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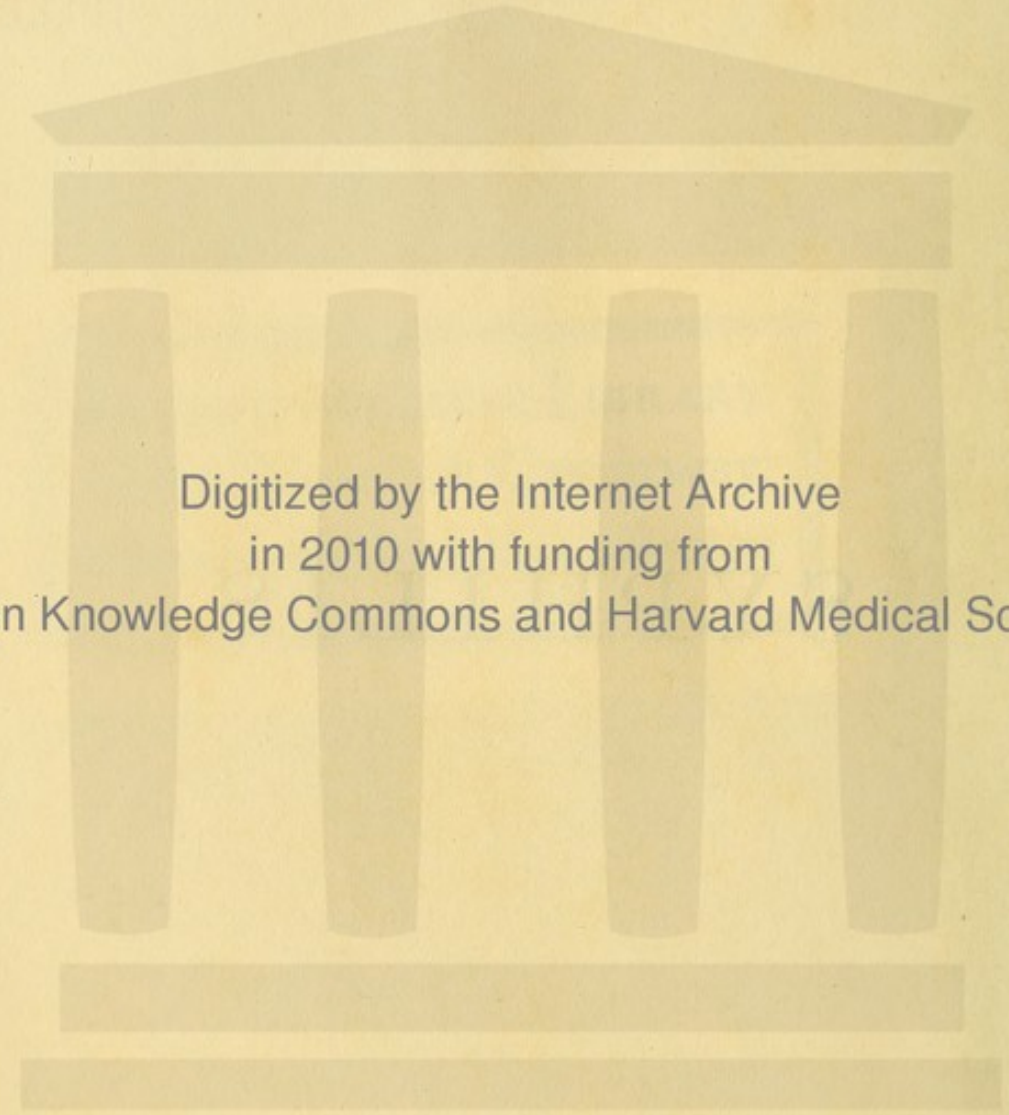

SYPHILIS

ITS NATURE & DIFFUSION POPULARLY CONSIDERED.

BY

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

LATE HONORARY AND CONSULTING SURGEON TO THE MELBOURNE HOSPITAL; CLINICAL STUDENT OF SYPHILOGRAPHY AT THE LOCK HOSPITAL, EDINBURGH, AND AT THE VENEREAL HOSPITAL, PARIS; MEMBER OF THE HUNTERIAN MEDICAL SOCIETY OF EDINBURGH; MEMBER OF THE MEDICAL AND ROYAL SOCIETIES OF VICTORIA; SURGEON ON THE STAFF OF THE ROYAL VICTORIAN ARTILLERY REGIMENT; FORMERLY ASSISTANT SURGEON TO, AND FOR SOME TIME IN MEDICAL CHARGE OF, THE THIRD ROYAL LANCASHIRE REGIMENT OF INFANTRY IN THE MEDITERRANEAN; AND ACTING SURGEON TO HER MAJESTY'S TROOPS, ON FULL PAY, DURING THE CRIMEAN WAR.

WITH FIFTEEN COLOURED PLATES.

Melbourne

GEORGE ROBERTSON, 69 ELIZABETH STREET.

MDCCCLXIX.

DEDICATION.

TO

P. RICORD, M D.,

Surgeon-in-Chief to the Venereal Hospital of Paris; Knight of the Legion of Honour; and Member of most of the learned Societies throughout the World;

The great and distinguished syphilographer who had the boldness and skill to first open up an untrodden, but to humanity a most important, path of medical investigation, and to whose eminent leadership the medical profession throughout the civilised world owe so much—who has stimulated the master minds of the several schools to follow him in his benevolent effort to release humanity as far as possible from one of, if not its greatest scourges:

This work is dedicated by one of his pupils, who deems it the highest honour his medical career has conferred on him to have listened to the teachings and enjoyed the friendship of so great a master.

It is but consistent that a work—the first of its kind in this part of the world—which is intended to disseminate the

knowledge which he has accumulated, and been the direct cause of evolving from other minds, should pay its just tribute to his high position.

In no part of the world is there greater need than here for the earnest pursuit of this momentous branch of medical science, nor a wider field for observation; and it is my ambition to emulate therein the wisdom, skill, and acumen of him from whom I learned my first and best lessons.

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

154 Collins-street East,

Melbourne, October, 1869.

PREFACE.

THE time has at last arrived when the leaders in the medical profession have publicly addressed themselves to the consideration of that large class of diseases known as venereal, which have for so long a period been claimed by charlatans and impostors as their favourite field of operation. The general public have hitherto been prone to conclude from some cause or other—not readily ascertained—that their only resource in such diseases is the professional advertiser, who with skilfully-wrought appeals to their fears, and solemn warnings, assumes a special supremacy over their secret conduct, and dictates with unbearable arrogance the refuge they should take from the disorders which their failings, vices, or misfortunes may have entailed upon them.

Humanity has probably suffered more injury from illegitimate and non-scientific practice in this class of diseases than in any other, both physically and mentally. It has been the richest field for the extortioner, who, working upon the natural alarm that a patient feels on making the discovery

that his constitution has been invaded by syphilis in one of its many forms, extracts from the sufferer anything that his means will permit or his adviser's cupidity dictate. The wrong which society is thus suffering can only be checked by greater attention and earnestness on the part of the whole profession. The frightful exhibitions of consuming force in this dire disease which are to be witnessed in our hospitals as the result of malpractice, are of themselves sufficient to deter the afflicted from having recourse to those who by their ignorance augment the destructive power of the malady, while they drain the purse.

Scarcely a journal can be taken up but we meet with advertisements tending to mislead the unwary and entrap the confiding who may be suffering from any of the protean forms that syphilis assumes. The boldness of the assertions and the pruriency of the descriptions carry away the sufferer, and he stealthily seeks the panacea so confidently promised, but so seldom afforded. It is also a wide-spread error, which has been sedulously inculcated by those interested in its existence, that the medical profession as a body avoid cultivating practice in venereal diseases, or are but imperfectly versed in the best methods of treatment. This mistake on the part of the people is partly due to the apathy of the profession itself; but it is not now likely to be of long continuance, as the chief authorities on medical science and practice in Europe have of late given prominence to the question of venereal disease, and have brought to bear

upon it all their acumen, observation, and research. Hence the disease is now being brought by the profession under the highest critical examination. The English physicians and surgeons are emulating the industry and success of their continental brethren, who have long treated the subject exhaustively; consequently we have in our medical literature now many works of standard value to the profession, that have thrown additional light upon the subtle operations of the venereal poison.

Such names as Ricord, Dupuytren, Cazenave, Divergie, Lallemand, Velpeau, and Lancereaux, in France—Hunter, Astley Cooper, Bell, Erasmus Wilson, Paget, Acton, Barton, Parker, and Berkeley Hill, in England—are sufficient to evidence the great attention that has been paid to it by those best qualified to investigate it. These eminent men have used their extensive opportunities for research towards ascertaining determinately the laws of syphilis, and the most philosophic and effective methods of dealing successfully with this, the greatest physical scourge of our race.

It is equally the duty of the physicians and surgeons of these colonies to correct the errors of the people here, and to take measures to show them that they are not without ample resources within the profession as a body, and that the leading medical men of this colony are not less prepared than their confrères of the northern hemisphere to maintain public confidence, if placed in them, in reference to the treatment of the venereal scourge, and to address themselves

earnestly to its eradication. To the physician and surgeon in extensive practice the protean forms of syphilis are a source of hourly interest. In a large proportion of cases that come under their treatment the practised eye detects the mark of the destroyer in one or more symptoms. Its presence is discovered either internally or externally where less skilled observers had not recognised it, and where even the patient himself had not the most remote suspicion of its existence. So frequently is it concealed behind diseases otherwise classified, that it often requires great experience and practised observation to discern it. There is scarcely an organ or tissue in the body which does not suffer from the corroding influence of this terrible malady. It is from this point of view that I deem it my duty to lend my assistance, in the form of a simple and popular treatise, to the public, that they may comprehend more intelligently the nature and danger of the syphilitic taint, and exhibit more reliance on the professional body in the treatment of the same.

Although it is now the aim of the medical profession throughout the world to reduce the influence of syphilis as a malady to a minimum, and render it far less fatal in its results to humanity, all will be in vain unless the intelligent communities everywhere are by some means carefully and wisely instructed as to the nature and danger of the disease. It is not necessary that their good sense and better feelings should be offended by indelicate representations or prurient details. All necessary information can be given without

offence, so that men, and women also, will be instructed how to use every precaution within their reach to avoid the many forms of contamination to which even the purest are exposed.

