hard sore is useless."

Ricord practises cauterization at the first, but he admits that once the sore is recognisable by its hard base as a syphilitic chancre, the abortive method has no value. Follin justly

observes that no conclusion can be drawn from destruction of a sore at a time when it cannot be determined whether it is a simple or syphilitic venereal sore. If, after its destruction, the patient escapes without constitutional symptoms, it may be inferred that the sore was from the first non-infecting.

It appears, therefore, that after it is recognisable as a syphilitic sore, it is not abortible.

To excise it or cauterize it is only to lock the stable-door after the horse is stolen.

Among the causes which have involved the study of syphilis in doubt and darkness must be reckoned the tendency which it has to form hybrids with other maladies. In its latter forms syphilis may be seen masked and modified by scrofula, rheumatism, scurvy, gout. We know that the vaccine virus and that of syphilis may be put into the soil together—the tares with the wheat—and it is probable that venereal poisons themselves may in like manner become mixed, and thus producing a compound infection, give rise to complications of symptoms almost impossible to disentangle.

The "chancre mixte" of Rollet is, indeed, supposed to arise from the compound virus of the simple and syphilitic sore; it does not, evidently, constitute a new disease, but it is important to recognise it, as it gives a satisfactory explanation of a number of apparently exceptional or contradictory facts.

Mixed chancre.

Rollet of Lyons and his school explain by the theory of the "mixed chancre" several phenomena otherwise out of the usual order, as we may say. Thus a chancre, to all appearance a simple sore, is followed by constitutional symptoms. Ah! they say, it was a mixed chancre; in the initial stage the disease had the character of the simple sore.

A chancre, apparently altogether syphilitic, with hard base, is re-inoculated on the bearer, as may occur four or five times in one hundred. They say it was a mixed chancre. The purely syphilitic part is not re-inoculable, but of course the virus of the simple chancre is. And also suppurating bubo following a chancre, which is to all appearance a true syphilitic sore, is explained on the "mixed theory."

We must be slow to admit such an hypothesis without well observed facts to support it;

yet we cannot deny the possibility, nay, the probability of a compound infection from the co-existence of the two poisons at the time of impure contact.

Duality of syphilitic poison.

Another question of much interest connected with the subject of syphilis is that concerning the unity or duality of the poison — in other words, whether the simple sore and the syphilitic sore arise from one virus, or are due to two distinct poisons. Ricord theoretically believes in the unity of the poisons, but I may say that practically he is a dualist, for he teaches that the simple chancre may be distinguished from the syphilitic one—that secondary accidents follow the latter only, and for it alone he reserves mercurial treatment. Clerc, Diday, Rollet, Guerin, Lancereaux, and other distinguished names are found among those who believe that we have to do with two distinct poisons. For my own part, if you ask me to what conclusion I have come upon this subject, I shall answer you by an analogy. I should say that as in natural history I am a follower of the distinguished Darwin, and believe that the wolf and the dog are probably descended from a

common ancestor, although now regarded as distinct species, so it is possible that the simple and the syphilitic sore may have had in past times a common origin, but that the lapse of years and circumstances which have not yet been determined have given to them certain distinct characteristics; so that, like the dog and the wolf, the simple and the syphilitic sores may now be regarded as specifically distinct.

In short, gentlemen, when we find that the usual characteristics of the syphilitic sore differ so from the *usual* characteristics of the simple sore, that

We see in the former :	and	*We see in the latter :*
Almost always a solitary sore ;		Very often several sores at the same time.
A hard sore ;		A soft sore.
Incubation of some weeks ;		No incubation.
Adhesive inflammation ;		Suppurative inflammation.
Incapability of inoculation upon the person who has the sore ;		Capability of inoculating an indefinite number of times the person who has the sore.
Not to be destroyed by excision or caustics ;		Able to be completely destroyed.
Constantly accompanied by indolent, hard bubo ;		When accompanied by bubo suppuration soon following.
Producing in due course secondary symptoms ;		Purely local in its effects.
Influenced by so-called specific treatment ;		Uninfluenced by specifics.

When we see all this, is it not hard to resist the conclusion that, whether arising originally from a common source or not, we have now to do with two distinct morbid principles—that small pox does not differ more from measles, the dog from the wolf, than the simple venereal sore does from the syphilitic?

You must remember, however, that there are many distinguished authorities, and we may especially mention Melchior Robert, and Langlebert, who teach the doctrine of the unity of the chancrous poison; they hold that the virus, the seed, is one and the same in all chancres; that the conditions of the soil make the difference. Their doctrine is, that if the seed falls on uncongenial soil, if the virus affects an individual whose peculiarity of constitution, state of health, or other circumstances render him inapt for its development, it germinates and springs up but to be blighted after a few weeks; it produces a local sore, perhaps a suppurating bubo, nothing more. But if it falls on a soil fit for its reception, it strikes root in the syphilitic sore, and flourishes, in due time to bear flower and fruit in the secondary and tertiary consequences.

In attempting impartially to decide upon this

question of the unity or duality of the syphilitic poison, it appears to me that the evidence derived from the experiments of Wallace, Waller, and others cannot be got over. Twenty-six times, competent observers have been guilty of the outrage on humanity of inoculating healthy persons with syphilitic poison (an outrage hardly to be justified, it is true, even by the gain to science); in every case where the poison *took at all*, a syphilitic chancre followed, with subsequent constitutional disease.

In twenty-six persons of different ages, sex, strength, constitution, &c., in Dublin, Prague, Lyons, Paris, Wurzburg, not one simple sore occurred with suppurating bubo, and nothing else. Now, knowing what we do about the more usual occurrence of the simple sore, are we to conclude that, by a remarkable coincidence, all of the persons infected chanced to be fertile syphilitic soils? or are we to believe that a syphilitic sore in every virgin soil produces its like, and that the simple sore is essentially distinct from it? This is our dilemma, and, in the present state of knowledge, I take the latter view.

LECTURE II.

GENTLEMEN,

In my last lecture I discussed some topics relating to venereal disease in general, and while attempting to give you what appears to me a fair and impartial statement of the evidence upon these subjects, I allowed you to see the conclusions towards which I myself conceive that this evidence tends. These conclusions were—

First, that gonorrhœa, the simple venereal sore, and the syphilitic sore are diseases arising, from three distinct poisons.

Secondly, that true syphilis, when propagated by contagion (that is, not hereditary) begins its inroad on the day of infection, creeps on in ambush for a fortnight or three weeks of incubation, then declares itself as a dry papule, a chancrous excoriation, or a hard chancre. From this time the disease is no longer capable of being cut short, nor is it capable of being

inoculated upon another part of the individual who has it. In other words, it is not abortible, neither is it auto-inoculable. Constitutional syphilis must follow. We have, in fact, to deal with a morbid principle in the system. How are we to deal with it?

I must now ask you to turn aside with me for a time to look at some general facts with regard to morbid principles, and to consider the tendency which some of them have to take up a permanent residence in the frame, and the tendency of others to make a raid, and after a time disappear.

Diathesis.

I would ask you, on the threshold of this part of our inquiry, what do you mean by a diathesis? In truth, it is a singularly indefinite term, indicating a peculiar morbid tendency in an individual. It is not a disease, but a proclivity to disease of a particular kind. It is something which is handed down from parent to offspring for generations. Thus we speak of the scrofulous diathesis, gouty diathesis, and so forth. It is merely another word for disposition, and affords little or no clue to the thing spoken of. Yet this vague and unscientific

term, diathesis, implies the existence of a morbid principle in the animal economy. A man having met with a compound fracture of the leg is admitted into this hospital from the adjoining brewery. He has been in the habit for many years of partaking largely, indeed excessively, of porter. From his appearance and his history, we know that the accident which has befallen him is likely to give rise to bad results. In fact, we say that his blood is in a bad condition. He is more liable than other persons suffering from a like accident to be attacked by erysipelas, gangrene, or pyæmia. We call such a condition an inflammatory diathesis. We recognise in this individual a morbid condition engendered within his frame, and apt to be called into action by the accident which has befallen him.

Toxæmia.

All this is very different from what we observe in cases where a morbid principle or poison is received into the system by infection or inoculation, producing what we call toxæmia, or a true intoxication—a condition in which a struggle ensues between the disease and the constitution of the patient, and nature either succeeds

in expelling the poison, or dies in the attempt. An individual gets small-pox, measles, or typhus fever. At the moment when the disease declares itself, a commotion takes place in the system. As soon as the constitution recovers from its surprise the struggle begins, and nature tries to drive out the intruder. Although in one sense all toxæmic maladies are true diseases, yet in another point of view they are processes of health. They are efforts of nature to restore health, and are no more diseases than parturition is a disease. The skilful midwifery practitioner takes his stand at the bedside of a patient in labour, to conduct a process of health, often fraught with danger, to a happy issue. His skill and experience have taught him to repose confidence in nature's efforts. He does not think of giving ergot in every case, or of having recourse to the forceps or the cephalotribe. In like manner the judicious medical practitioner takes his stand beside the smallpox patient, to aid nature in the accomplishment of a certain definite object. The time has gone past for speaking of specific remedies for morbid poisons, such as produce smallpox, measles, or typhus. We no longer

believe that there are remedies at present known, which can neutralize these poisons as an acid does an alkali, and which can cut these diseases short. But close observation and experience have taught the medical mariner where the shoals and rocks lie hid. He has learned the days of greatest danger, the accidental complications, the signs of debility, and he strives, by aiding nature at those periods, to bring his patient safely through the struggle.

Is syphilis a diathesis?

Now, gentlemen, the question is, does the syphilitic poison give rise to a diathesis, or is it a true intoxication? Ricord says "that the induration of a chancre is the first symptom of a diathesis," and Diday says "it is an intoxication, not a diathesis." I conceive that it is a matter of the greatest consequence, yet a matter of the greatest difficulty, to decide between these opposite opinions. Does the poison of syphilis give rise to a diathesis analogous to that of gout, scrofula, rheumatism, &c.? or is it a toxæmic disease—a true intoxication, a disease like smallpox, tending to spontaneous cure, if nature be strong enough to expel the poison —if the human frame, like the womb of the

parent, is able to expel the putrid fœtus? If the first proposition be true, there can be no inherent tendency to self-cure, for a morbid principle has entered the organism, there to reside, and this principle engendering a proclivity to disease of a particular kind, will be ever and always ready to be roused into activity. True, it may lie dormant for years. It may remain in a state of quiescence while the general health is good, but if debilitating influences, such as insufficient food or clothing, bad air, hardship or debauchery, come to lower the bodily strength, the morbid principle of syphilis may forthwith declare itself. We can never speak of recovery from a scrofulous diathesis. We can never speak of curing a gouty disposition. We can only hope that, by following certain well-known rules of conduct, we may diminish the risks to which such subjects are liable. If there is evidence that the morbid principle of syphilis engenders a diathesis, it then must fall within the same category. Just as good air, good food, cod-liver oil, iron, may be of use in keeping the scrofulous tendency in check, so certain remedies can exercise a great control over syphilis, may muzzle it;

but on the theory of a diathesis, neither the one nor the other can be cured.

Now if, on the other hand, we have in communicated syphilis a true toxæmia, we have to do with a malady which is spontaneously curable ; that is to say, with one in which nature is able, under favourable circumstances, to grapple with the morbid principle, to seize the intruder by the throat, and after a longer or a shorter struggle to kick him out. If then syphilis belongs to the latter category, we may reasonably hope for a complete recovery. We may speak of cure as we speak of it in any disease of the same class ; that is, we may expect that by aiding nature in the contest, we may eventually bring about complete restoration to health.