In England much has been achieved by Mr. Acton in diffusing general and useful information on this subject, and the good results are already manifest in the increased attention paid to the treatment of syphilis by the profession, and in the confidence which all classes are now placing in the legitimate practitioner when requiring relief from this dangerous malady.

I have been largely indebted to the writings of Ricord, Divergie, Lallemand, Lancereaux, Acton, Hill, Parker, Lee, Wilks, Virchow, Rollet, Diday, Maclean, Viennois, Hutchinson, Bennett, Aitken, and others, whose opinions on nearly all points are such as I have been able to endorse in the course of long and attentive observations of the diseases on which these celebrated syphilographers have so ably written. My efforts to follow them in their philanthropic and scientific endeavours to release mankind from the venereal scourge will, I hope, be fruitful in drawing the attention of all my readers to those preventive and judicious eradicative methods which science has recently devised.

I have treated the question of transmission of syphilis by vaccination rather more fully than I intended, because during the writing of this book my already established opinion as to the fact of its transmission by that means was sustained, and

strongly forced upon my attention by cases which came before me. It is a matter of great moment, and although it is said to admit of discussion, not being supported by all syphilographers, still my views upon it are fixed, and I unhesitatingly affirm that more care—on that ground—should be taken in vaccination.

I am indebted to the celebrated work of Ricord and Cullerier for the excellent plates which I have introduced into the work as pictorial illustrations of the ravages which syphilis makes on the skin and viscera.

I have purposely omitted the medical treatment adopted, because in a popular work such as this is, designed to be read more by the public at large than by the profession, it would be almost useless to give it, if not injudicious, on account of the nature of the medicines used, and the impossibility of any real advantage arising out of the information. With regard to the profession the usual specific treatment is not to them, of course, a sealed book. They, equally with myself, have the recent medical literature treating on this great question. In addition I may say, that it is my intention shortly to publish a work especially for professional use, in which I shall more critically discuss certain matters of scientific interest in reference to syphilis, and describe in detail some methods of treatment which I think are worthy of being more generally adopted. A portion of the material for such a work is already prepared.

The circumstance which mainly suggested to me the idea

of giving this work a popular dress, was the fact that the public purchase with such avidity anything written on the subject that is so couched as to be intelligible to them. It is therefore desirable that they should have works put in their way that will be of service to them. Mr. Acton, in England, has done much good by his many popular works on this and kindred subjects.

"An average educated man hardly requires to be told that the self-laudatory announcements put forth by advertising charlatans, are like the pictures that mountebanks exhibit outside their caravans, and which represent everything that is not to be found within. It may be assumed as true that the ignorance of an advertising quack, whether qualified or unqualified, is in tolerably exact proportion to the loudness of his declaration that he is superior to everybody else. . . . . It is scarcely necessary to say that any properly-qualified medical practitioner is competent to treat the average forms of disease to be found in ordinary practice, and those who devote themselves to the specialities of disease by the properly scientific methods through which only it is possible to arrive at particular excellence, do not advertise their special competency. . . . . The particular truth, however, that we are desirous of making manifest, is the exceeding paltriness of both this (the Jordan museum) and all other forms of medical quackery. People indeed may be willing to be deceived, and are deceived accordingly; but such exposures as we have had in this case of Jordan's will, at any rate, leave them no excuse for complaining if they are any longer deceived."—*Leading Article on the case of Jordan v. Syme in "The Argus" of Sept.* 15, 1869.

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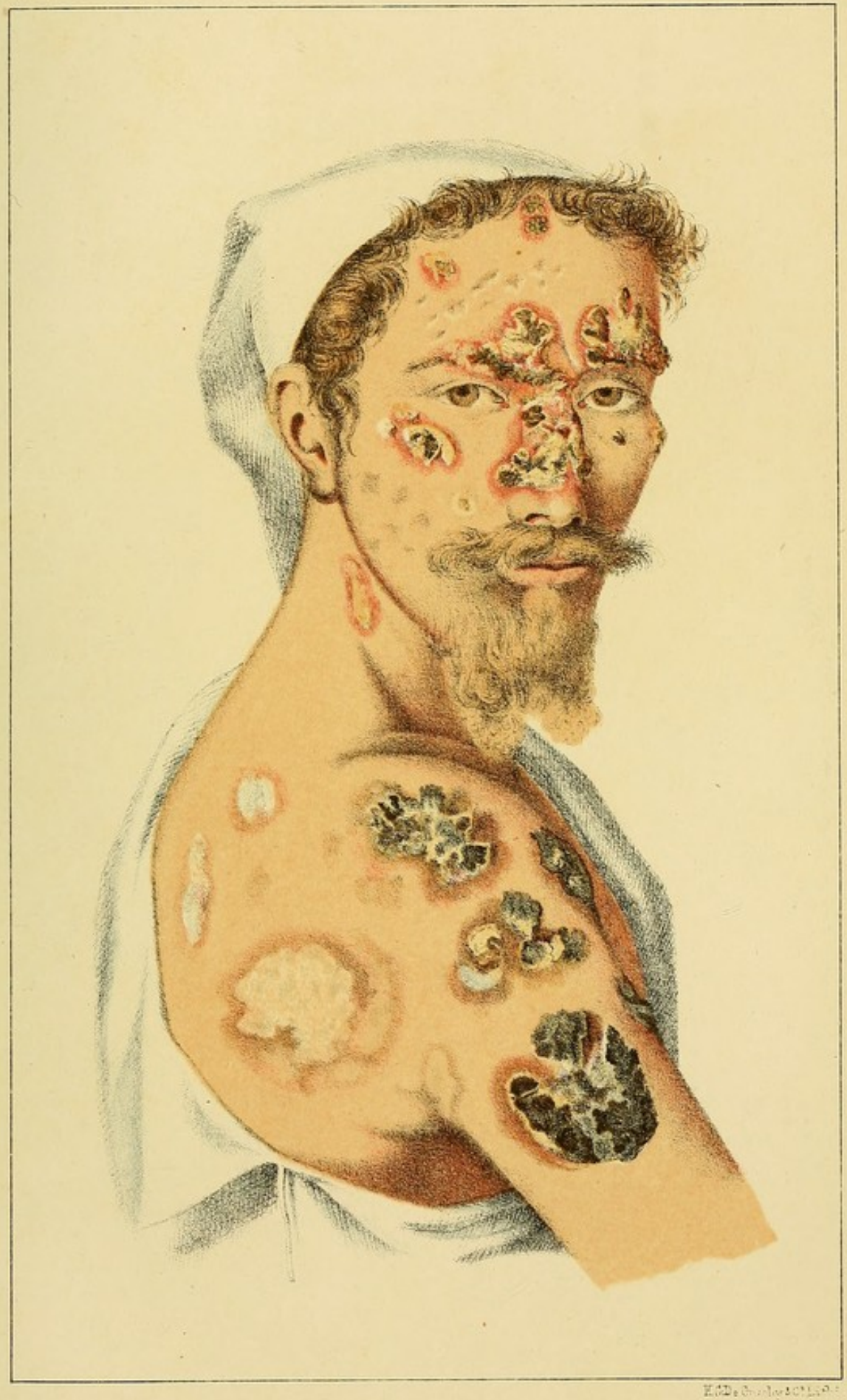

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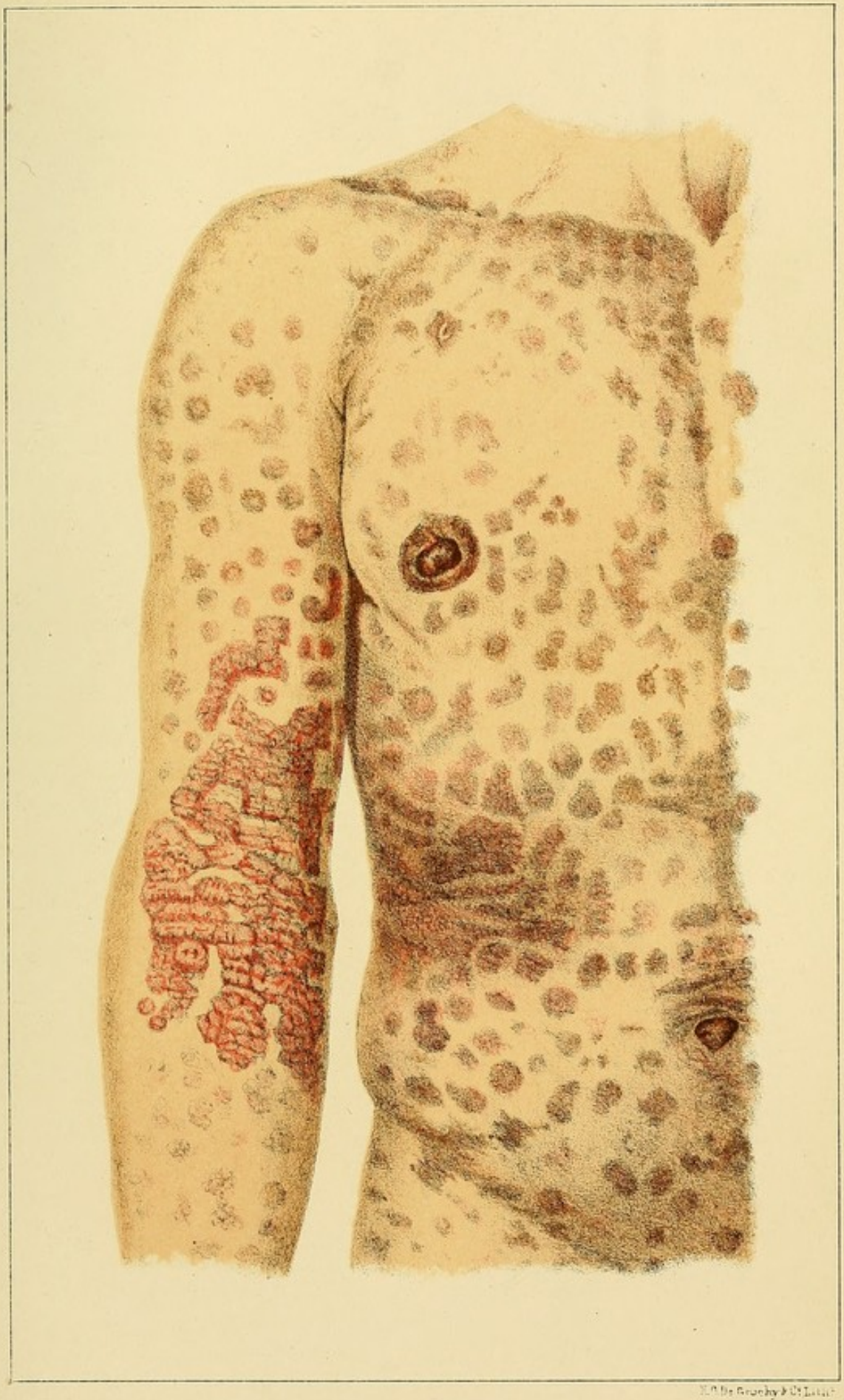

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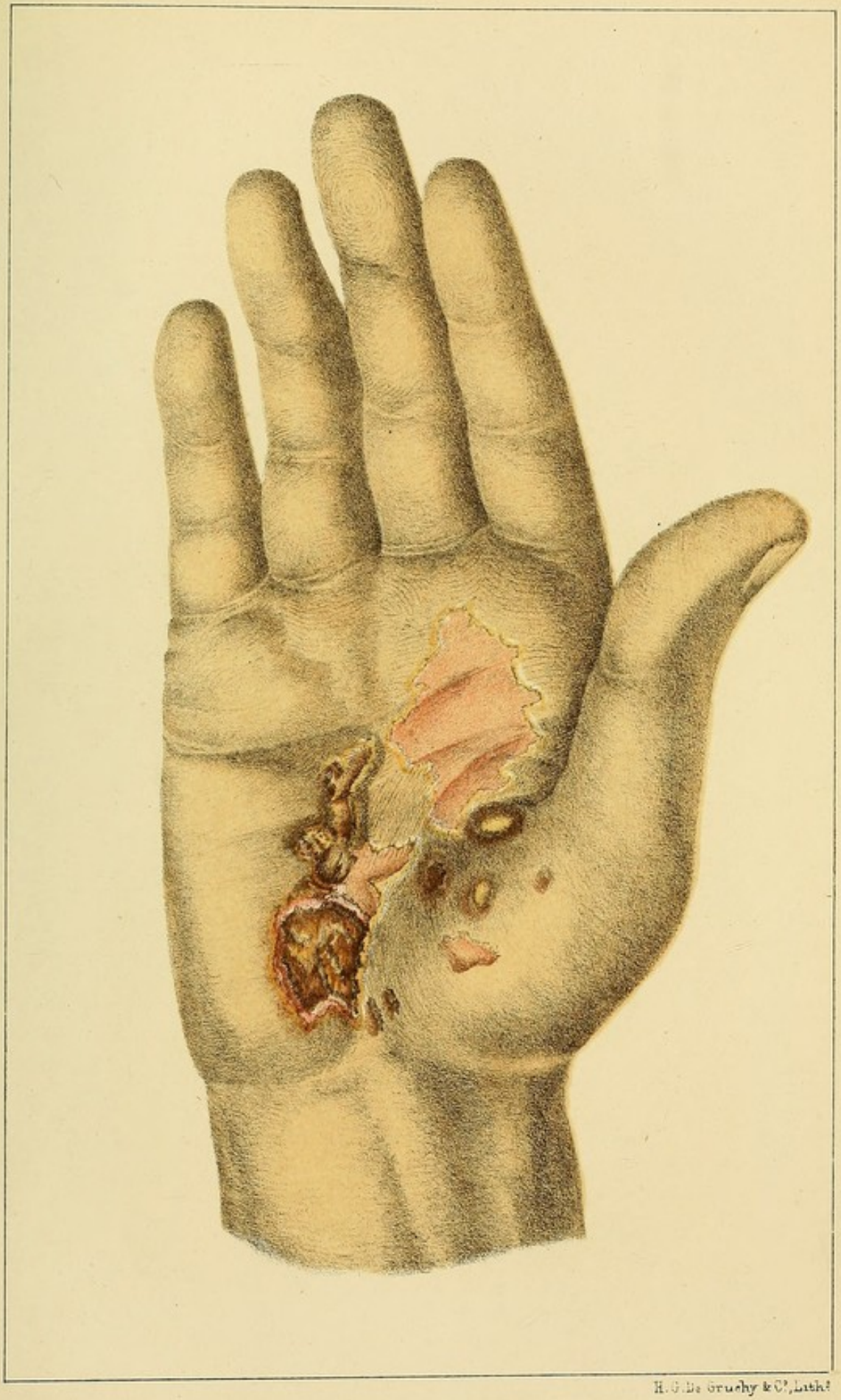

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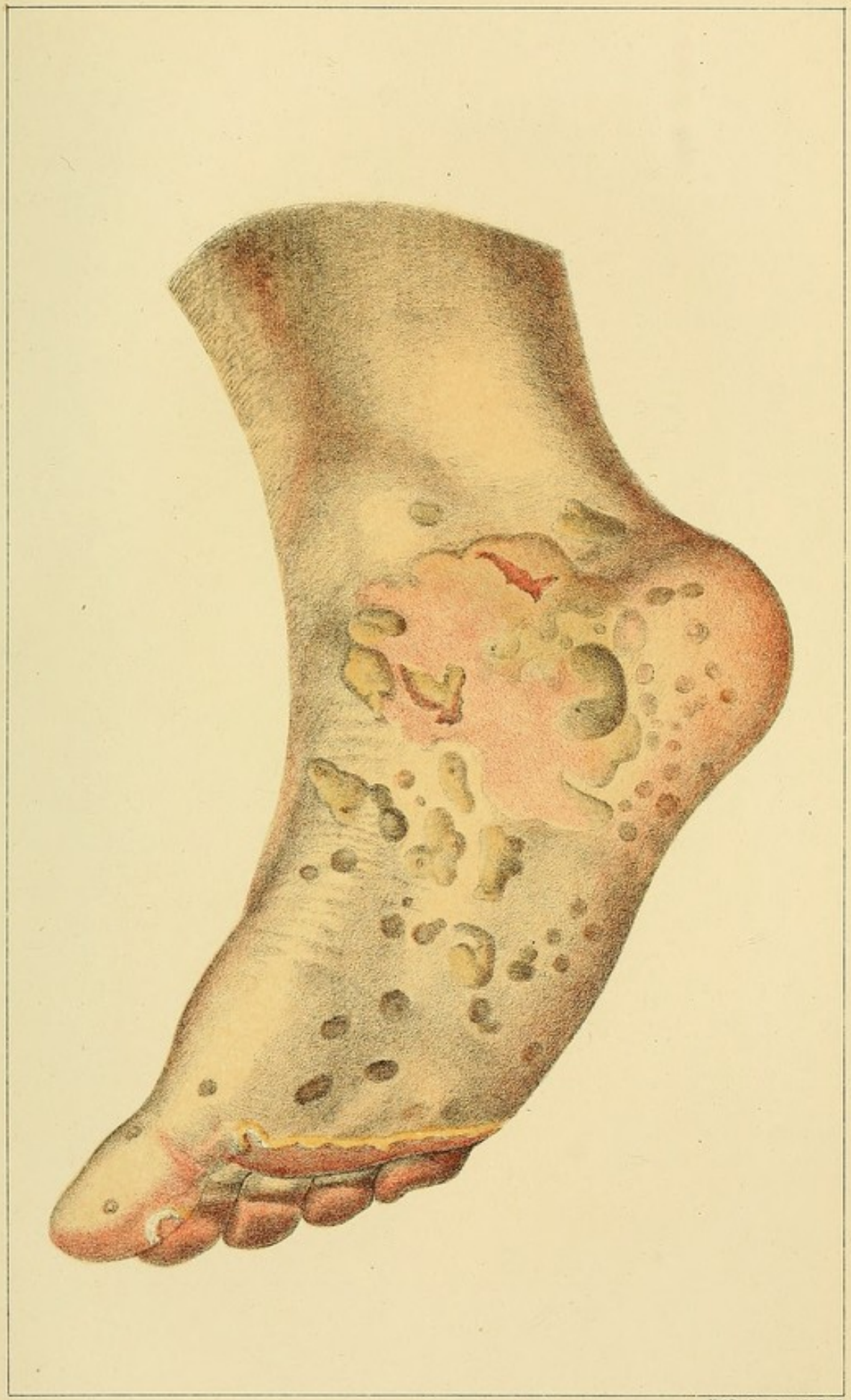

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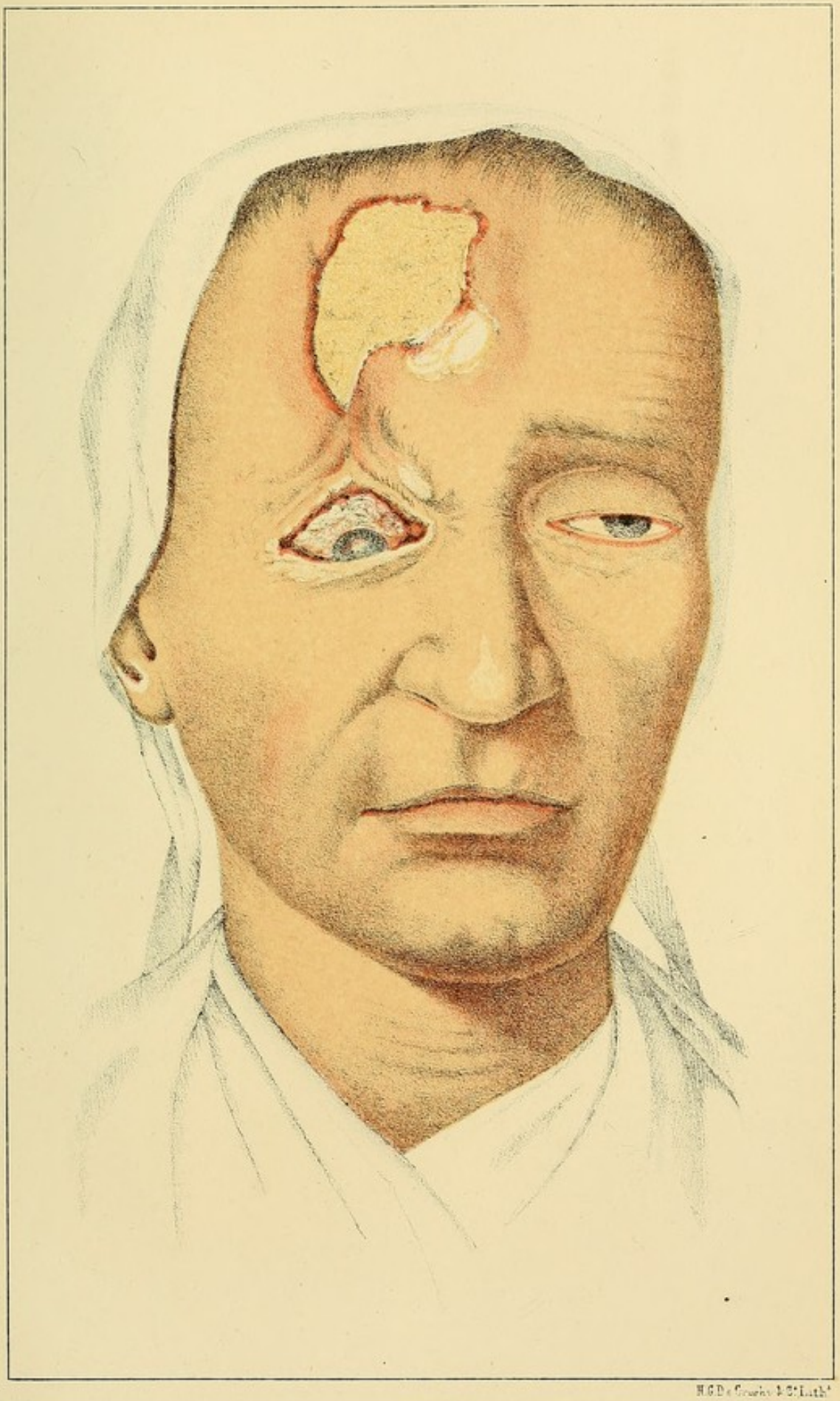

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(Tertiary form.)