I have already said that the term diathesis is very vague. Perhaps some may say I am wrong in speaking of it as an incurable condition, but I am sure that, as the word is generally understood, I am right. You will, however, easily see the reason why some eminent authorities have been led to adopt, in the case of syphilis, the theory of a diathesis, while others equally eminent regard it as an intoxication. The long and tedious course which the

complaint runs, the disposition which it has to combine with certain known cachexias, the manner in which, after it has apparently gone off, it turns, like the retreating Parthian, to take another shot ; above all, its hereditary disposition have caused it, not unnaturally, to be looked upon as something very different from a morbid poison capable in due course of being eliminated. This view of the subject has been strengthened, no doubt, by the fact that the cachexias arising from debauched habits of life among the wealthy, misery among the poor, and from prolonged and severe specific treatment for the disease itself (cachexias too frequently accompanying syphilis, although essentially distinct from it), have served to mask the true nature of the complaint, and caused the condition resulting from the whole to be regarded as a diathesis.

Syphilis a toxæmia.

That syphilis is a toxæmia, a true intoxication, I cannot doubt. Diday's argument on this question appears to me unanswerable, but facts are beyond reasoning on such a subject. When I see a patient with a hard chancre, accompanied by hard glands in the groin, followed by the usual

syphilitic sore throat, pains in the bones, affections in the cervical lymphatic glands, several successive crops of syphilitic eruption on the skin; and when I see this patient getting well, and years after married, his wife in good health, in good health himself, and the father of healthy children, "dont il croit pieusement être le père," to use the modest expression of Gil Blas; when I know that from the first to the last he has not taken one grain of mercury, that he has been treated on the simplest principles of hygiene, how can I refuse to believe that there has been a poison which has been eliminated, and that health has been as perfectly re-established as after recovery from small-pox or from typhus? This is a subject upon which I do not myself entertain the slightest doubt. I cannot expect, I do not ask you, gentlemen, to adopt my convictions. It is not from the hearing of cases, or from reading, that you can come to be thoroughly convinced upon this important point. You must get your convictions where I got mine, not from the teaching of any man, but from the observation of cases about which I could not be deceived. Let me earnestly beg of you from this time, early in your career, to watch and note

those cases which you may reasonably hope to follow for years. If you do so, I venture to predict with the greatest possible confidence, that the time will come when you will hold as strong convictions as I do this moment regarding the curability of syphilis without the use of specifics.

You must not, however, suppose that because I regard syphilis as essentially a toxæmic disease, I therefore altogether deny the existence of a peculiar cachexia in syphilitic patients. Nature has indeed a long and hard battle to fight in eliminating this poison, and the victory is often won by a constitution which has been so thoroughly exhausted in the contest, that it is never good for much after. If, in addition to the exhaustion resulting from a fair fight in a constitution not naturally vigorous, we remember that that there is not unfrequently a bad condition of health resulting from the debauched habits of life of the wealthy profligate, or the miseries and hardships of the poor, and if with this we connect the evil influences of treatment, which assuredly tend rather to weaken than to strengthen, we can easily account for a cachexia or diathesis being at length formed. What I wish you to understand, what I most desire to

put before you in a clear light, is that the intoxication of syphilis and the cachexia which follows are essentially distinct—that while syphilis itself is a true toxæmic disease, capable therefore of spontaneous cure, it is too often followed by a cachexia, in producing which debility, debauchery, poverty, and mercury have had, perhaps, each a share.

Classification of syphilitic symptoms.

According to Ricord, the drama of syphilis is divided into three acts or parts :—

1st. The primitive accident or chancre, which is the immediate result of contagion.

2nd. The secondary accidents or constitutional poisoning resulting from this infection.

3rd. The tertiary accidents, rarely showing themselves before the end of the sixth month.

To these Bazin has added a fourth, which comprises the visceral lesions, and which he designates under the name of the quaternary period. I would observe, in passing, that it is much to be regretted that such terms as primary, secondary, tertiary, &c. cannot be expunged from among the technicalities of syphilis. They imply that the syphilitic drama consists of so many distinct acts. They give the idea that

the curtain must rise and fall so many times before the play is over ; in short, that the performance is still unfinished unless tertiary and quaternary symptoms present themselves. All this tends to perpetuate, as far as nomenclature can, the old notion that syphilis of itself always gets worse, and never gets better spontaneously.

Ricord's division is anatomico-chronological. He takes into account not only the time at which certain symptoms appear, but likewise considerations furnished by the state and physiological relation of the local affections. He holds—although in this respect his opinions are of late somewhat modified—" that the primary affection alone is contagious ; that the secondary symptoms are not contagious but hereditary," and lastly, " that the tertiary symptoms are neither contagious nor hereditary, but that they predispose to scrofula."

German authorities do not adopt the classification of Ricord. Baerensprung of Berlin looks at the question in an anatomico-pathological point of view. He admits syphilis to have a period of hyperæmia and a period of tubercle. Secondary syphilis, according to him, manifests itself by inflammations limited to the superfi-

cial layer of the corium (maculæ and scales), and hypertrophy, more or less considerable, of the papillæ; papulæ and condylomata, and ulcerations having a condylomatous character. Affections of the iris, the testicle, the liver, the bones, ulcerations which destroy the tissues deeply, are ranged by him among the tertiary symptoms. Sigmund of Vienna adopts a division purely chronological. Virchow, as a pathological anatomist, classes the symptoms of constitutional syphilis into two groups. One of these has a passive or negative character—marasmus, visceral degenerations; the other embraces the active phenomena—various inflammations.

Lancereaux's division is simple, and eminently practical:—

1st. The period of incubation (from the day of infection up to that on which the chancre makes its first appearance).

2nd. The period of the local eruption (during the existence of the chancre).

3rd. The period of the constitutional eruptions (during the time the secondary symptoms exist).

4th. The period of gummy productions (the

time of the tertiary and quaternary symptoms of other writers).

For clinical purposes the arrangement given by Diday of the successive phases which syphilis undergoes in its evolution is, I think, the simplest and the best. According to him, syphilis, when not hereditary, presents eight features worthy of careful scrutiny, provided the investigation of them is within our reach :—

1st. The contaminating cause.

2nd. The period of incubation.

3rd. The initial lesion (the chancre itself).

4th. The second incubation.

5th. The prodromata.

6th. The first evolution of constitutional symptoms.

7th. The glandular affections.

8th. The successive relays of eruptions, and other symptoms, often, but improperly, called relapses.

It is by a careful analysis of the symptoms, which may be grouped under these eight heads, that we may arrive at a tolerably accurate conclusion with regard to the severity of the attack of syphilis under which any patient may be suffering. It requires but a small experience

to see that syphilis, like all other diseases of the kind, presents itself to us sometimes in a mild, sometimes in a severe form. The most important thing which science can hope to do in the treatment of this formidable complaint, is to detect and lay down with precision the symptoms by which we may be able to predict that the complaint is about to run a mild or a severe course ; whether, in short, we can afford to allow the work to be executed by nature, with little or no help, or whether it will be necessary for us to step in and use remedies, which, although useful in one way, are certainly injurious in another ; to learn, in fact, how long we may stand by, watching the spontaneous evolution of the disease, and skilfully to determine the moment when it may be necessary for us to have recourse to those measures which correspond to the ergot, the forceps, or the cephalotribe in the hands of the accoucheur.

The celebrated Astruc, in the end of his remarkable work on " Venereal Disease," gives an interesting account of the methods of cure used by the Chinese ; he says they have two modes of treatment, one which drives out the disease gradually by gentle sweats ; the other which

takes it by storm. The latter is accomplished by mercury, or "*kinfen*" in the Chinese language. This is exactly what requires good generalship on the part of the practitioner, viz.—to determine the kind of case in which mild measures will be successful, or that in which he must fall back on his storming party—his "forlorn hope."

It would be foreign from my purpose to enter into any discussion as to the causes which make syphilis mild in one person, severe in another. The truth is, we know very little about this; but the fact is so. The "vérole faible" and the "vérole forte" of Diday (which you may translate as you please, the mild and inveterate, or the benign and the malignant syphilis) are met with in practice; and this is, after all, the best division of the subject for clinical purposes; it is in fact the division into syphilis which is curable by simple rational hygienic measures, and that which requires mercury.

I consider it all nonsense to call these syphilis and syphiloid, syphilis and pseudo-syphilis. They are one and the same disease, differing in intensity as other diseases of the same kind

differ in intensity, and needing different treatment according to these differences. It is in the highest degree unphilosophical to make distinctions where no real distinctions exist.

The first great step towards proving that syphilis is a true toxæmic disease, and therefore one capable of self cure, was made by Carmichael.

Mr. Rose, of the Coldstream Guards, followed up what he had begun. He had a field for research among the soldiers of his regiment, which offered him a means of obtaining more accurate results than most persons in civil practice can hope to obtain. By direct observation he proved that all primary syphilitic affections could be cured without mercury, and that the secondary lesions which followed also in time gave way to mild and simple treatment without mercury. "In my opinion," says Sir William Lawrence, "this is the most important step that has been taken towards understanding the nature and treatment of the venereal disease, and I should place the truth thus"—originating with Carmichael, and "established by Mr. Rose, far beyond any of the speculations contained even in the work of John Hunter."

The clear-sighted Graves, that great and philosophic physician, gave its full value to this truth. "Mr. Carmichael of Dublin," he says, "was the first who materially improved this important practical branch of our profession, and taught, in a clear and scientific manner, when mercury ought, or ought not, to be exhibited."

The slowness with which practitioners have come to see in syphilis a disease not essentially different from other toxæmic maladies; the tenacity with which, even to the present hour, some cling to a mercurial treatment in all syphilitic cases, are due in a great degree to the old, but erroneous, idea to which I alluded in my former lecture—viz., that syphilis is a disease with an unconquerable tendency always to go on from bad to worse, unless checked by the specific action of mercury, which has been supposed to destroy the venereal poison as an alkali neutralises an acid.

Carmichael fell into the error of believing in the plurality of the syphilitic poisons; he attempted to show that there were several distinct kinds of primary syphilitic sores, each followed by its peculiar set of secondary symptoms. He conceived that, in the case of

each distinct primary syphilitic sore, there was a distinct poison—a germ or seed put into the soil ; that we had, as I may say, the oats sore, the wheat sore, the barley sore, and the rye sore, each bearing in time its own crop. He thus looked upon the papular, the pustular, the scaly, and the rupial eruptions as the results of different poisons. Experience has not supported this view; the different forms of eruption are due to the soil, not to the seed. There were many who could see Carmichael's error, and ridicule it, who failed to catch the fundamental truth which ran through his observations. I ask, what was Carmichael's practice ? In practice he separated the sheep from the goats—the cases which need mercury from those that do not—the cases, as I may say, of natural labour from those requiring instrumental interference. This truth, "éclate dans l'œuvre entière de Carmichael, ce profond observateur si méconnu, si travesti." Diday gives merit to whom merit is due, and I, gentlemen, preach to you the truth I learned from my first master, and I preach it to you with all the earnestness which arises from conviction of its truth.

Although I admit that we at present know

no remedy which exercises so great an influence over syphilis as mercury, yet I very confidently affirm that the majority of the cases which come before you in practice may be cured without taking one single grain of it, and in after years they will be healthier, haler men than if they had been treated by mercury.

But some one of you says, "if mercury is the most powerful remedy against syphilis, why not use it in the milder as well as in the severer cases? what harm does it do?"

This is a question which would be answered very differently by different practitioners; some assure you that mercury is a tonic, that men thrive and fatten on it; others tell you it is an infernal agent, to be avoided as death or sin, that it is a source of disease worse than that it is intended to remedy.

Here again, gentlemen, although I venture to give you my own views, I do not ask you to adopt them. Do not blindly swallow my assertions, or those of any one else. Keep your eyes open; observe, and note results for yourselves. You stand exactly where I myself did fifteen or twenty years ago. You halt between two opinions. You stand as I myself

did, to use a homely comparison, like the ass between the two bundles of hay—you know not which to turn to.