H.G.De Gruchy & Co.Lith.

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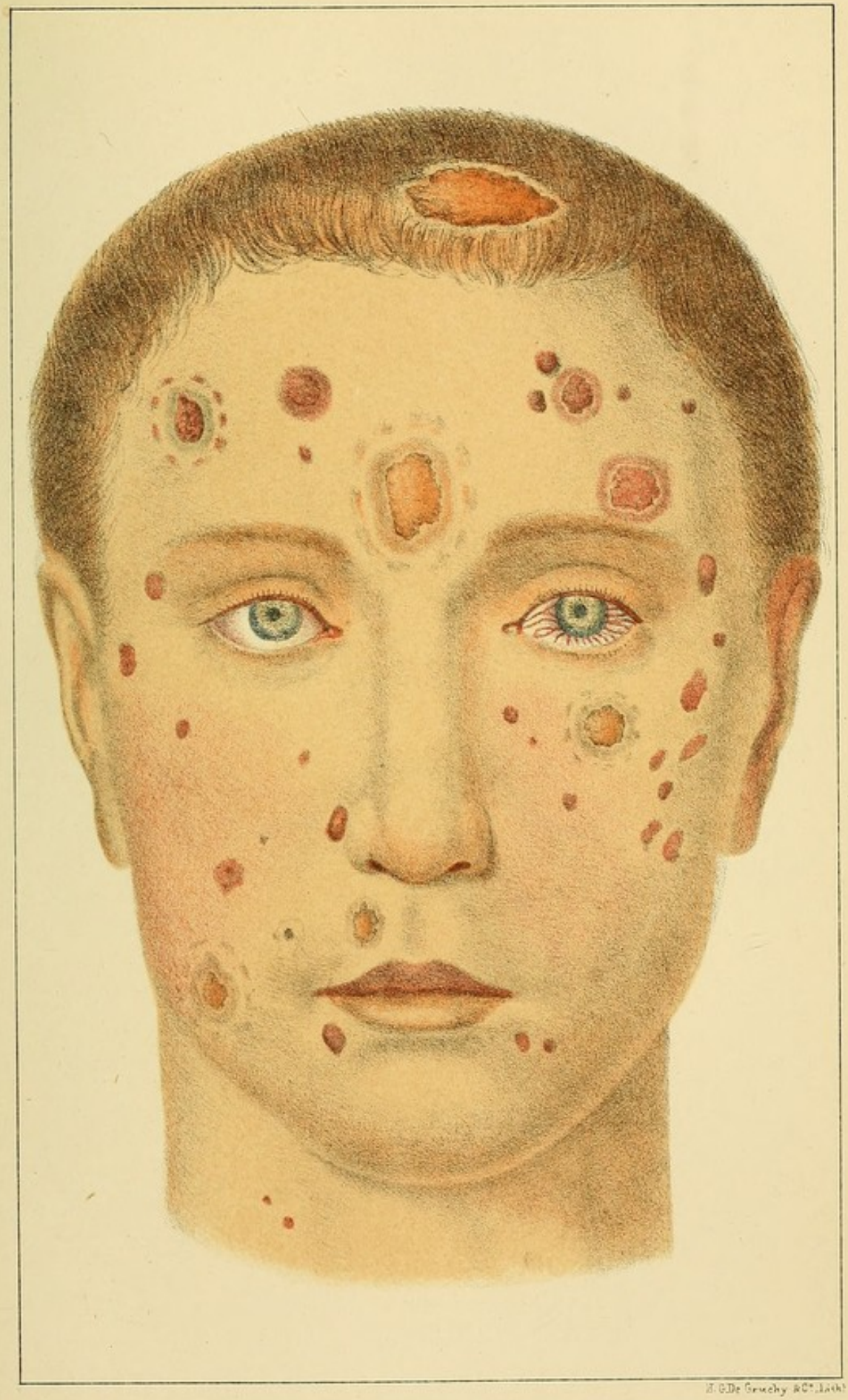

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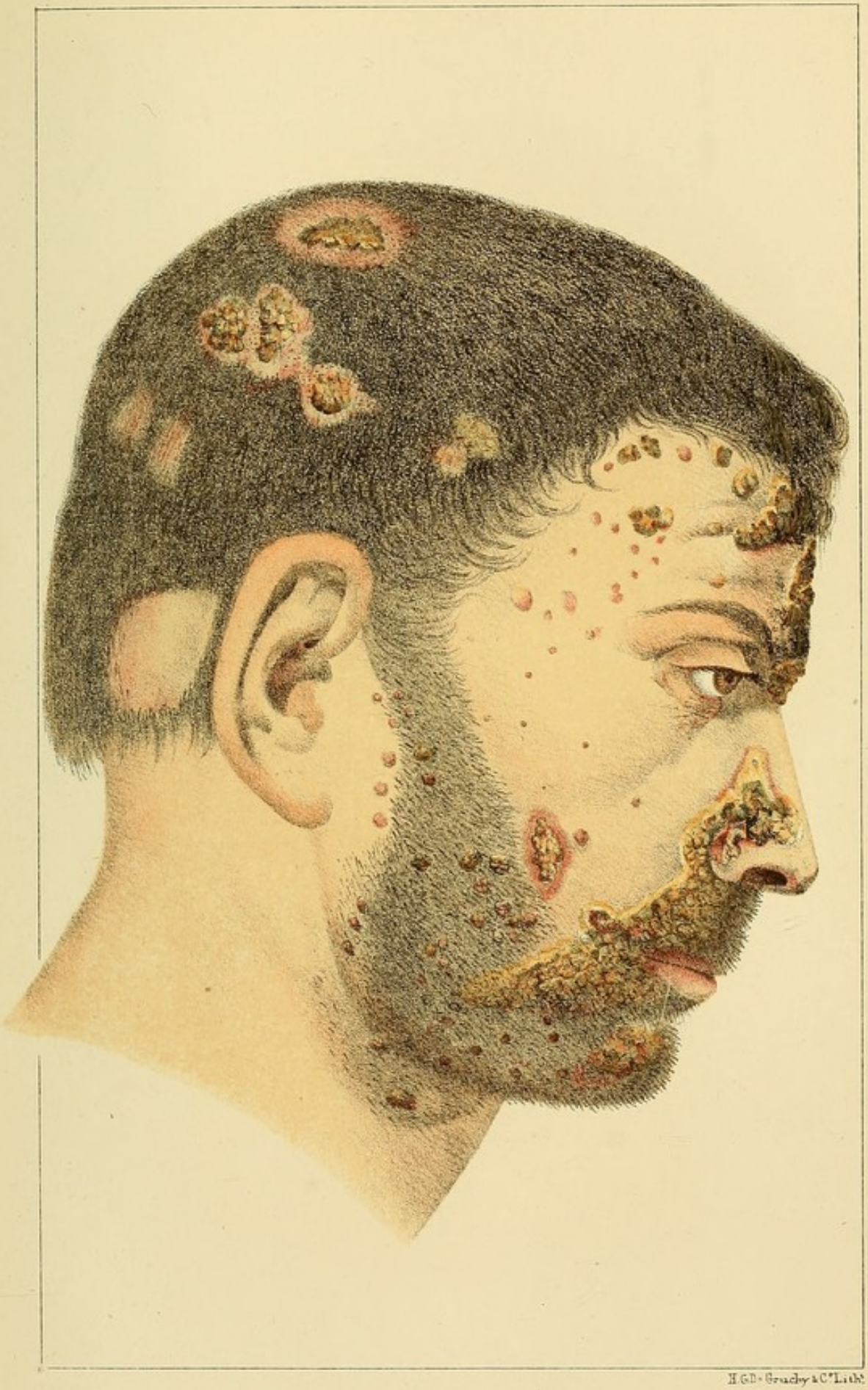

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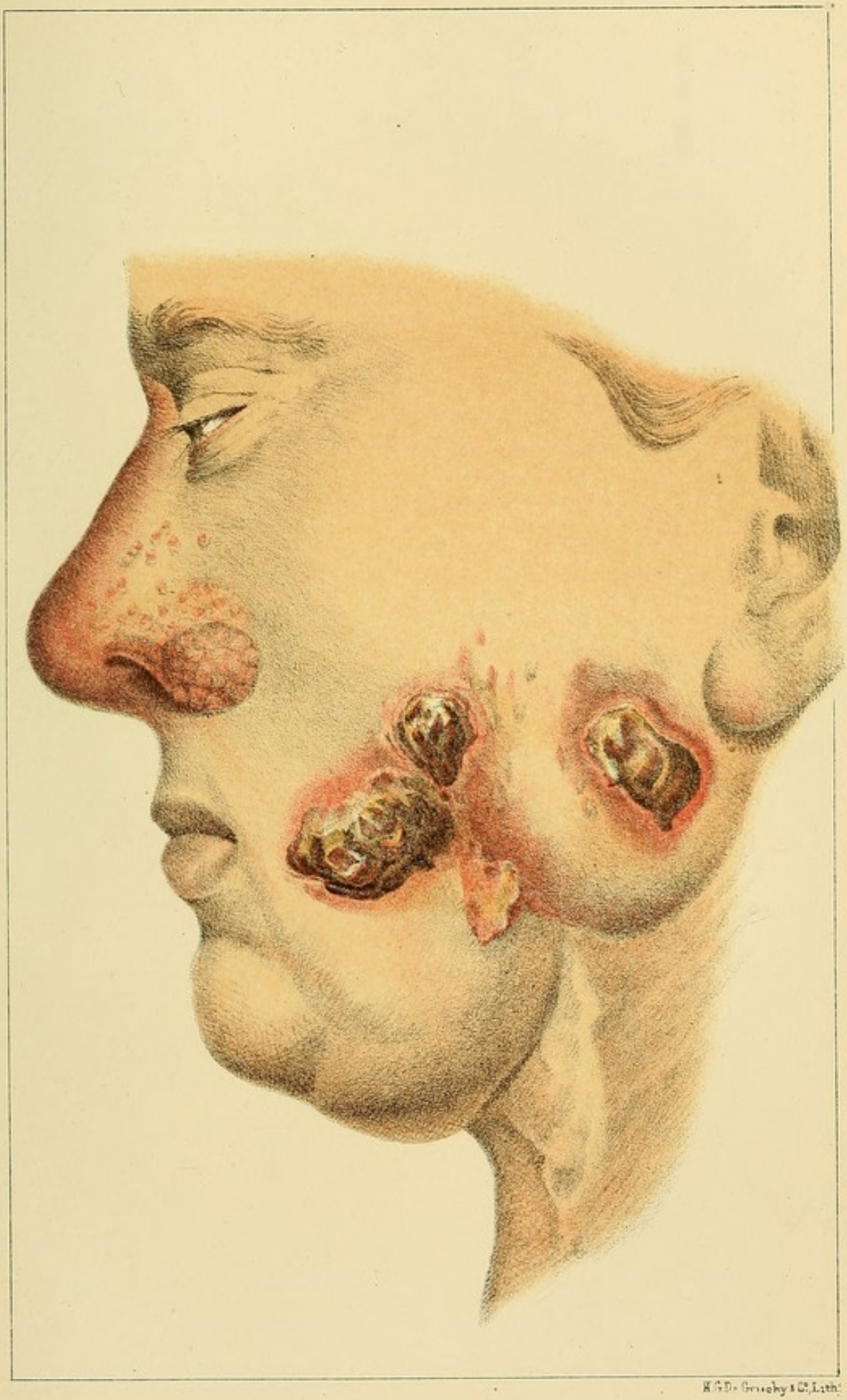

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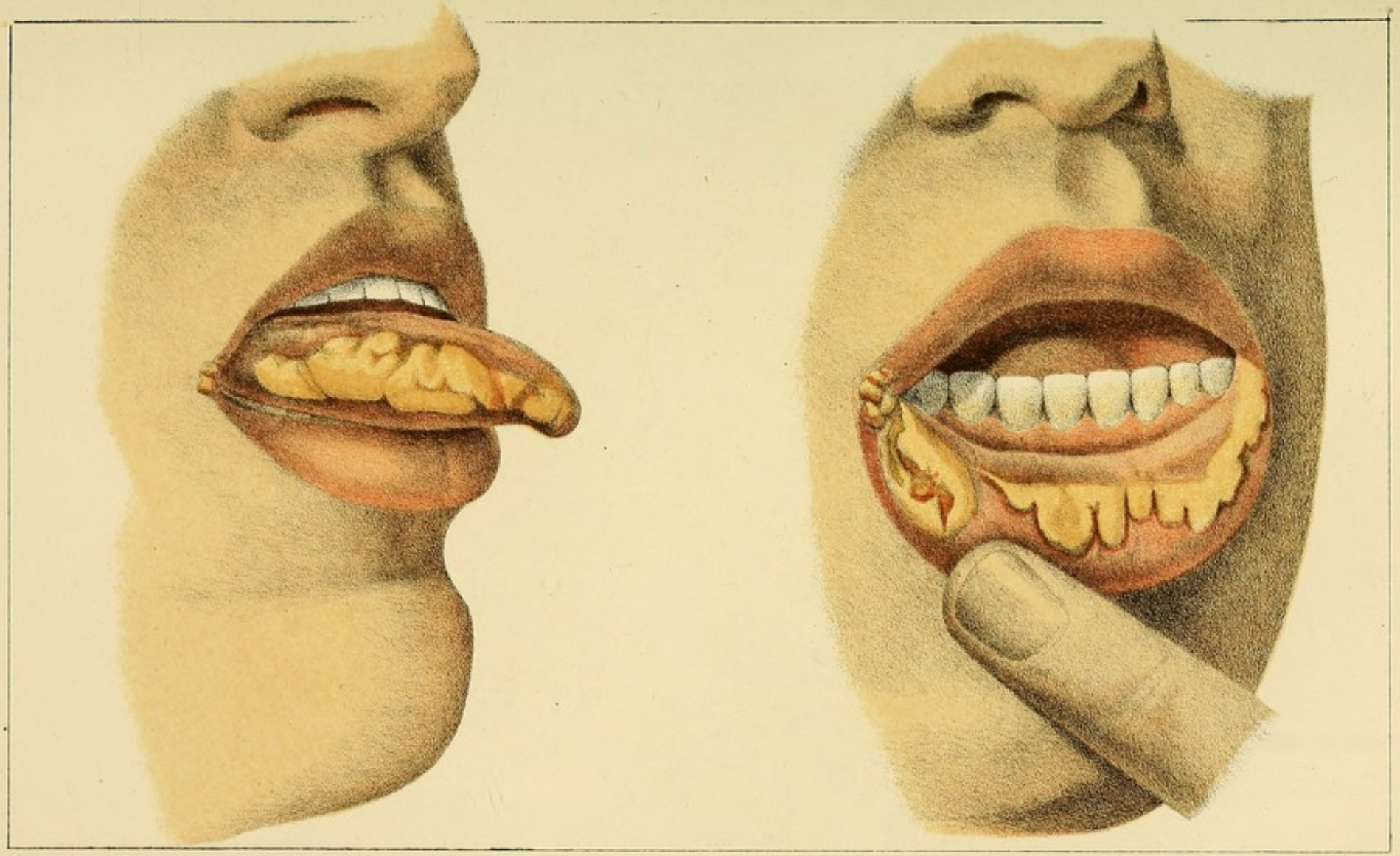

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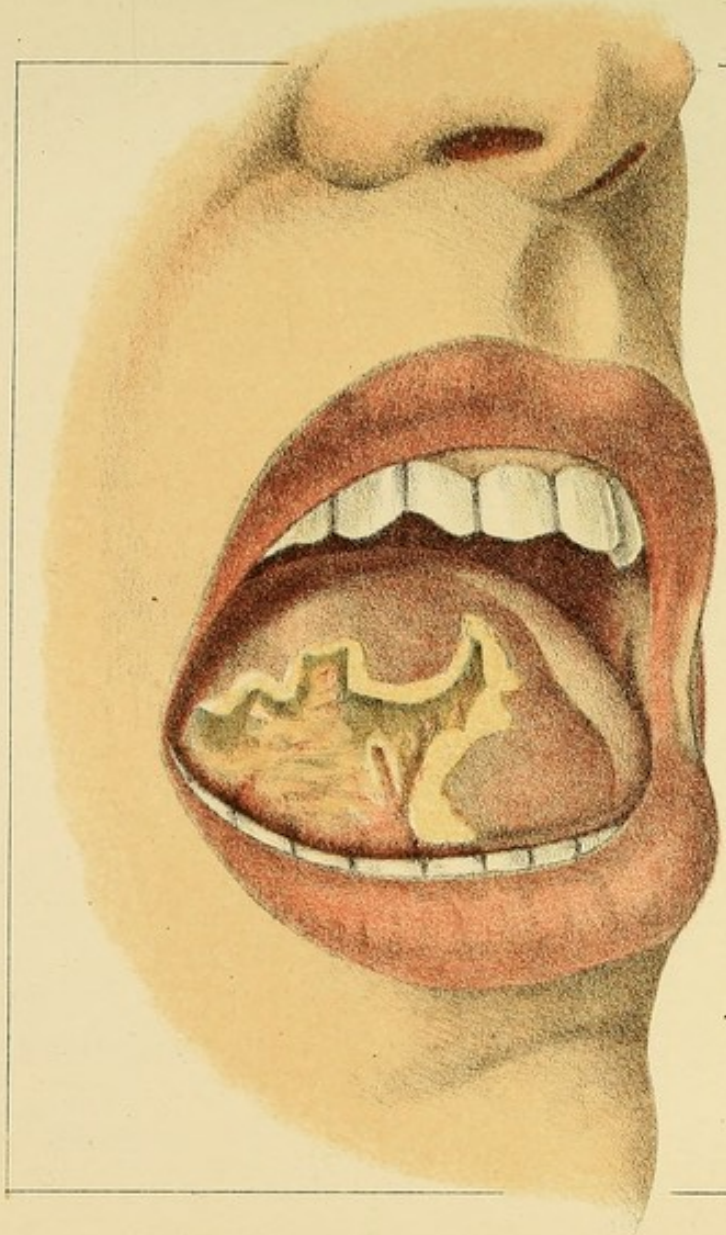