That mercury is a very powerful remedial agent I do not question : but it is potent for evil as well as for good : it is as a two-edged sword ; while it cuts the disease at the one side, it cuts at the constitution on the other. What the knife is in surgical practice, what the crotchet and the perforator are to the accoucheur, mercury is as a therapeutic agent. It should never be administered without duly considering, whether the injury which it inflicts on the constitution, may be fairly regarded as compensated for by the benefit which is likely to result.

The greater ills said to arise from the use of mercurials have been, I think, exaggerated. At least, as these preparations are generally exhibited in the present day, I have rarely seen palsy, caries, madness, etc., as a consequence fairly traceable to this cause. An impartial consideration of the reports of the diseases met with among the workmen employed in mercury mines at Idria and elsewhere, as well as among mirror makers, gilders, etc. who are exposed to

mercurial vapours, does not lead to the conclusion that these very formidable consequences of mercurial poisoning are so common as some would have us to believe.

The minor ills arising from the use of mercurials meet us at every turn. Cases like the following are of almost daily occurrence :—

A young man, as a boy the healthiest of a very healthy family, met with a severe injury of the eye. According to a practice happily less frequent than it used to be, he was kept for some weeks in a dark room and mercurialized. Years afterwards he is the least robust of his family. He is sensitive to changes in the weather; before he is up in the morning, he knows from what direction the wind blows. By slight irregularities of diet, dyspepsia is induced; the white of the eye is jaundiced, and the urine loaded with lithates and with bile. In such cases the gums often recede from the teeth; neuralgic and rheumatoid pains pester the patient; he is a weaker vessel than he was before; convalescence from slight illness is slow. Such individuals are more a prey than their neighbours to that slighter form of melancholia which we commonly call "the blues."

The use of mercurials for any considerable time transforms a moderately strong man into what we ordinarily call a miserable devil. It makes him hippish and hypochondriacal, and gives him a greater proclivity to disease than others. In short, "the thousand natural shocks that flesh is heir to,"—even in the most robust of us—become, in his case, multiplied into ten thousand.

As mankind in the aggregate suffers more annoyance from such creatures as mosquitoes, gnats, and midges, than from the depredations of the lion and the tiger; so the minor ills arising from mercury, in their aggregate, bear harder on mankind than the more formidable but rarer affections of a grave character which are traced to it.

Such, gentlemen, are my views, yet I know that you will meet some who have enjoyed large opportunities of practice, and yet have not recognised the ill effects arising from mercury; they say it does no harm and may do good; and so it becomes taught as a principle (I do not now speak merely of the treatment of syphilis), that when you are in doubt as to an obscure affection, you should give mercury: it is said—fire into

the bush: you may have the good luck to shoot the hare which perchance is lurking in it, and you do the bush no harm.

Against such a principle I cannot speak too strongly. To be in doubt is to be in ignorance. It is better far to admit one's ignorance, than blindly have recourse to a remedy which the experience of mankind admits to be anything but harmless. It is a principle which inculcates that you are to inflict upon your patient a very certain injury, with a very slender chance of doing him any good. It is a principle against which it may seem to some of you almost ridiculous to have to raise one's voice in the present day; yet, I assure you, it is one even still but too generally acted upon.

To return, however, to the subject of syphilis, I have I trust explained to you the apparent paradox—that while I admit that no remedy exercises such an influence over this disease as mercury, I should recommend you to have recourse to it in practice as rarely as possible.

There are in No. 2 Ward, at the present moment, four patients—

Peter K., . . 18 years of age.
Michael B., . . 25 „ „
Michael D., . . 22 „ „
Matthew M'D., . 58 „ „

suffering from secondary venereal symptoms, each presenting characteristic eruptions, etc. These patients have been under my care from the first—that is, these four have not, as some others, been treated mercurially by any other practitioner before admission to this hospital. Of these four, one is taking, and one has used, mercurials; two have not, and, I hope, never need take any.

To point out to you the principles which guide me in making this important difference in treatment shall be the object of my next lecture.

In conclusion, I would observe that, in the wards of an hospital like this, you meet with a larger number of cases requiring the use of mercury, as a remedial agent, than you will meet with in ordinary practice; and for this very simple reason—the slighter cases, the cases of what Diday calls "vérole faible," do not require to come into hospital for treatment. The bulk of the cases of syphilis which you see here are severe, or malignant syphilis.

During ten years, while I was Medical Superintendent of the Mountjoy Convict Prison, I met with fifty-four cases of syphilis. This is a small array when compared with the hundreds and thousands which figure in the statistics of some. The power of accurate observation within prison walls, the certainty and precision of the facts, the removal of many of the disturbing influences which confound results and observations made on ordinary patients; above all, the power of watching for years the undisturbed progress of the case, give, however, a great scientific value to observations made within the precincts of a convict prison. Of my fifty-four cases, thirteen were from the first under my own care, never having been interfered with by any treatment until after their committal to prison. Of these thirteen, two only appeared to need mercurial treatment; the rest got well under that simple, rational, hygienic treatment which can be so well carried out within a prison, where habits of dissipation are at an end, and time is no object.

LECTURE III.

GENTLEMEN,

In all scientific questions where several forces are in action, and a certain effect produced by their combination, it is a difficult matter to assign to each cause its proper share in the result. This is the supreme difficulty in the solution of medical problems.

A syphilitic patient like Richard B——, in No. 2 Ward, may be compared to a billiard ball which has been struck at the same instant by several cues, and which rolls along in a direction the resultant of several forces. The syphilitic poison represents one cue; his wretched scrofulous constitution a second; his habits of dissipation a third; and the severe mercurial treatment which he has already (before admission here) undergone, a fourth. He rolls along in obedience to the combined influence of these causes. When such a complicated entanglement of "*veræ causæ*" exists, it is obviously

very difficult, as I have already said, for the most impartial and truthful-minded observer to assign its true scientific value to each. One is inclined to attribute everything to the syphilitic cue alone; another to the "whiskey punch" cue; while perhaps I may be accused by some of attributing too much to that one which has been handled by some brother practitioner — the mercurial cue. What I wish you to understand, however, is this: that the difficulty which surrounds the investigation of such subjects as that which now engages our attention is immense, and that this is owing to the action of a variety of influences, no one of which can be guaged with absolute accuracy. The instruments of the physicist or the chemist can be very imperfectly applied to such researches. Controversy on such topics should be as much as possible avoided, as it only succeeds in making each disputant clench his favourite cue the tighter, and deny altogether any effect save that in accordance with the theoretic view he holds to.

The important matter still, as regards syphilis, is to get hold of hard facts observed with scientific precision. It must be confessed that as

yet we know little of the natural progress of simple uncomplicated syphilis ; that is to say, uncomplicated by scrofula, debauchery, or specific treatment.

It is, above all things, necessary that you should enter on the study of such a subject with minds free from prejudice. No one who has not engaged in such researches can conceive the many sources of error that meet us at every point.

In the treatment of ordinary patients it is, I assure you, very difficult to be quite certain that one's directions are fully carried out. I recollect myself pointing out, with considerable satisfaction, a case of syphilis which was cured, as I supposed, without the administration of mercury ; yet I afterwards found that this individual, who was an hospital patient, had taken a share of the mercurial pills ordered for another person. On the other hand, Diday gives an amusing case in which he himself, having prescribed mercurial treatment, and attributed to it the patient's recovery, discovered, long afterwards, the boxes of pills untouched in the drawer of his patient's dressing-table ; yet his patient was *cured*, and, as

he says, remained cured for more than nine years without any mercurial treatment.

In a prison conducted on what is known as the "cellular system" no such sources of error can exist. We have perfect scientific precision in watching our cases.

Constitutional manifestations of Syphilis.

The following is the description given in the report of the Venereal Committee of the constitutional effects of syphilis:—"The constitutional manifestations of syphilis follow the primary sore at an uncertain interval of time, ranging from four to ten weeks;* the average term being about six weeks. Its first indication consists in a sense of chilliness, followed by heat of skin, accelerated pulse, general lassitude, and mental depression. These symptoms are accompanied by pains in the limbs, and especially in the joints, often of a severe rheumatic character. In the course of two days or more the skin upon the chest, back, abdomen, and arms—occasionally in severe cases over the whole surface of the body, exhibits, on examination,

* Not unfrequently the soreness of throat is the first symptom which attracts the patient's notice; he fancies he has an ordinary cold, with sore throat.

some form of eruption, most commonly of an erythematous or roseolar character of a pale pink colour. Such eruption terminates in copper-coloured patches.

"If the disease be severe, well-developed papules, vesicles, and pustules may appear over the back and head, intermingled with or following the rash. The pulse continues frequent. The throat exhibits a florid discolouration, which involves the tonsils and the neighbouring parts of the soft palate. Of the condition of the throat, the subject may remain for a time unconscious. This stage of the disease, which continues for some days stationary, may be preceded, accompanied, or succeeded by enlargement of the inguinal and posterior cervical glands. The latter, however, are not always affected. These indications are accompanied by impaired health, and by loss of physical strength.

"A sense of general debility prevails, coupled with pallor of the skin, the blood being said to be deprived of a portion of its red corpuscles. The tonsils ulcerate, and exhibit either an excavated ulcer, or a plain, flat surface, of a soft, red, flabby aspect. The hair falls off (alo-

pecia). On the side of the tongue at a yet later date, and generally on its under surface, are formed small white ulcers, three or four in number, of about the size of a split-pea, which, on healing, leave a white and somewhat depressed cicatrix, while others appear on the soft palate and roof of the mouth, on the gums, or at the angle formed by the two jaws. Condylomata, soft mucous-like ulcerations at the angles of the mouth, nostrils, nates, and female genital organs, iritis with its complications, and onychia frequently occur. Such are the various symptoms that mark the progress of syphilis in the majority of cases, and which may be said to belong to the acute form of the disease. There is, however, another group of symptoms not preceded by febrile derangement, and more chronic in character. To this belong psoriasis, lepra, and tubercular eruptions, honey-comb eruption of the palms of the hands, the excavated ulcer of the tonsils, and enlargement of the testicle. All these affections are in a remarkable degree almost destitute of pain."

In severe cases these symptoms succeed each other, wave after wave, eruption after eruption,

for four, five, or six outbursts, with intervening periods of betterness. In mild cases, one, two, or perhaps three crops of slight eruptions end the affair.

That syphilis presents itself to the practitioner in forms which vary greatly in severity, that common sense and reason indicate that the treatment should vary with the severity of the complaint—these are the simple principles which I must now ask you to bear in mind. The greatest of all practical questions with reference to this formidable complaint appears to me to be—how are we to discriminate the one class from the other? how are we to separate the cases of benign from those of malignant syphilis? You may justly say to me—"You have already said that it is not possible, with anything like certainty, to diagnose the simple from the syphilitic venereal sore; to say of one sore that it will be the forerunner of constitutional syphilis—of another that it will not. You admit that it is a matter of difficulty, if not impossibility. How, then, can you hope to tell in advance whether the constitutional disease which will succeed the syphilitic sore may turn out to be mild or severe?" Let me say

in reply, that you must wait patiently and watch carefully. As the gradual evolution of the complaint goes forward, you will perceive certain indications—certain circumstances with regard to your patient's age, habits, constitution, etc. which will indicate to you with considerable precision the course the complaint is going to run, and you must adapt your treatment accordingly. But you say again—"Are we to wait and watch, looking quietly on at the evolution of this formidable malady? are we not rather to attack it at once, and by mercurial treatment in the beginning to prevent constitutional disease?" Gentlemen, let us be candid. We cannot prevent the constitutional disease.* On this subject the evidence brought before the Venereal Committee exhibits a mar-

* Although not unanimous upon the subject, yet a large number of observers give a negative reply to the question, "Does the administration of mercury prevent the occurrence of secondary symptoms?"