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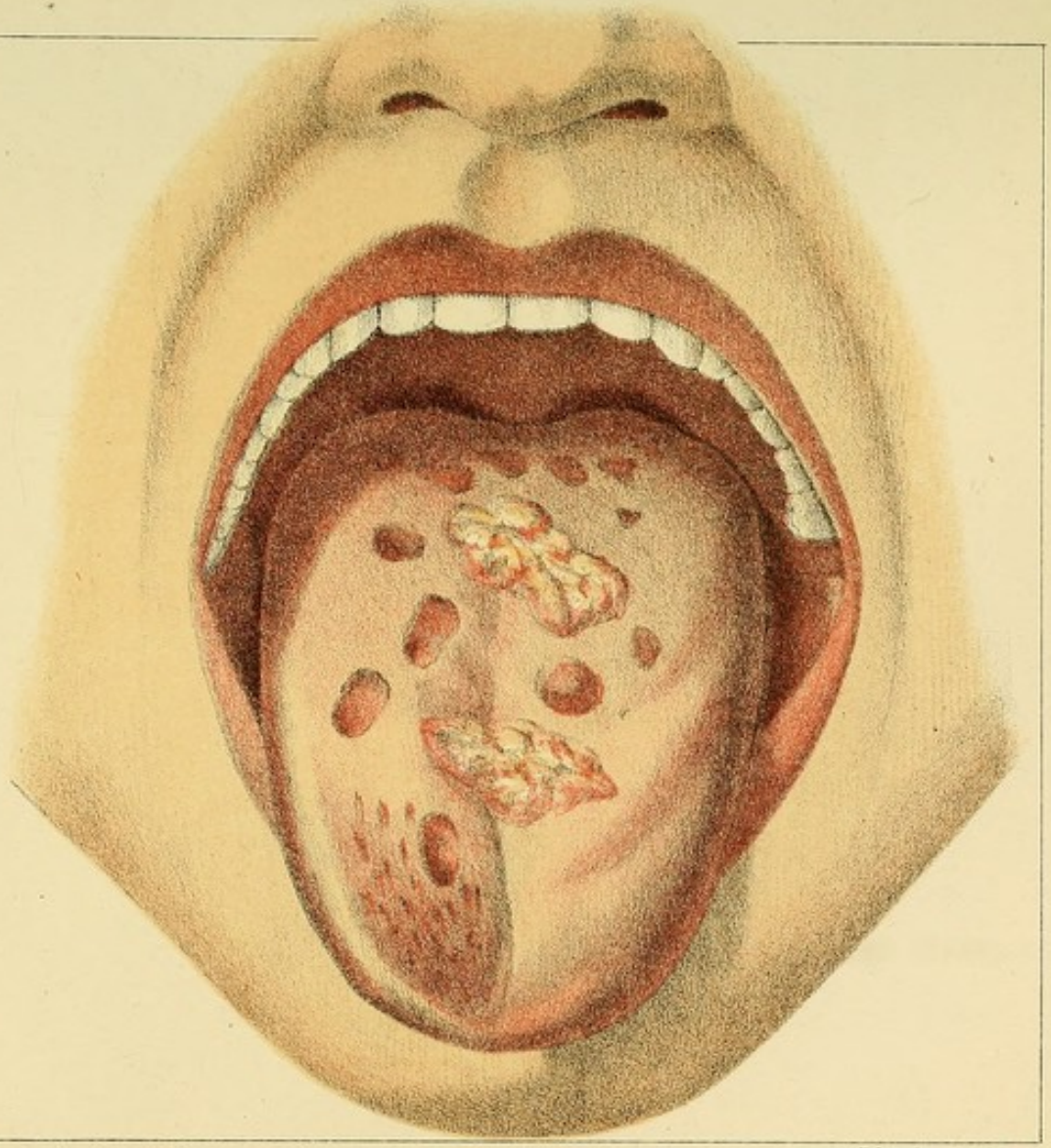

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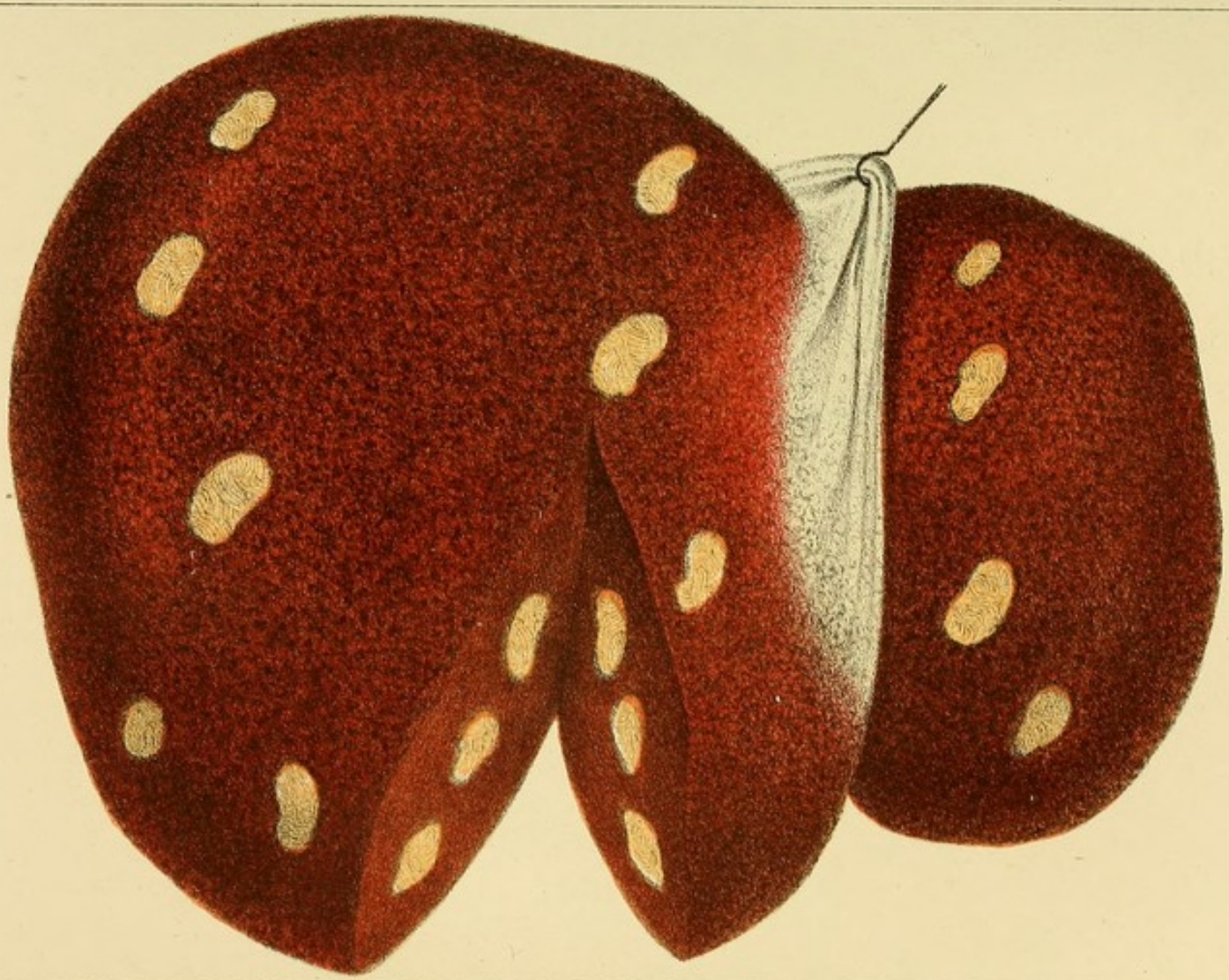

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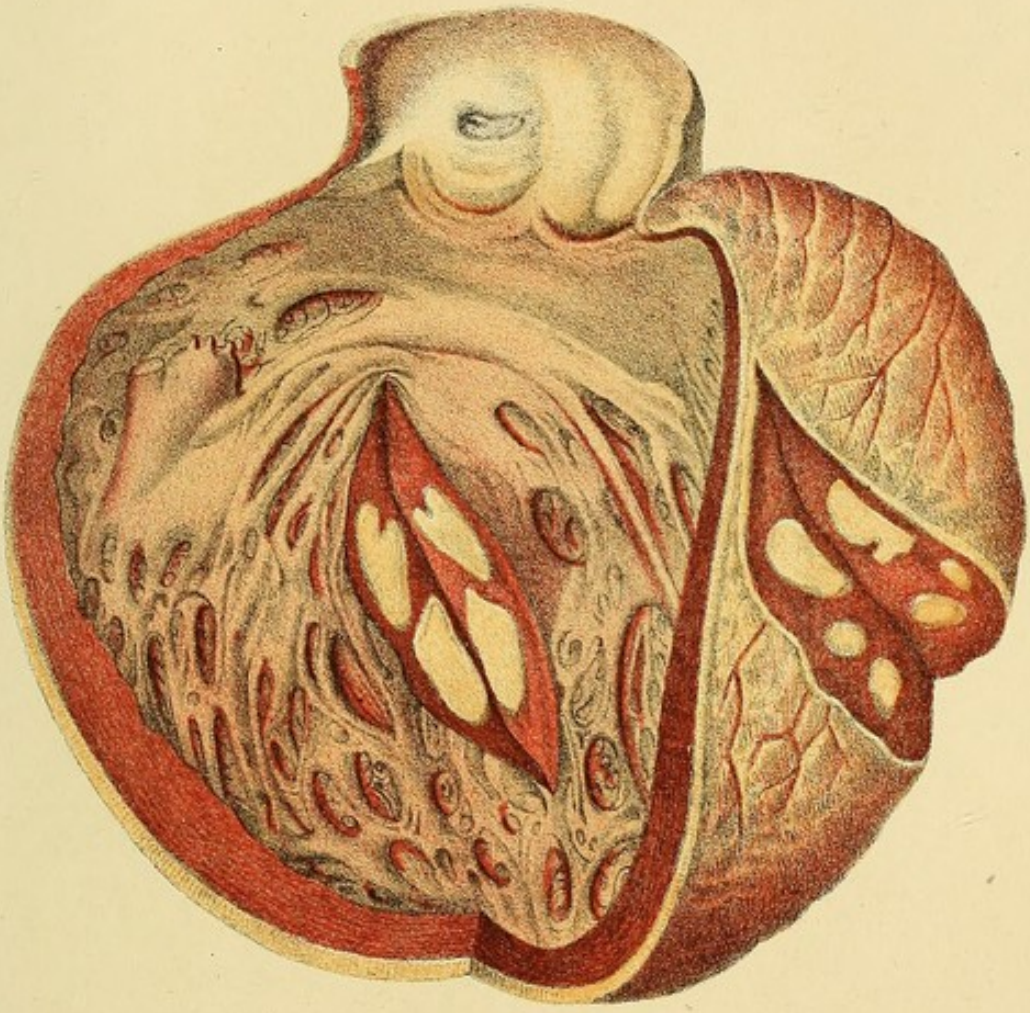