Mr. Skey, President of the Committee on Venereal Diseases, says:—"I think it is clear that the primary sore treated by mercury is as likely to be followed by secondary disease as the primary sore not treated by mercury."

Mr. Longmore, of the Military Hospital at Netley, says:—"I have been taught by experience not to believe that the development of secondary symptoms is prevented by giving mercury."

Sir W. Fergusson, King's College Hospital, states that he

vellous unanimity. The report says :—"No treatment by mercury, whether moderately or freely administered for this purpose, can give exemption from the liability to constitutional disease." It is true that a few of the persons examined before the Venereal Committee adhered to the opinion which was so confidently put forward by the last generation of practitioners—viz., that constitutional syphilis is prevented by the mercurial treatment of the primary disease ; but the error of our ancestors is easily explained. They treated all ulcers on the genitals with mercury ; four out of five of these were simple sores ; in four out of five no secondary disease followed, or ever would have followed under any treatment ; and they attributed to mercurial treatment what was in reality due to the non-infecting character of the simple

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does not think the action of mercury gives any immunity from constitutional symptoms.

Mr. Langston Parker, Queen's Hospital, Birmingham, in reply to the question, "Do you think that the treatment by mercury gives any exemption from the secondary disease ?"—says, "No, I do not."

Mr. Erichsen, of University College Hospital, speaking with reference to the syphilitic (hard) sore, says :—"I cannot say that I have ever seen a case in which a man has escaped the secondary symptoms under any form of treatment."—*See Repor of Venereal Commission.*

sore. If, therefore, you fully recognise the fact that you cannot prevent constitutional syphilis from coming on, you will have less scruple in calmly watching the evolution of the disease, and you will be more reconciled to the issue when you know that this is the surest mode of obtaining the evidence—the all-important evidence—on which your prognosis and your treatment are to be based. I have already told you in a former lecture, that Diday speaks of eight distinct and successive features which mark the progress of every syphilitic case.

1st. The contaminating cause. We have comparatively little opportunity in this country for investigating it. The method of confrontation, as it has been called, the tracing home of the syphilitic affection to its source in the female, the confronting in fact of the sore on the male genitals with that of the parent sore from which it takes its origin, has borne good fruit, and been one of the most decisive methods of proving the duality of the venereal poison. Owing, however, to the uncontrolled condition of prostitution in this country, we have but rare opportunity of doing it, and for practical purposes we may set aside any evidence which we are likely to derive from this source.

2nd. The first incubation—that is to say, the period which elapses from the time of the impure contact until the moment when the sore becomes apparent—is a point upon which we can sometimes obtain precise information, and, when we can, information of great importance. It may be laid down as a general rule, that the longer the period of incubation the less virulent the infection. We have already seen that considerable difference of opinion exists with reference to the duration of this period of the first incubation. In ten cases of inoculation from secondary lesions, the mean incubation has been 28 days ; in two cases of inoculation from primitive lesions, the mean incubation has been 18 days ; while Diday assigns 14 days as the mean period for incubation in the ordinary run of cases. As in gonorrhœa, so in syphilis, the longer the period of incubation, the less virulent, in all probability, the nature of the virus ; but in truth we cannot build much upon this with reference to our prognosis.

3rd. The primitive lesion, that is to say, the chancre and its characters, have been thoroughly studied, and appear to afford some important testimony. The initial lesions, unattended with much induration, may be stated, as a rule, to

be the forerunners of the milder form of syphilis. The unindurated syphilitic chancres, which have been described by various writers under so many names (the venerola vulgaris, the chancrous erosion, the condylomatous affection, the superficial erosion, patchy excoriation, superficial primary syphilis, the chancriform erosion), appear from the statistics of Bassereau generally to give rise to mild syphilis. Thus, from his tables, we find of 170 cases of roseolar eruptions, the primitive lesion was in 146 of them an erosion ; in 24 of them, a hard chancre.

4th. The period of the second incubation. The duration of this period has not been accurately fixed as yet—that is to say, the period over which it extends. Some authors date it from the time of the impure contact to the time when the secondary lesions declare themselves. Others date it from the day upon which the chancre is observed, up to the period when those constitutional symptoms present themselves, which are about to usher in what we call the secondary lesions. The latter is probably the best definition, and can, generally speaking, be accurately defined, as we can almost always

find out from the patient when it was that the sore was first noticed, and we can invariably discover the time at which the malaise and general discomfort supervenes—which is the sure indication that the constitutional symptoms are about to make their appearance. It is a remarkable fact that this period is rather longer in cases of severe syphilis, while the milder forms generally develop themselves more rapidly. Diday gives forty-seven days as the average period of the second incubation for cases of "vérole faible;" fifty-three days as the average period in cases of "vérole forte." The mild roseolar eruption appears early, the severer forms of eruption appear later. In determining, therefore, the severity of the cases, the length of the period of the second incubation affords valuable evidence.

5th. The prodromata. Under this head are placed the anomalous symptoms which usher in the first outbreak of constitutional symptoms —headache, rheumatic pains, or, as they are called, osteocopic (οστεον, a bone, and κοπος, fatigue, bone-ache), syphilitic chlorosis, depression of spirits, tendency to rigor and general discomfort. It is quite certain that, as in many other

eruptive affections, these general symptoms may sometimes be very aggravated, and yet the parturient mountain gave birth but to a mouse. Severe prodromata are by no means necessarily the forerunners of severe syphilis.

6th. The first outbreak of constitutional symptoms is, as Diday expresses it, the true touchstone of the intensity of the syphilitic infection. This outbreak shows itself in the mucous membranes or the external integument, very generally first upon the scalp, in the form of the corona veneris. Fortunately, the benign forms are the most frequent. More than one-half are of the roseolar variety; something like twenty-five per cent. belong to the papular; while the scaly, vesicular, and pustular are of much rarer occurrence. These syphilitic eruptions, or syphilides, as they are called, are after all most important indications of the severity of the syphilitic intoxication. I believe it is rarely necessary to have recourse to specific treatment for the roseolar form of the disease—very rarely indeed in persons under thirty years of age, and I should venture to say never, when we find that the second crop of eruption, which may follow some weeks later, is not of a severer kind than the first.

7th. The glandular affections, technically called adenopathia. To this group belong the glandular affections which appear in the lymphatic glands throughout the body, first in the groin, afterwards in the neck, sometimes in the axilla.

These, generally speaking, have little tendency to suppurate unless called into action by some cause which may be regarded as extra syphilitic, as a scrofulous diathesis, the occurrence of erysipelas, or local irritation of some kind. In the milder cases these glandular engorgements gradually become dissipated. When they suppurate from local causes, they form a very troublesome complication, and frequently necessitate a specific treatment.

8th. Successive relays of symptoms. This aspect of syphilis, in which its tendency to return again and again is shown, has been misnamed relapse. It is, in truth, no evidence of relapse, but evidence of a natural tendency in the complaint not to die out at once, but to die out gradually, making itself visible in a succession of outbreaks at intervals of some weeks, and each often slighter than that which has gone before.

If, however, you find this line of progress is

departed from—if the second and third crops of eruption follow each other quickly, and each is worse than that which has preceded it—we have in this the most important of all indications for a specific treatment. "If," says Diday, "a roseolar eruption at first has been succeeded by a squamous eruption for the second crop, the prognosis is altogether different from what it would be if the crop succeeding the first consisted of lesions diminishing in severity. But, besides the peculiarity of each outburst, we should never lose sight of the degree of rapidity with which they follow each other." Let us compare these two cases:—

Time.	Case of Mild Syphilis.	Case of Severe Syphilis.
	Days.	Days.
Number of days of second incubation, *i.e.*, from the appearance of the chancre to the appearance of first crop of eruption	40	60
Number of days from date of appearance of first crop to appearance of second	38	28
Do. from appearance of second to appearance of third	134	20
Do. from third to fourth crop	—	32
Do. from fourth to fifth crop	—	44

In the mild case, but few successive crops after longer intervals ; in the severe one, more

numerous crops separated by shorter intervals.

You may ask me, then, why I have not adopted a specific treatment in the case of Peter K——, at present in No. 2 Ward. He is eighteen years of age, and was admitted on the 19th of August last, having on him a roseolar eruption. He was discharged, seemingly well, on September 23rd.

He was re-admitted on October 21st, having a papular eruption on his arms, shoulders, face, and thighs.

This got better, but on November 30th a fresh outburst took place, in which pustules were mingled with the papulæ.

Erysipelas of the head came on, and, as a consequence, the glands of the neck suppurated.

A fourth slight eruption occurred at the commencement of the present month. No mercurials have been given in this case, yet you see the patient is now every day getting better.

I tell you, gentlemen, that in this instance I have departed from my own principles, and I have done so in order the more to impress upon you the power which syphilis has of working its own cure. This is a case in which I have gone beyond my usual practice, in order to impress upon you this most important of all

the truths connected with syphilis ; and I have erred as regards the principles which I wish to teach you—at least, I have violated the general principles which I wish to lay down, in having adopted throughout in this man's case a non-specific treatment.

Upon what grounds in the case of Matthew M—— is mercury administered, while to all appearance the disease does not appear to bear upon him so heavily as upon the other ? I answer, this man is fifty-eight years of age ; he has escaped from syphilitic infection for fifty-eight years ; at that age the reparative powers are feeble as compared with younger subjects.

Men over fifty have lost the elasticity and vigour of constitution, which are so important in the struggle with a morbid poison. You all know that youth is the time to get typhus over you. Typhus hits very hard after the age of fifty ; so does syphilis. His age alone determines a mild mercurial treatment in his case.

Michael D—— has a chancre, now healed, an indolent bubo, a roseolar eruption on the chest and abdomen, with severe rheumatic pains and slight mucous tubercles in the fauces. He is

twenty-two years of age. Watch his case; you will find that he will need no specific treatment to effect his cure.

Michael B——, twenty-five years of age, had scrofulous abscess in his neck in childhood, the traces of which he still bears on his neck. Having contracted syphilis, he was exposed to circumstances in the highest degree likely to make it severe. He is a cab-driver on night service; he has been much exposed to the inclemency of the weather and frequent wettings; he admits that he had recourse to the consolation of spirituous drink as frequently as he could get it. Such circumstances are most likely to change a mild syphilis into one of a malignant character. Such has been his case. The syphilitic eruption was papular; abscesses formed in the neck, axilla, and at the ankle; iritis supervened. Mercurial treatment was indicated in this case.

Without going the full length of the anti-mercurialist school, I admit that in my judgment the great question as regards syphilis is, how far we can judiciously dispense with a mercurial treatment. Von Baerensprung's view coincides with that which I have arrived at; ac-

cording to him, "Mercury does not cure syphilis; mercurialism causes the symptoms of the disease to disappear for a time. As long as the mercurial action lasts, syphilis remains in a latent state, reappearing afterwards by so much the more terrible in proportion as the mercurial intoxication has weakened the constitution of the patient." Nevertheless, there are cases in which you must deal with the symptoms.

The cases—and they are not a few—in which I have seen direct proof of the power of syphilis to get well without mercurial treatment, are those on which my own convictions are based. There are other facts, however, to which I may point; and I fancy some may be surprised to find proofs drawn from the writings of those who are themselves strong and decided mercurialists. Moliere's "Bourgeois Gentilhomme" was surprised to find that he had been talking prose all his life without knowing it. I am not certain that the mercurialist will be as well pleased to be told that he has been practising non-mercurialism without knowing it. In fact, patients cured by the calomel vapour-bath are cured by non-mercurial treatment. I am now satisfied that calomel used in this way has no

specific effect. Calomel is not absorbed by the unbroken skin.

When I was a student I frequently ordered, under the direction of the late Dr. Hutton, calomel ointment for the treatment of psoriasis and lepra, not syphilitic. Those who were acquainted with the practice of this eminent surgeon, will remember that he frequently prescribed an ointment consisting of one drachm of calomel to an ounce of lard, to be frequently rubbed over the surface of the body in such cases. I was struck by the fact that this mercurial preparation, so active when given internally, never mercurialized when rubbed over the skin in the form of ointment. I have known pounds of it to be used—rubbed in in ounces daily over the entire body—but I never knew a case to be salivated by it. Later, when turning my attention more to the subject which at present occupies us, I found that mercurialization did not follow even the very frequent use of the calomel vapour-bath—provided the patient did not let his head into the vapour and inhale the sublimated calomel. When a patient leaves the calomel vapour-bath, if we scrape the surface and examine in the micros-

cope what has been there deposited, we find the sublimated calomel in crystals — a form ill-adapted for cutaneous absorption.

Doubting that it ever was absorbed in this way, I made some experimental observations. Some ounces of finely levigated calomel were tied in a muslin bag. Every day, after coming out of an ordinary warm bath, the patients were dusted over with the calomel in the bag, from the waist down. I have myself rubbed ounces of calomel over the legs, abdomen, and scrotum, leaving the patient as white as a miller with it, but I have never found it salivate the patient.

There is a simple method by which we can test in many cases the general action of mercury on the human organism. If we apply to the skin a small disc of gold (or anything gilt), as a patient becomes salivated it becomes *silvered.* I generally use one of the discs of an old gold shirt-stud, stuck to the skin in the axilla with a piece of sticking-plaster. I have not found this test give evidence of general mercurial absorption, when calomel has been freely rubbed over the lower half of the body day after day. In fact, so convinced am I

that under ordinary circumstances the cutaneous absorption of calomel does not take place, that although I have no love for it, yet, so far as regards fear of mercurialization, I should not mind spending a month up to my neck in a sack of calomel. How is it, then, that the calomel bath has been found to do so much good ?

It is, gentlemen, simply the vapour-bath acting beneficially on a malady which has a natural tendency to get well of itself. Monsieur Jourdain has been speaking prose without knowing it. The recovery of the patient is attributed to a cause which has, in reality, nothing to say to it.

I have now, gentlemen, endeavoured to point out to you some of the general indications which will enable you to determine whether you have a severe or a mild case of syphilis to deal with. The details of treatment you must learn at the bed-side.

You must not suppose, however, when I say that the majority of cases of syphilis may be cured without the use of mercurials, that I would have you leave such cases to themselves. By no means.

If a syphilitic patient smokes and drinks beer half the day, and plays cards and drinks punch half the night, or if, like our patient Michael B——, the cab-driver, he is exposed night after night to wet and cold, and at the same time submitted to whiskey-punch treatment, his case will become aggravated—his disease will pass from the mild to the severe form. You must lay down strict rules for living. You must by simple means keep the skin, kidneys, and bowels in action. I am told, "Your cases at the Mountjoy Prison were not like ordinary cases in the outer world. You could there enforce hygienic discipline such as cannot be enforced in general." There is, no doubt, some truth in all this; yet the curing of soldiers and prisoners by an enforced hygiene proves the great power of such treatment; and it is at least your duty to put this strongly before your patient.

If he will not submit to the discipline and instructions necessary for his cure in the one way, he must be prepared to undergo a treatment which will leave him a more or less enfeebled man for the rest of his life. Let his blood be on his own head.

LECTURE IV.

GENTLEMEN,

I do not mean to trouble you with any very lengthened observations on the treatment of syphilis. I have already said that the details of treatment must be pointed out at the bed-side, yet I feel that my lectures would very incompletely answer the purpose for which they were intended, if I did not briefly touch on some points connected with the therapeutics of syphilis.

As students of the Irish School of Medicine, you may look, gentlemen, with very just pride to what has been done in this department by practitioners of Dublin. To Wallace we owe the introduction of iodide of potassium as an anti-syphilitic agent—an agent now universally admitted to be one of the most potent weapons which human skill can wield against this disease in many of its forms ; to Carmichael we are indebted for having led the van in opposi-

tion to that free and reckless use of mercurials, which has done, and indeed still does, so much mischief. He may almost be said to have inaugurated the all-important scientific study of the natural history of syphilis ; while Colles, Abraham Colles (whose memory is so highly revered within the walls of this great hospital), has, in his work on " Venereal Diseases and the Use of Mercury," given the most masterly sketch with which I am acquainted as to how we should handle the claymore against syphilis, should it become necessary to draw it from its scabbard.

I shall speak now of the treatment of syphilis, first, as regards measures of simple hygiene, and subsequently, as regards that method which is generally spoken of as specific treatment.

Let me, however, before entering on these topics, lay before you some of the conclusions lately arrived at on the subject of syphilisation.

In volume fifty of the " Transactions of the Medico-Chirurgical Society of London," you will find a very valuable contribution to our knowledge on this subject by Messrs. Lane and Gascoyen, surgeons to the London Lock Hospital. These gentlemen give a report of cases treated by syphilisation, or the repeated inoculation of

syphilitic matter in persons already the subject of constitutional disease. It is true their own opinions do not agree as to the curative influence of syphilisation ; the facts, however, which they record are not the less interesting and instructive.

Syphilisation.

Syphilisation.—This peculiar method of treatment originated with M. Auzias-Turenne about 1845 ; owing to the opposition of the French Academy of Medicine, it can scarcely be said to have been tested in France, except by the late M. Melchior Robert of Marseilles. M. Sperino of Turin tried it in a considerable number of cases. Professor Böeck of Christiana, however, is at this moment the champion of syphilisation ; he has developed the system on a large scale, and the publications of himself and his pupil, Dr. Bidenkap, have revived the interest in this subject.

The strange idea of curing syphilis by repeated syphilitic inoculations had its birth in France. It took its origin in this way. M. Auzias-Turenne, when studying the effects of syphilitic virus upon animals, perceived that after a certain number of inoculations, the inoculated animal gained a power of resisting the

chancrous virus. To the immunity from the disease thus established, or rather to the peculiar modification of the organism thus induced, Auzias-Turenne gave the name of syphilisation. In November, 1850, he announced the result to the Academie des Sciences. He naturally conceived that it would not be impossible to reproduce in man the effects which he had observed on the lower animals; some patients voluntarily submitted themselves to his inoculations; in these cases a complete immunity was obtained; and so the ideas of Auzias-Turenne became admitted within the domain of therapeutics.

The practice of syphilisation evoked extreme hostility in England; in fact, it was never fairly tried until undertaken by Messrs. Lane and Goscoyen, who commenced their series of observations under the direction of Dr. Böeck himself.

These gentlemen pursued the method recommended by Dr. Böeck, which is as follows:—At the commencement, three punctures are made on each side of the chest, and matter is inserted derived either from a person who has a primary syphilitic ulcer, or from the artificial

sores of a patient who is undergoing syphilisation. After an interval of three days, if the punctures have developed pustules, three other inoculations are made from them in the same region of the body, and this process is repeated so long as pustules are produced; the inoculations being made at intervals of three days, and the matter being always taken from the last-formed pustules. When at length these are not inoculable, fresh matter is employed, and the above process is repeated until a positive result can no longer be obtained on the trunk. The same practice is then commenced on the arms, and continued there until the punctures fail; when a similar process is pursued on the thighs until no more postules result, and a condition of immunity, more or less perfect, is arrived at. In the ordinary run of cases this occurs in from three to four months.

The average period during which Messrs. Lane and Goscoyen's cases were under treatment in hospital, was five months and sixteen days. The average number of inoculations practised in each case was 259, of which 145 produced chancres, and 114 were sterile. A method of treatment which entails the produc-

tion of some 150 chancres over the body can never, I think, be a popular mode of treating syphilis. From a very careful perusal of the valuable memoir of Messrs. Lane and Goscoyen, I must fully concur in the justice of the conclusion at which they arrive as to the therapeutic value of syphilisation. "Differing," they say, "as we do, on the scientific aspect of the question, we are entirely in accord as to its practical bearings, and we are decidedly of opinion that syphilisation is not a treatment which can be recommended for adoption. We consider that, even if it could be admitted to possess all the advantages claimed for it by its advocates over other modes of treatment, or in many instances over no treatment at all, it would not sufficiently compensate for its tediousness, its painfulness, and the life-long marking which it entails upon the patient."

Curative effect of Syphilisation.

Has syphilisation any curative effect whatever? It seems strange, indeed, that at this period of the world's history we should not be able at once, and with certainty, to answer this question. Yet, to our shame be it confessed, we cannot. We do not as yet know enough about

the simple and undisturbed progress of syphilis, to say whether fifty cases of the complaint, with no other treatment than the dietary, rest, regular hours, &c. of an hospital, would take longer to get well than fifty similar cases submitted to syphilisation. Mr. Lane believes that *it does exercise some* beneficial and specific influence over the progress of the disease. Mr. Gascoyen, on the other hand, thinks that the natural tendency to recovery, which an early and uncomplicated constitutional syphilis exhibits with the lapse of time, and under circumstances favourable to the general habit, is sufficient to account for the subsidence of the secondary symptoms during syphilisation. It is gratifying to find so competent an authority as Mr. Gascoyen so deeply imbued with the belief that "an early and uncomplicated syphilis" has so great a natural tendency to recovery. For my part, I should certainly agree with him. If the possibility of the spontaneous cure of syphilis be no longer contested, from that moment it becomes difficult, if not impossible, to assign its true therapeutic value to any mode of treatment—syphilisation among the rest. In order to determine whether the cases of cure attri-

buted to syphilisation are not in reality due to the natural progress of the malady, there must be some definite standard of comparison. Hence the extreme value of cases carefully noted, and accurately observed for years, and which have undergone no other than treatment by hygienic measures.

Prophylaxis and Hygiene of Syphilis.—The prevention of syphilis, or at least the attempt to check its ravages, is one of the greatest objects connected with state medicine. The rude machinery for this purpose adopted in Great Britain has, until quite recently, contrasted most unfavourably with the schemes of our continental neighbours.

Preventive treatment of Syphilis.

The Englishman's respect for personal liberty, as well as a sort of moral instinct which made him unwilling to handle an unclean thing, caused us as a nation to shrink from legislation on such a subject as the control of prostitution. Our soldiers, our naval and mercantile marine, and of course the public, have in consequence suffered to an extent quite incredible. We are, however, commencing a better system. Of this aspect of the prophylaxis of syphilis I do not speak at present.

Various plans have been devised in order to prevent the occurrence of venereal disease in an individual after a suspicious connection. These may almost all be summed up in a few words:—strict attention to cleanliness, thorough washing. There can be little doubt that proper attention to this simple preventive measure would greatly lessen the evils arising from venereal disease of different kinds. A number of practitioners have recommended various lotions, with the design of adding to the wash such ingredients as may destroy any venereal virus lurking in the folds, or coming in contact with slight fissures or excoriations, around the corona or about the frenum. Lotions containing acids, alkalies, alcohol, wine, sulphate of zinc, lead, etc., have been thus ordered. Langlebert recommends a mixture of soft soap, potass, and alcohol. Rodet of Lyons a lotion somewhat more caustic, viz.:—

℞ Ferri perchloridi liquoris fortioris.
Acidi hydrochlorici.
Acidi citrici aa. ℥iv.
Aquæ distillatæ fl. ℥iv.
M. Fiat lotio.

How long after contamination the use of such appliances may serve to neutralize a poi-

son remains doubtful. All we can say for certain is, that the sooner any poison is washed away or destroyed the better.

Hygienic treatment of Syphilis.