Tertiary Syphilis

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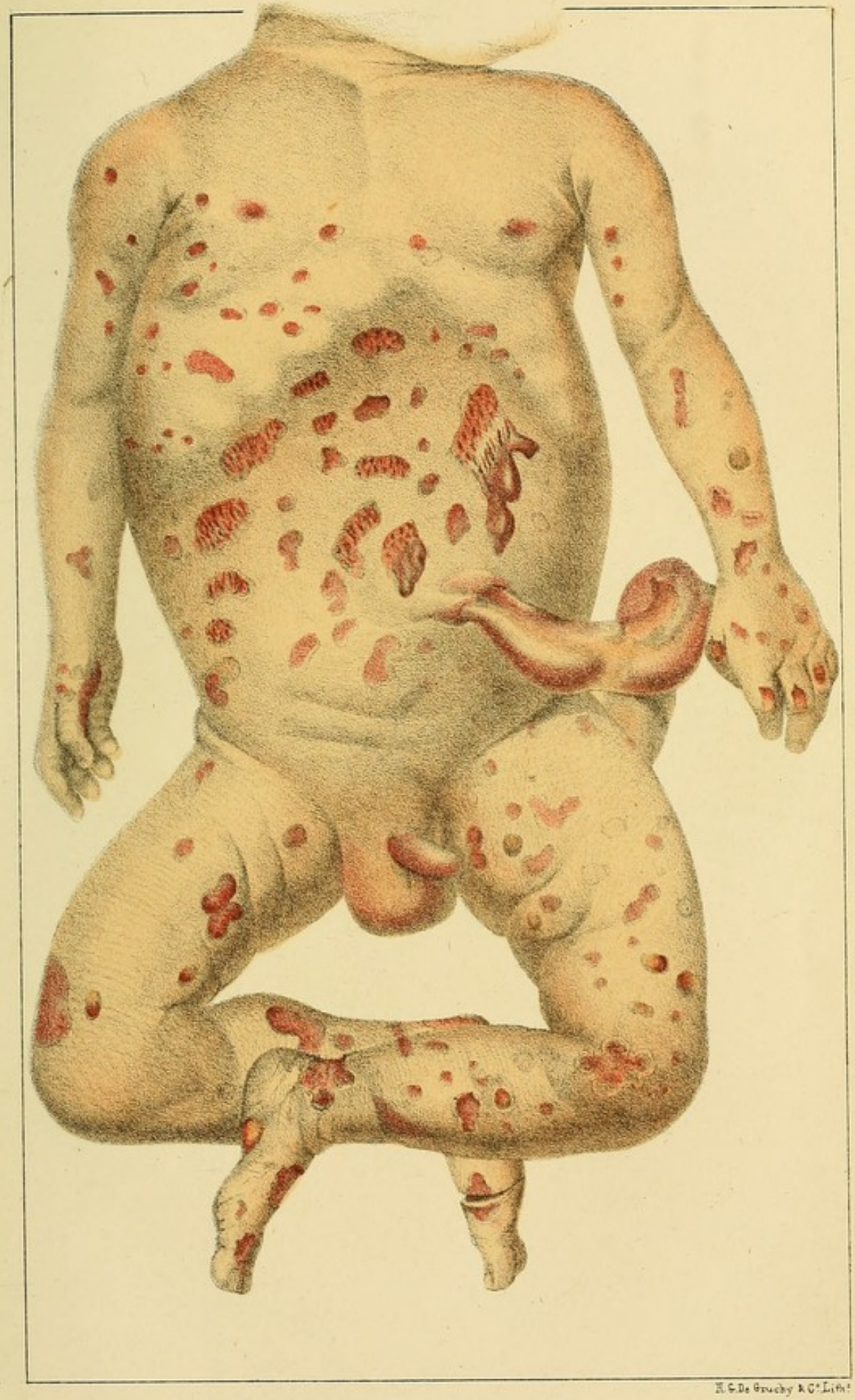

H. G. De Gruchy & Cie Lith.

Hereditary Syphilis.

CONSTITUTIONAL SYPHILIS.

"THERE IS NO DISEASE WHICH MORE IMPERATIVELY DEMANDS THE CAREFUL STUDY OF THE PROFESSION AT THIS TIME."—*Aitken.*

CHAPTER I.

DEFINITION.—*Gummata are the characteristic lesions of constitutional syphilis, and when they first exhibit themselves they are small, solid, pale swellings, like a hard kernel, varying in size from that of a pea to the size of a haricot bean. A syphilitic lesion may be recognised by its own peculiar characteristics. Abscesses are easily recognised by the pus; and which, being altered by age, may be anatomically recognised. Cancerous masses are recognised by the juice expressed from them. In syphilis we have no juice. In cancer there is difference in form and growth; in syphilis the changes of tissue are uniform in appearance and condition, and the elements are not so highly organised as in cancer, which have a tendency to infiltrate other neighbouring tissues. The gummy syphilitic node remains isolated from the tissues around it, and is generally divided from them by a semi-transparent greyish tissue.**

As will be at once seen, I pass over, for obvious reasons, the discussion of the phenomena of what is commonly termed Primary Syphilis, *i.e.*, the local indication of the disease arising from the poisonous action of the virus on the spot

* Dr. Aitken, Professor of Pathology in the Army Medical School.

where it has been deposited, which is commonly on the organs of generation. This indication of the disease is usually known by the term "chancre," and is one of the simplest forms of development. It is so well known, and so readily suggestive from its nature and ordinary locality, that whenever it may occur the patient is not at a loss to determine its character and origin. Much could of course be written upon this stage of the syphilitic taint, but as the secondary and tertiary forms of its exhibition are far more important to the public, involving far more serious conditions, I shall leave the less serious phenomena for those demanding more extended and particular notice. It may not be unimportant, if not perhaps advisable, to throw out a few hints in reference to the phenomena of the primary stage itself; although it then has not fully invaded the constitution, and commenced to undermine the foundations of health and life, it still is a warning that the enemy has taken its seat upon the surface, and will, if not absolutely destroyed, penetrate the frame, and proceed with its accustomed devastating power.

Its primary symptoms are balanitis (inflammation of the gland and lining of prepuce); simple or ulcerative gonorrhœa; chancre; granular disease of the mouth of the womb; irritation of the testicle, prostate gland, rectum, membrane of the nostrils, and the membrane of the eye. It is seldom that a poison, having once been absorbed, is spontaneously got rid of without serious alterations in the functions and tissues of the body; generally it proceeds to repeat itself and develop in regular progression all the phenomena that necessarily succeed each other, until it has brought about the destruction of the tissues it has invaded. In syphilis this is in a marked degree the case. It continues its hold when once the virus has been absorbed, and is so insidious that, unlike other poisons, it may remain latent for months, and even years, and suddenly break out in alarming severity.

The blood receives the taint in the form of poisonous germs, and thus disturbs every tissue which it supplies, depressing the brain, prostrating the nervous energies, and causing a sense of uneasiness and malaise in every portion of the frame. The syphilitic fever may not, however, set in unless led off by a chill or catarrh; and so also is it with the secondary phenomena, which may depend often for their positive activity on the debilitating influence of some other cause.

It is therefore imperative that as soon as any one discovers his misfortune he should at once confide his safety to those whose talents and position as surgeons guarantee to him a rapid release from the unpleasant association. That is the stage at which prompt and judicious action at once and for ever disposes of the evil; it is also the time at which an error in practice will allow the virus to invade the system generally, and increase the difficulty of cure. No time should be lost; no attention spared; no indifference as to choice of surgeon permitted.

With these suggestions as to the primary venereal affection, I shall leave it, and at once proceed to the task I have set myself, viz.—to make as plain as possible to the non-professional reader the terrible nature of the secondary and tertiary phases of this disease, and, if possible, to give him that amount of information which will enable him to detect its presence, or suspect it where he finds that certain phenomena occur in his own person in unison with the description given.

Constitutional Syphilis has for a long period been the scourge of the human family; having the ready mode of communication which sexual intercourse affords, it has spread with uninterrupted progress amongst all races. But although it has continued its march year after year, until very recently it met with no important check from the medical

schools. Not having been well understood, it escaped detection in thousands of instances, and under the guise of diseases having other names, insidiously spread itself by contact when its presence was unsuspected. Millions of men, women, and children have fallen victims to this constitutional form of the disease, and it now appears to the observant physician almost everywhere present, wherever the constitution is seriously affected. Indeed, the opinion of many of our most eminent men is, that it is our duty to look for it everywhere, and thus always be on guard, and prepared against a power which otherwise will baffle all our attempts at cure, if not recognised and specifically treated; the prominent feature of the patient's disorder being but superficial, or overlying the deeper and more serious ailment.

It will be necessary to give a sketch of the premonitory symptoms which point out in most cases an invasion of the syphilitic taint into the constitution, so that the dangers of ignorance may not be superinduced upon those of neglect. As a general rule it will be found that the system begins to respond to the activity of the poison about the sixth week, though even a longer time than that is often noticed to intervene. Then appear dullness of the eye, and want of the ordinary lustre and vivacity of the countenance. The skin changes from its usual clearness and ruddiness to a dull and earthy hue. Mental and bodily effort become painful, and a general inertia overwhelms the patient's energies, who becomes taciturn and inactive. Pain in the head with frequent attacks of giddiness occur; and the headache has the peculiarity of being worse generally at night, and especially so when in bed. The pains in the head principally occupy that part of the forehead immediately over the eye, the top of the head, and the left side. Paralysis of the face is also another symptom which not unfrequently occurs, and itching of the nose. Many persons complain of tenderness

under the clavicle, and I have frequently found this symptom to be an excellent diagnostic sign, as well as the substernal tenderness pointed out by Dr. Brodrick, of Madras. This gentleman thus writes in the *Edinburgh Medical Journal*, on substernal tenderness :—"It can only be detected by pressure on the bone, and when searching for it formerly I used to knead the bone with the fore and middle fingers, carefully, from the manubrium to the scaphoid cartilage. In a case of suspected constitutional syphilis, if the patient be asked if he has got a pain in the breast-bone, he will probably answer in the negative. The medical man should then knead the sternum carefully and gently along the whole of its course, and the tender spot will generally be found at the commencement of the lower third. With much practice and observation in this class of cases, I now generally succeed in touching the tender spot at once, to the great surprise of the patient, previously quite ignorant of the existence of the tenderness. If substernal tenderness be found, I believe we are quite safe in assuming that the subject of it labours under acquired venereal taint, which may have been masked by divers symptoms, and be quite unsuspected both by patient and surgeon. It often furnishes a clue to the cause of very anomalous symptoms, and a most invaluable guide to us in treatment. . . . Although the existence of substernal tenderness is, I believe, unerringly significant of venereal dyscrasia, it must be borne in mind that a patient may be constitutionally syphilitic without manifesting this particular sign ; but when detected, in it the physician has a very valuable guide for treatment. . . . I have hunted diseases to their source at once, in scores of cases, since I became aware of the existence and the importance of this diagnostic sign ; and the rapid improvement of such cases under the specific treatment has invariably confirmed my diagnosis. Constitutional syphilis prevails very largely in

Malwa, so that I have a large field in which to practice palpation of diseased sterna amongst the sick coming to my dispensaries. . . . In a suspected case, then, look for this tenderness; it will usually be found at the commencement of the lower third, occasionally in the upper third, and very seldom in the space intermediate." Swellings of the glands at the back of the neck are frequently observed, and are in a high degree characteristic of the further encroachments of the disease. Falling of the hair from the head is another symptom of importance, which will with others receive further notice as we proceed.