When it is once admitted that syphilis is a true toxæmic disease, that it is a malady, in fact, depending upon the admission into the system of a poison which, under favourable circumstances, is capable of spontaneous elimination, then it follows that hygienic measures must play a capital part in its treatment. If, as I have said in a former lecture, a struggle is going on between the constitution of the patient and a disease which has made an inroad into his system, it is of course of prime consequence that the constitution should be well backed up in the conflict.

To maintain the general health, to uphold the natural vigour of the constitution, to keep the powers of the organism up to that level which is best adapted to accomplish the elimination of the virus—this is the object of the hygienic treatment. When to this we add the use of those simple medicaments which, acting on the skin, bowels, and kidneys, tend to keep their functions in healthy play, yet are

not supposed to exercise any specific action, we then have that plan of treatment which has been called the rational or methodic treatment of syphilis.

As regards diet, the syphilitic patient should, as a rule, live generously. He should live on simple and nutritious food, taking as much as his appetite indicates to be sufficient—neither weakening his frame by taking less, nor striving to take more than his stomach can readily deal with. In prescribing a dietary, attention should always be paid to the patient's usual mode of living ; yet, believe me, you will generally find it necessary to insist on your syphilitic patients living tolerably well, many of them are so imbued with the idea that abstinence is necessary for their cure.

Next, probably, in importance to diet is good air, a well-ventilated sleeping apartment free from damp. The damp and crowded dwellings of the poor exercise a most baneful influence over the complaint.

Let your patient have seven or eight hours sleep of a night; let him give up theatres, balls, card and supper parties ; let him have such moderate exercise every day that, without being

exhausted or absolutely fatigued, he may be well satisfied to go to bed each night at ten o'clock.

If you have influence enough over your patient to induce him to adhere to such directions; to shun those selfish indulgences which tend to debilitate the frame; and if he has youth and a tolerably good constitution on his side, you may look forward to his case running its course favourably as one of "vérole faible."

If he is one of a delicate family of a scrofulous or gouty diathesis, then it is all the more necessary for him to leave nothing undone to keep up his general health.

But if, on the other hand, you have a patient to deal with who will not forego his selfish pleasures; who haunts the tavern and the billiard-room, smoking and drinking, breathing foul air vitiated by gas and reeking with tobacco-smoke, during the hours which he should give to repose, let him expect that to him syphilis will come in "all her Gorgon-terrors clad."

As adjuncts to hygiene, such simple medications as cod liver oil, chalybeate tonics, and warm baths play an important part. The first

is specially indicated when any strumous tendency exists; the second class of remedies, useful through the whole course of the disease, is particularly called for during those periods of syphilitic chlorosis (chloro-anæmia), so usually the forerunner of an outburst of eruption. Warm baths or vapour baths are the most effective means of keeping the skin in action. Medicated baths of various kinds are eminently useful; baths corresponding with those of the bromated and iodated waters of Kreuznach, the waters of Schlangenbad, Harrogate, Baréges, can be readily obtained in all our cities.

Tonic and exciting medicated baths are of great service in syphilitic as well as other affections of the skin; baths containing iodide or sulphuret of potassium, or arseniate of soda are eminently useful in the anæmia, chlorosis, or rheumatism connected with syphilis.

Dr. Noël Guéneau de Mussy recommends three and a-half ounces of subcarbonate of soda, with twenty grains of the arseniate, in a bath. No unprejudiced practitioner will deny the benefit of the Turkish and Russian baths. We have no means of inducing diaphoresis comparable to these.

Such a bath as the following :—

℞ Ferri sulphatis, ℥ij.
Sodæ sulphatis, ℥vj. M.

Dissolve in thirty gallons of soft water at 98° Fahrenheit for a bath—can be readily obtained even at the patient's home ; and thus the advantage of the chalybeate and the bath combined.

The bowels should be kept in action once or twice every day : for this purpose nothing answers better than some of the sulphurous mineral waters made artificially ; those of Bagnères-du-Luchon, of Baréges, of Aix les Bains, in Savoy, of Aix-la-Chapelle have gained a well-deserved reputation. The waters of Kreuznach are greatly praised against the intractable combination of syphilis and scrofula. I very commonly order the following imitation of the Harrogate sulphur water:—

℞ Sulphatis potassæ, cum sulphure, ℥iv.
Bitart. potassæ, ℥ij.
Sulphatis magnesiæ, ℥iij.
M. Fiat pulvis.

One teaspoonful of this powder to be taken in a tumbler of warm water every morning, or every second morning upon first getting up. The dose

should be increased or diminished according to its effects. The patient should take a short walk before breakfast, and by increasing the quantity of fluid which he consumes daily he should keep the kidneys in good action.

Syphilitic patients are themselves sometimes aware of a peculiar faint yet disagreeable odour emitted from the urine ; this is observed at intervals, and after each has passed away the patient finds himself better. It seems to resemble the odour which patients labouring under ague know as indicating the approach of an attack of fever ; and certainly points to the necessity of keeping these organs in good working order.

Some patients object to the large quantity of liquid necessarily taken in consuming mineral waters, and although this is one of the great advantages attending their use, you may have to direct something else ; equal parts of syrup of senna and fluid extract of sarsaparilla—a teaspoonful once or twice a-day in half a cup of hot water, acts well as an aperient, and suits those persons, not a few, who still retain an unbounded faith in sarsaparilla.

Chlorate of potash used internally, and also as

a gargle and mouth wash, is a great favourite with some. For the slighter forms of sore throat I often order the following :—

℞ Potassæ chloratis, ℥ij.
Mellis ℥j.
Aquæ ℥xj.

to be used as a gargle several times a day, and half an ounce to be swallowed three times a day.

The doses ordered to be taken internally should be swallowed slowly, in fact taken in sips, so as to be brought well in contact, in the act of swallowing, with those parts of the throat and fauces not reached in gargling.

Local treatment of Syphilitic symptoms.

The importance of the local treatment of all kinds of venereal sores, whether primary, secondary, or tertiary, cannot be over-rated. You have seen abundant proof of this in the terrible case of rupia, lately in No. 9 ward. The ulcers were so extensive that it was impossible to deal with all at the same time. You saw those which were touched with nitric acid, and afterwards dressed for some days with creasote ointment, healed rapidly, far outstripping those less energetically treated.

You have often seen the almost magical

effect of a large blister upon the hideous lupoid ulcerations of tertiary syphilis. I have seen some cases in which the local action of an accidental attack of erysipelas has entirely altered the appearance of the ulcer, and brought about rapid cicatrization.

In short, whether on the genitals, the mouth and fauces, or the skin, the local treatment of venereal affections forms a chief part of the therapeutics of syphilis. Prohibit tobacco-smoking, and the source of irritation once removed, "mucous patches" and ulcerations on the tongue, etc., for a long time recurring, will get well. Wash the surface, attend to cleanliness, and simply dust the part over with finely powdered starch, and you will quickly get rid of troublesome condylomata. Learn to overcome the more frequent and troublesome symptoms of syphilis; let your patient know that in the natural course of things he must expect recurrences; do not promise that relapses are at an end; by so doing you are pretty certain to get a disappointment, and to lose the confidence of your patient, and that equally whether you adopt a specific treatment or not.

The beneficial action of iodine in the treat-

Iodine.

ment of syphilis is beyond doubt; in some eruptions, in severe syphilitic rheumatism, and most forms of tertiary syphilis its efficacy is unquestioned. In 1831, Lugol published his observations on tertiary symptoms cured by iodides without the combined use of mercurials. This led the way to what may be considered the greatest discovery in syphilitic therapeutics of modern times—namely, the introduction of iodide of potassium as a remedy against syphilis. I have already said that it is to Wallace, of this city, that mankind is indebted for this boon.

I am glad to find that Lancereaux, one of the most learned and accomplished writers who has treated of the subject of syphilis, gives, in his exhaustive work, full credit to Wallace for being the first to introduce into practice this agent.

Lancereaux says :—" Wallace, of Dublin, has the merit of having first employed iodide of potassium, of having fixed the doses of it, specified the indications for its use, and thereby of having definitely introduced the iodide into the therapeutics of syphilis, placing this medicament almost upon the same level with mercury. He

commenced his experiments in 1832, and gave the results four years later in the form of four lectures.*

"One hundred and thirty-nine patients were observed, of whom six were affected with iritis, six with affections of the testicle, ten with divers diseases of the bones and articulations, ninety-seven with syphilitic skin affections, twenty with lesions of the mucous membrane of the mouth, nose, and throat; finally, three pregnant women were also submitted to the same treatment, with the object of preserving the fœtus from syphilitic affection. The preparation employed, *mistura hydriodatis potassæ* (as it was then called) contained two drachms of iodide of potassium in eight ounces of distilled water. Adults took half an ounce of this mixture four times a-day—that is to say, thirty grains of the iodide per diem." Lancereaux adds, "The happy effects of this remedy are so generally recognised, that we cannot refuse to it, in the present day, a place alongside of mercury itself."

Wallace's success soon attracted the attention of other physicians. In England, Judd, Savile, Winslow, Williams; in France, Trousseau, Ri-

* See *Lancet*, March, 1836.

cord, Gauthier ; in Italy, Brera, Sperino, Pellizzari ; in Germany, Guzman made trial of it and proved its good effects.

The acute observation of the illustrious Ricord soon detected that it is an agent which exercises more influence over tertiary than secondary symptoms. The deeper affections of the skin and mucous membranes, the gummy tumours of the cellular tissue, the lesions of the bones—such are the conditions which yield most readily to the use of iodide of potassium. It has been likewise recognised that it may be advantageously employed even in larger doses than those at first recommended by Wallace ; by degrees it may be increased from fifteen grains to one drachm or even more daily.

You have lately seen in No. 8 Ward a remarkable instance of the efficacy of this medicine in the case of a woman named Looney, suffering from nodes and very distracting osteocopic pains. She was ordered ten grains three times a-day, but by mistake took double that dose, taking sixty grains in the day ; she was relieved almost as by magic.

Although less prompt in its action, you saw the large nodes on the forehead of Williams, in

No. 2 Ward, gradually vanish under its use. Wallace made some amends for the grievous offence he was guilty of in inoculating healthy subjects with the poison of syphilis.

Mercury.

I approach the subject of the use of mercury with some diffidence, not because I have not made up my mind upon this point, but because I feel that I cannot convey to you my convictions upon this important subject. My convictions are founded upon facts and observations witnessed by myself. You have merely my testimony, and you have on the other side the testimony of persons quite as trustworthy, and as anxious to teach what they believe to be true. You are placed in the centre of a dilemma ; you can only get out of it by keeping your eyes open and observing for yourselves—observing cases not for a few weeks or months, as you usually see them in hospital, but for years ; observing, in short, such cases (as everyone has some opportunity of watching) as are likely to come in your way again and again through life, and noting whether those treated by mercury are, after two, three, four, or five years, *better men* than those treated without it.

My experience has led me to assume these two propositions as true—

1st. Upon most men mercury acts in a way very detrimental to the constitution.

2nd. In the majority of cases true syphilis can be cured without it.

Hence it follows that I have recourse to mercurials as little as possible.

Now, gentlemen, as regards the first of these propositions, I am aware that you will find many persons who have used mercury a good deal in their practice, who will assure you that it does no harm. That is not my experience. Let me call some witnesses, whose evidence will weigh with you as though it were given on oath from the witness-box :—

Sir Astley Cooper.—"It is lamentable to think on the number of lives which must have been destroyed by phthisis and otherwise, in consequence of the imprudent administration of mercury which prevailed among the older surgeons. The health of a patient is perhaps irremediably destroyed by this treatment."

Q. "Have you ever been able to trace any connection between the excessive use of mercury and those symptoms which are generally designated tertiary syphilis ?"

A. (Mr. Hilton)—"I have; and I think it is the deterioration of the health by the medicine, and not by the disease: that is my belief."

Q. "Have you seen bad effects from pushing the mercurial course too far?"

A. (Mr. Paget)—"Yes; and I believe the worst thing syphilis can produce is produced with the help of mercury. When the latter is carried too far, or so given as to injure severely the system of the patient, the effects are much worse than would be produced by syphilis if left alone."

Professor Syme, of Edinburgh.—"I regard mercury, not in all constitutions, but in many, as a poison. A very small quantity may be sufficient for the purpose. I believe that the modified use of mercury has perhaps done more, or as much, harm as the profuse administration of it."

Q. "Have you noticed the effects of syphilis on persons in after life, and do you believe that it tends to depreciate the health in after life?"

A. "That is a question, I think, of whether it is syphilis or mercury. I shall not say which, but undoubtedly people who have suffered from these two retain through life a peculiarity in

appearance and a proclivity to disease very different from their neighbours."

Q. "You used mercurials in your practice in early life. Having tested it fairly, were you induced to forego it as an anti-syphilitic agent, and to rely upon simple remedies ?"

A. "Yes. I think that mercury frequently relieves the existing symptoms of the disease, but it seems to have an effect upon the constitution which exposes the patient to some subsequent attack in a more aggravated form." —*Vide Report of Venereal Committee.*

I think, gentlemen, I need call no more witnesses to prove that mercury is a rather dangerous weapon to handle : that he who would not "push it too far" had better not use it at all in cases of "vérole faible"—in cases which can certainly be cured without it.

LECTURE V.

GENTLEMEN,

In the concluding words of the previous lecture I attempted to impress you with the conviction that mercury acts upon most men in a way detrimental to the constitution. I am, however, far from denying the powerful influence it exercises over the symptoms of syphilis. Let me, to-day, briefly consider the methods after which it is administered in the present time.

Mercurials used in the treatment of syphilitic, as well as other maladies, are sometimes given as alteratives—that is, in the hope of putting the patient in a better condition of health, but without producing any marked mercurial effect. Sometimes they are given with the intention of producing in a more or less decided degree the peculiar effect known as mercurialization.

Besides these effects, it appears to me that

some mercurial applications are only local in their action. These actions of different mercurials, or of mercurials used in different methods, must be carefully discriminated from each other. To one of them only can we assign any of that influence which has been called, and is still regarded by many as specific.

I have stated in a former lecture, that I have never known anything like constitutional mercurial action from the use of calomel ointment; yet this is a very useful ointment in many skin affections — syphilitic and other; its action seems to be local. Citrine ointment may also be used, more or less diluted, and rubbed extensively over the body. I think it is of real service in clearing away various eruptions, but I have never known it produce any affection of the gums. The ointment of the red iodide of mercury, so useful in lupoid ulcerations, also appears to have only a local action.

Extensive condylomata, by cleanliness and dusting the surface with powdered calomel, are quickly cured; yet here also there seems to be nothing more than a local effect. Possibly the sublimed calomel of the calomel vapour-bath,

on which I have already given my opinion, may have some similar local effect.

Administered as an alterative, many mercurials are given internally at considerable intervals, sometimes combined with aperients, or more frequently and in small doses.

Corrosive sublimate is much used in this way. It forms the mercurial ingredient in the pill of Dupuytren,* the liquor of Van-Swieten,† and the decoction of Zittman.‡ In the treatment known

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* Formula for Dupuytren's pill :—

℞. Corrosivi sublimati, gr. 1-5th or ¼.
Extracti opii aquosi, gr. ¼.
Guiaci resinæ, gr. iv.

M. Fiat pilula.

† Formula for the liquor of Van Swieten :- -

℞. Corrosivi sublimati, gr. viij.
Spiritus rectificati, ℥iss.
Aquæ distillatæ, ℥xivss.

M. From two to four drachms daily, divided into three or four doses, and given in milk or decoction of sarsaparilla, with some syrup of poppies, if it causes any pain in the bowels.

‡ Formula for "Zittman's decoction" :—

DECOCTION NO. 1.

℞. Radicis Sarsæ, ℥xij.
Aquæ, lb. xxiv.

Boil for a quarter of an hour, and add the three following substances tied up in a muslin bag :—

Aluminis, ℥iss.
Calomelanos, ℥ss.
Hydrargyri sulphureti, ℥i.
(Cinnabar.)

in Germany as the Dzondi method, the same preparation is used, but is rapidly increased in quantity. Thus, twelve grains of the sublimate are made into 240 pills. Four pills are given the first day, and every second day they are increased by two, until it becomes thirty a day.

Boil until the whole is reduced one-third, and add—

Fol. sennæ, ℥iij.
Rad. glycerrhizæ, ℥j.
Anisi seminum.
Fœniculi fructus, aa., ℥ss.

Infuse for a few minutes, and strain.

This decoction is called the "strong decoction."

DECOCTION NO. 2.

Add to the residue of No. 1 decoction—

Radicis sarsæ, ℥ij.
Aquæ, lb. xxiv.

Boil and add—

Limonis cort.
Cannellæ albæ cort.
Cardamomi seminum.
Rad. glycerrhizæ, aa., ℥iij.

Infuse for a few minutes, and strain.

This is called the "weak decoction."

The first day the patient takes a purge; every morning he takes half a pint of decoction No. 1; he drinks it hot and remains in bed. In the afternoon he takes a pint of decoction No. 2, and in the evening half a pint of decoction No. 1; these doses are taken cold.

He continues this for four days, and on the fifth takes another purge; then resumes the decoctions as before for four days, and follows on the fifth with another purge.

After a week of repose this treatment is again resumed, if necessary.

During the treatment a strict regimen is enforced.

Of Zittman's decoction the mercurial action is certainly nothing more than alterative. Although it is calomel which is used in making it, yet the prolonged boiling with the other ingredients causes a small quantity of this to be dissolved in the form—as I am told by Dr. E. Davy, who examined it for me—of corrosive sublimate.

I have seen very good effects from the so-called Zittman treatment. Mr. Erasmus Wilson speaks very highly of it. His evidence, in answer to the Venereal Committee, is as follows:—

Q. "Have you any experience of the Zittman treatment?"

A. "Yes."

Q. "What is the result of your observations upon that?"

A. "The result is that a patient with the very worst form of syphilis—the most irritable form, in which mercury cannot be given—seems to be entirely cured at the end of ten days."

Q. "You say, seems to be?"

A. "I would say, cured, because I have known instances in which the disease has never returned. Sometimes it is necessary to repeat the Zittman treatment a second or third time after an interval of some months."

The exact decoctions, according to Zittman's formulæ, are so troublesome to prepare, that I have adopted the following in imitation, as being more convenient :—

℞ Extracti sarsæ liquidi, ℥ij.
Syrupi sennæ, ℥j.
Anisi essentiæ, ℥j.
Extracti glycerrhizæ, ℥j.
Aquæ fœniculi, ad. ℥viij.
M. bene ; fiat mistura.
Mark, No. 1.

℞ Aluminis, ʒss.
Corrosivi sublimati, gr. ij.
Glycerini, ℥j.
Aquæ, ad ℥iij.
M. et solve.
Mark, No. 2.

We begin on the first day with a purge of compound colocynth pill.

Every morning the patient takes, in half a pint of hot water, one tablespoonful of No. 1 and one teaspoonful of No. 2 bottle.

In the afternoon he takes, in one pint of cold water, half a tablespoonful of No. 1 and one tablespoonful of No. 2 bottle.

In the evening he takes the same dose as in the morning, but cold.

He keeps his bed and continues this treatment for four days ; on the fifth he takes only

another purge ; then recommences for four days more as at first, and again on the fifth day another purge.

Treatment is then stopped for one week, at the end of which time it is again resumed if necessary.

The patient should, during treatment, remain in bed, and make no unnecessary exertion. He is allowed a cup of tea and dry toast for breakfast ; the same in the evening ; a cutlet or mutton chop, with a little vegetable and bread, for dinner.

Mr. Erasmus Wilson says he has found persons so fascinated by this mode of treatment, that they have put themselves under it without his knowing anything about it, and that in very bad cases indeed.

It owes its merits to its sweating, purging, and diuretic action ; and certainly does not debilitate at all so much as one might expect.

As regards the administration of mercury given with the intention of producing marked mercurial effects on the system, the world has seen divers methods. In the good old times there were "the great mercurial unction," and "the mild mercurial unction." You should

read Astruc's account of these, written something more than a century ago. He says—"1st. Of the great mercurial unction."

"A full regular spitting being once raised, the second stage of the cure commences, of which we shall now speak.

"We call that a full regular spitting in which a thick, tenacious, viscid, and pituitary saliva flows out of the mouth to the quantity of five or six pints in twenty-four hours. But I would not be understood to mean this at the beginning or at the end of a salivation, when the spitting is not in so great plenty, but at the height of the ptyalism, when I think the regular discharge ought to be from three to six pints. If the discharge is less than three pints it will be too small, and not conquer the disease, unless it be continued beyond the usual number of days. If it exceeds the bounds of six pints it will be too violent, and not be borne by the patient for a sufficient time to get the better of the distemper. If the ptyalism keeps within due bounds it is neither to be encouraged nor restrained, but to be kept to the same height for fifteen, eighteen, twenty or twenty-five days, as it shall be more or less plentiful."

"2nd. Of the gentler method of mercurial unction:"—

"Whereby the disease is cured by a very gentle salivation; you should proceed slowly and cautiously through the whole course of the cure, with gentle unctions used at due intervals, taking care that no bad accident may happen by bringing on a violent and too precipitate ptyalism. But if you find it necessary, the dose of ointment may be increased, or the intervals between the frictions shortened, in such a manner that after the fourth or fifth friction a salivation may be raised—not a precipitate tumultuous one, bringing on a sudden swelling upon the face, head, and neck, inflammatory, burning, ulcerous, irrestrainable, immoderate, in which the discharge of saliva amounts every day to eight, nine, or ten pints—such a one as is frequently produced by the greater method of unction, by which many patients are suffocated, and most are brought into manifest danger of their lives; but, on the contrary, a slow gentle spitting, easy to be managed, attended with no swelling of the head, a very gentle inflammation, and a moderate discharge, which never exceeds the quantity of a pint or two in

every four-and-twenty hours. The spitting is kept up to the same height during the whole course of the cure."

Some highly esteemed practitioners in the present day have recourse to treatment which is virtually the same as Astruc's milder unction; they would hesitate to use such plain and vigorous language in describing it, but effectively it is the same. The system of Ricord is, however, now-a-days more the fashion.

Ricord adopts a less severe but much more prolonged method of exhibiting mercury. When the chancre is indurated, he gives it from the first, and prefers its internal administration; when this is inadmissible, he employs inunction or fumigation. He does not desire to salivate, but continues the mercurial treatment for months, stopping it for a time if salivation comes on, and arresting this with chlorate of potash, given in doses of from 40 to 60 grains a-day. The mercurial course is followed by one not quite so long of iodide of potassium, in doses of from 20 to 60 grains a-day.

Some persons agree with Mr. Syme in thinking that the tedious process of introducing mercury into the system adopted by Ricord

and his followers injures the constitution as much as, if not more than, the short, sharp, and decisive salivation of Astruc and his school.

I have myself seen several cases in which, unintentionally or by accident, a "full regular spitting was raised," producing a marvellous effect upon symptoms which seemed only aggravated by the milder method.

It is not improbable that the observation of cases of profuse salivation accidentally brought on first, induced our forefathers to adopt a practice which unquestionably is occasionally followed by very striking results. I have met with cases in which ulcers, either syphilitic or of suspected syphilitic origin, have been treated with mercurials until the gums became affected with no better effect than that of making the sore exquisitely irritable, so that the patient would shriek with pain when the dressings were removed. A dose of calomel given with the intention of purging, but failing to do so, has called forth an excessive salivation, or an enema of black wash thrown into the rectum by a mistake of the attendant has produced a like effect, and instantly the whole aspect of affairs has changed, and the ulcer healed up as

if by magic. No one who is candid will deny to mercury this influence in certain cases—not of syphilis alone ; but candour also requires that we shall recognise its baneful influence on the constitution in a very large proportion of individuals.

I have said that I have seen several cases of this sort. I recollect Mr. Paget mentioning to me a case of the kind, which, by the accident of giving an enema of black wash, had occurred in his practice. I have also seen cases in which there was no reason to suspect any syphilitic taint, where an unintentional hyper-salivation produced great and prompt benefit.

A woman was extensively scalded in the back and shoulder ; after the sloughs had separated, a large and exquisitely irritable ulcer remained; exuberant flabby granulation rose from its surface ; it was directed to be dressed with black-wash ; after some days of this application to so large a surface, the patient was found to be profusely salivated. At once the entire character of the granulations altered, the sensibility diminished, and the ulcer healed rapidly.

I learned that, some months before, this patient had been mercurialized for an injury to her eye ; she denied ever having had syphilis ;

was married to a respectable man, and was the mother of three healthy children.

Such cases are instructive; yet we should not think of adopting the practice of salivation for ulcers resulting from burns; no more should I advocate a return to the method of Astruc for treating venereal ulcers in general.

Some one of you has asked me this very practical question: "How do the bulk of practitioners in the present day treat venereal ulcers on the genital organs?" Now this question embraces all sorts of sores, both simple and syphilitic, and I think I may answer it in a double fashion.

1st. I may speak for the mass of practitioners spread over the length and breadth of the land. 2nd. For those who, in large cities, connected possibly with medical schools and hospitals, or as specialists, may be supposed to be on the whole more intimately acquainted with the subject.

From my own experience, I unhesitatingly say that the first class, as a rule, give mercury in some form in the treatment of all venereal ulcers. This is not to be wondered at; the great mass of practitioners carry through life much of what they picked up as students; they follow the dicta of their most respected masters;

hence we see the practice of such a man as Colles living long after him; lasting in fact longer than it would, had he lived to modify it according as advancing science shed more light upon the subject. Even the illustrious Colles could not know what was not known in his time; viz.—that the simple and the syphilitic sore are quite distinct; that the former is much the commoner, and does not need mercury either to cure it, or to prevent the secondary affections, which under no circumstances would succeed to it. He, as a rule, gave mercury to all; so do his pupils, and they still fancy that they are in many cases preventing the occurrence of constitutional symptoms, when in reality it is the nature of the disease that no such symptoms ever follow it. They do what we are all prone to do, they attribute to the action of their mercurial course what is really simply due to the non-infecting character of the complaint. But, gentlemen, setting aside my own personal views, I think that it is to the practice of the second class that you should look for the real answer to the question—to the practice of those whose position makes it, in fact, necessary for them to be acquainted with the teachings of

modern science on this subject. Now, perhaps, the best reply I can give to this question is by again calling some witnesses from among those examined before the Venereal Committee, and letting them speak to you for themselves.

Let me first call Thomas Byrne, Esq., F.R.C.S.I., a gentleman whose name is well-known to you, and who has had the vast experience, arising from over 32 years' connection with the Westmoreland Lock Hospital in this city.

Q. "Do you employ mercury in the treatment of both sores?"

A. "I never use it for the soft sore."

Q. "Do you give mercury in every case of indurated chancre?"

A. "I do."

2nd. William Acton, Esq., formerly extern to the Venereal Hospital in Paris, and who may be taken as representing the views of the school of M. Ricord.

Q. "Do you give mercury for primary sores?"

A. "When I have well ascertained that a sore is an indurated chancre, I do immediately."

3rd. George Busk, Esq., F.R.S., surgeon to the *Dreadnought* hospital ship.

Q. "Do you ever treat the primary sore with mercury?"

A. "Yes; at any rate, all indurated sores."

4th. Victor De Meric, Esq., Surgeon to the Royal Free Hospital.

Q. "Do you treat the primary sore with mercury?"

A. "I treat the primary indurated sore with mercury. I do not wait until the so-called secondaries have appeared."

5th. Langston Parker, Esq., Surgeon to the Queen's Hospital, Birmingham.

"I should abolish the treatment of a soft chancre by mercury altogether, as a rule. In a sore specifically indurated I should give mercury with one object, not to prevent the secondary taint which should follow, but to heal the ulcer itself, which will not heal sometimes without mercury."

6th. Jonathan Hutchinson, Esq., Surgeon to the London Hospital.

Q. "I believe you do not treat the primary sores with mercury?"

A. "The indurated sores I do."

Q "But not the soft sores?"

A. "No."

Q. "Do you treat the indurated sore invariably with mercury?"

A. "I do. I may state that I treated for two years, at the Metropolitan Free Hospital, all indurated sores without mercury; for the sake of the experiment, I systematically desisted from the use of it, but I have now gone back to the use of mercury. I now always prescribe it for a primary indurated sore."

7th. Sir William Ferguson, Bart., F.R.S., Professor of Surgery, and Surgeon to King's College Hospital.

Q. "How do you treat the common soft sore?"

A. "With plain water, a bit of lint and water locally applied, a little attention to the general health, keeping the bowels regular, and the skin in correct condition, also paying attention to the habits of the patient and the diet."

Q. "How do you treat the primary hard sore which we should all deem to be syphilitic?"

A. "I would still, whatever sore it might be, go on with the water dressing, until I saw that the hardness was fully developed; after that, if I had not already used any specific remedy (that is to say, a remedy to have a specific

effect on the constitution, such as blue pill in moderate quantities, or iodide of potassium), I would then begin one or other of these. I should very likely start with a little blue pill, thinking that it would probably put the patient into a better state of health, and I should proceed moderately with that, using it as an alterative, and not with a view of producing any very marked effects of mercury. If I were satisfied that the patient were in a better condition and in good health, with the exception of the sore, I should not use this remedy long, but very likely administer iodide of potassium, sarsaparilla, or some other agent that would have a beneficial effect on the system."

8th. James Paget, Esq., F.R.S., Surgeon to St. Bartholomew's Hospital.

Q. "Do you use mercury largely in the treatment of primary sores, taking first the soft sore?"

A. "Never in the soft sore, unless I found after a long time that all other means failed, and I thought that I had made a mistake with a primary hard sore; then, assuming the condition of the patient to be such as would fairly

bear a careful use of mercury, I should always give it."

You will naturally attribute much weight to the testimony of such witnessess. You perceive that there is considerable unanimity among them; they all attach great importance to the hardness; this symptom is that which determines mercurial treatment. The simple venereal sore they cure without it. Syphilitic sores, without hardness, they deal with on expectant principles.

A few practitioners of note, as Mr. Erichsen, give mercury for both sores. He says, "Both in the soft and hard sores I give mercury." But we have to set against such persons the highly valuable testimony of some of the most distinguished of our military surgeons, whose peculiarly extensive opportunities of studying accurately these complaints give much authority to their evidence.

9th. Thomas Longmore, Esq., Professor of Military Surgery at the Army Medical School, Netley.

Q. "Including the entire class of cases based on deposit more or less hard, do you, as a rule, employ mercury, either local or through the

constitution, for the primary treatment of the sores ?"

A. "Not for the primary treatment ; I have given up that for years."

Q. "What is your reason for relinquishing it?"

A. "It is, that I have been taught by experience not to believe that the development of secondary symptoms is prevented by giving mercury, and my impression is that the secondary symptoms are more tractable, if it be not given for the treatment of the primary sore."

10th. George E. Blenkins, Esq., Surgeon-Major, Grenadier Guards.

Q. "I think you stated that you did not treat either the primary or secondary manifestations of the disease with mercury ?"

A. "For the last twenty-six years I have not done so. For the first year of my experience in the Guards I adopted the same practice that I found every one else pursuing to a large extent, but I saw so many bad forms of the so-called tertiary syphilis where the bones became carious, that I was inclined to follow the treatment that I heard had been pursued in the army before Sir James M'Gregor's cases were made known. Ever since that period, twenty-

six years ago, I have adopted that plan rigidly, and have never swerved from it, although it has been attempted to laugh me out of it, and I have been almost told that I have been doing what was incorrect. But I have invariably pursued one system of treatment, and I am perfectly satisfied that in the long run I have been the gainer, and the patient too."

11th. Dr. Jeffery Marston, Assistant-Surgeon, Royal Artillery, Portsmouth.

Q. "Do you consider it necessary to give mercury in all cases of primary sores based on thickening or induration?"

A. "No."

Q. "Do you observe that the administration of mercury has an effect on the period required for the healing of the primary sore?"

A. "In some cases it has, but sores often heal by local remedies only."

Q. "You cannot lay down a rule as to the administration of mercury?"

A. "No. There are many things to be taken into consideration. I do not now commonly give mercury in the primary stage, unless the induration be dense or large."

I feel justified, therefore, upon the whole, in

stating in answer to the question which I have been asked, that the vast majority of well-informed practitioners in the present day do not give mercury until they are certain that the case is one of true constitutional syphilis.

All doubtful cases are watched; they are treated with simple measures and surveillance.

I have already said that the hardness is an important but by no means absolutely constant symptom of a syphilitic sore; when it does occur, it is regarded by most practitioners as the first proof that the case is one of constitutional syphilis. They wait, however, until this or some other unmistakable symptom leaves no doubt that the case is one of constitutional disease; then, and not till then, do they give mercury. To use a homely phrase, they do not take off their hats to the devil, until they are quite certain that he has come in sight. A few like M. Diday, and I may say myself, if his highness keeps at a distance (only appearing in the form of a "vérole faible"), forego the honor of saluting him, even although we may catch a glimpse of his formidable person; while one or two staunch heroes like Mr. Blenkins sternly

refuse to pay their homage under any circumstances.

Such is, I believe, a true statement of the actual practice of the present time as regards the use of mercury.

You will perceive, gentlemen, at a glance, that since the close of the last century King Mercury has lost much of his temporal power. He then, with the aid of a great Lieutenant-General John Hunter, ruled despotically over three races. A great territory, a land flowing — but not with milk and honey — the land of gonorrhœa was beneath his sway. The rest of his people, although as different in race as the Christian from the Jew, dwelt together, as we may say, in the same cities and bowed beneath his sceptre. "Chancrelles" and "chancres" alike submitted to him.

The first revolution deprived him for ever of gonorrhœa-land. The second was the revolt of the chancrelles; this was headed by the Garibaldi of venereal revolutions, the illustrious Ricord, who in his earlier days had struck the last blows which had liberated gonorrhœa from the yoke of the tyrant. This second revolution

may now be said to be accomplished. Ricord has won the freedom of the chancrelles. The mercurial despot of former times is now reduced to the condition (pardon me for saying it) of a *constitutional* sovereign ; he reigns only over the true chancres ; even among these there is an agitation going on, and a popular demagogue with wonderful powers as a "mob orator," named Paul Diday, bids fair to gain great privileges, if not absolute manumission, for the section known as the "Véroles Faibles."

In medicine, as in politics, there are party struggles, defeats, and victories ; we have our conservatives and our reformers, those who look always back to the "good old times," fearing changes, and shaking their heads at any departure from ancient rules of practice, those who are prone, too prone perhaps, to adopt new ideas, and turn their backs on what time and experience have sanctified.

Between the two we make progress. Syphilis is a subject which has drawn to itself the attention and study of some of the greatest minds the world has ever produced ; that our knowledge of it has advanced so slowly is the surest

proof of what difficulties and obscurities surround it. He who has done aught to penetrate this obscurity, to let into the darkened chamber one ray of light, so as to give the physician armed with a club a better chance of striking the disease and avoiding nature, has achieved much for mankind. Among these it is that, with pardonable national vanity, I point to Colles, Carmichael, and Wallace.

END OF PART I.