The regions principally affected in the secondary form are the mucous membranes, seen in ulcerations and eruptions; the eye, seen in disease of the body of the eye itself, and especially the iris; the throat, as seen in ulceration of the fauces, the tonsils, the palate, &c. The blood also changes, and as a consequence every tissue in the body undergoes more or less disturbance and disorganisation, until the unfortunate victim falls, in the tertiary stage, a prey to a destructive agent which might have been strangled in the outset had it been in the hands of a competent surgeon.

The poison of syphilis undergoes a multiple process of elaboration or development in the system before its full effects are completed, and the lesions it induces demonstrate some of the most interesting points in the pathology of the multiplications of morbid poisons. It is this multiplication which ultimately destroys life through a general degeneration of the tissues, or by the induction of grave lesions in important visceral parts, such as the brain, lungs, liver or the kidney, and heart. In the so-called primary and secondary affection we have mainly to do with congestions, inflammations, and ulcers. In the tertiary lesions and advanced stages of syphilis there are (1) a constitutional cachexia, with certain definite anatomical characters; and (2) a tendency to the

growth of a peculiar material, chiefly in the form of gummatous tumours, or nodules of which the node is the common and familiar type, but which are found not only in the bones, but in the areolar tissue, heart, muscles, testes, and eye.

Secondary Symptoms, as they appear on the Skin and Appendages.

EXANTHEMATA *(Rash)*.—This rash varies considerably in form, and also in regularity of size. The patches are superficial and red, but disappear on pressure, and they pass away by means of desquamation, or falling off in the form of minute scales. Either during the existence of the primary symptoms above alluded to, or after improper treatment and throwing in of the virus, the patient observes on different parts of the body—sometimes extensively, at other times very limited in extent—an eruption which he is inclined to consider as of a simple nature, from its similitude to measles. It is seen most frequently on the arms and abdomen, and has the appearance of rosy patches more or less circular in form; at the same time the surrounding skin is unhealthy in character, being of a dull, dusky, and yellowish tint. This rash is sometimes accompanied with a little fever, but not generally; hence it is allowed frequently to be treated lightly, and considered of little moment. This absence of fever is by no means a reason why the rash should be passed over with indifference, for having once appeared, it may from time to time re-appear, and assume quite a chronic and uncontrollable character; it is, however, the simplest form of secondary, and can at that stage by proper treatment be effectually controlled, any further development being prevented. It is also often erratic, or roving, appearing and disappearing at different parts of the body, which indicates

that the taint is becoming general, the virus having penetrated the blood current. These spots or rosy patches in the end become dull, and, losing their rosy hue, become coppery, and thus especially characteristic. It would be well for the infected to have obtained proper assistance before this last change has taken place, but it behoves him especially to take the alarm as soon as he perceives that the apparently simple rash—which scarcely at first arrested attention—becomes changed into what at once admonishes of the existence of the dreaded poison, viz., the coppery stain. One of the hints that may judiciously be thrown out for the better guidance of the infected in this matter is, that the duration of the course run by the rash is exceedingly unequal, varying from a few hours to three weeks, thus differing widely from the great regularity noticed in the periods of those eruptions which syphilis is said to simulate. The absence of itching and fever may always excite suspicion, but should there be chancre anywhere on the body at the time of the rash, no doubt whatever need exist as to the nature of the disease. This rash is, however, sometimes simulated by one which is not of a formidable character, but so seldom does this occur that it is exceedingly unwise in any one to speculate upon such a chance. The surgeon alone is able by analysis of all the circumstances to arrive at a correct conclusion.

The true rash has been clearly described in *The Lancet*, and in so concise a form that it will be of some service to quote it:—"When the eruption has appeared it will go on for more or less time, but it then presents a kind of intermittent character; it is observed to fade away for a little while, then it reappears, and it may thus go on with interruptions for two, six, or twelve months, but after a year or two it entirely dies away. It fades away without the patient being aware that it ever existed; but some time after—say a year—another and deeper eruption makes its appearance, and

here you must be careful not to take this latter eruption for the first manifestation, for you would then fall into the error of believing that you had to do with a tertiary symptom, the second having been absent altogether." From this high authority I thus draw a powerful auxiliary to the advice above afforded, which authority beyond all dispute commands the attention of the public, as well as of the profession. This rose-coloured rash, therefore, which is the first and simplest of secondary phenomena, should, by all persons who suspect themselves of being contaminated, be immediately accepted as a note of serious import, and steps should be taken by professional aid at once to deal with it effectually and curatively.

The syphilitic *roseole* is preceded almost always by the symptoms which precede the simple rash, such as lassitude, sometimes soreness of the throat, with redness of the fauces, feverishness, and general feeling of some constitutional disturbance. It also leaves, after it has run its course, a slight discolouration. There is a still lighter efflorescence on the skin, also of a syphilitic character, which does not eventuate in pimples, vesicles, or pustules. This is one of the simplest of the syphilides, and is called in scientific language **Erythema**—*Erythema* meaning simply redness. This simple syphilide has no precursory symptoms whatever; it is therefore generally allowed to pass without any treatment, its real character not being suspected, although doubtful coït may have recently been indulged in. The *Roseola* syphilide is not so simple and unimportant as the one just described. Its patches of rose colour or redness are distributed irregularly over the surface of the body; it is variable in its duration, sometimes being many weeks in existence, and when it has passed away it leaves a stain. It is also sometimes annular in its manifestation, spreading in extensive rings over the body, and having a patch of clear skin in the centre. Although there is in this syphilide no serious disorganisa-

tion of the skin or underlying tissues, still the stain is similar to that of all the syphilides.

S. **VESICULÆ** *(small round elevations of the skin containing a clear and colourless fluid).*—In describing the many forms of vesicular or herpetic syphilis, it is well that the reader should know what is the strict meaning of the term. A vesicle then is a small bleb which rises upon a portion of the body that may be slightly reddened, and which fills with a clear fluid. The vesicles vary in size from a pin's head to a bean. People generally term these small blebs blisters, and are not alarmed at their presence if they are solitary, or not very numerous. Syphilis when assuming this form is called vesicular syphilis. The first in order of the vesicular syphilides is

S. **ECZEMA**, so called because the grouped vesicles were supposed to resemble bubbles of boiling water, also from the painful burning that accompanies them. It appears in patches which have a shining appearance, scattered irregularly over a limited portion of the body, and usually in groups. It is in fact the characteristic representative of this class. These small vesicles remain so, and do not rupture as all others of this class do, nor does the skin around them crack as it does in what is termed true or uncomplicated *Eczema*. It is in fact more frequently of a syphilitic nature, and results from some infection having been taken at some antecedent period. There is no itching of the vesicle, as is so common in simple and uncomplicated eruptions of that kind. It principally attacks the face and the roots of the hair upon the neck.* After these vesicles have continued for about five or six weeks without any particular change, the fluid in them dries up, and the characteristic coppery tint presents itself. It is frequently seen in children.

* Divergie.

S. HERPES.—The next form of vesicular eruption is called "*Syphilitic Herpes.*" The nature of simple herpes is seen in the small blisters or vesicles which many people have, and especially the young, on the lips at the close of a common cold, or catarrh. When there is an unusual proneness to this kind of eruption on the mouth, it is prudent to suspect that it may be complicated with the syphilitic taint. Herpes also occur on several parts of the body besides the lips, and vary in size from a millet-seed to a pea, and always have a bright red base in the adjoining skin. The herpetic vesicles contain a yellowish and thick fluid; they break, and after discharging their contents form a thick crust, which when picked off is renewed. Under this herpetic crust there is slight ulceration, which is sluggish and prone to assume a chronic form, accompanied by considerable soreness. Other portions of the face besides the lips are subject to these patches, which, not uncommonly, are found to be accompanied by similar eruptions on other places, such as the genitals and the rectum. The eruption may sometimes appear in the form of rings. Although these several forms of herpes may be considered simple and trifling, still they are undoubtedly indicative of a long and tedious course. Many persons very imprudently allow this disease to continue unchecked, without seeking proper medical aid, and thus subject themselves to considerable and unnecessary inconvenience, for it is not difficult, by judicious treatment, to prevent the recurrence of this very troublesome disorder.

CASE I.—*Exanthem, &c. Rash, variable and intermittent. Tedious Herpetic eruptions on the lips; ulceration of tonsils, &c. Pains in the heart. Loss of hair, &c. Loss of memory.*

Mr. M'C., a schoolmaster from the country, called upon me about ten months ago, and consulted me in reference to

his health, which had for some years been ailing, without his being aware of the reason. On examination I found it necessary to question him as to the probability of his having been at some time of his life infected by the venereal poison. He informed me that about nine years ago he contracted syphilis from impure coïtus, and had then a chancre on the penis. He had not seen anything of the kind since then until about two years ago, when he noticed an eruption that appeared and disappeared at irregular intervals, with frequent breakings out (herpes) on the lips, for which he could not account. At the same time he had small ulcerated spots on the tonsils and throat, which after a short time disappeared. On consulting me he complained of paroxysms of violent pain in the heart; his hair was nearly all gone; his memory so seriously impaired that it destroyed his efficiency in his profession, and necessitated his asking for leave of absence in order to recruit and put himself under my care. I treated him as a person suffering from the syphilitic taint, and recovery at once set in. Although he had lost his hair, a new thick crop soon commenced growing, and continued. A good appetite returned, his memory again became vigorous, and he resumed his duties in perfect health. I had no doubt but that this patient owed all his misfortunes to venereal taint, and was rapidly proceeding to a tertiary condition.

CASE II.—*Vesicular Syphilide. Annular eruptions on several parts of the body, on the nose and lip. Invasion of the eye.*

R—— (T. M.). This patient came from Ballarat, having some months before contracted the venereal taint. On examination no chancre appeared, but it happened that one had been on the penis, and also on the scrotum, or covering

of the testicles. They had been succeeded by eruptions of a vesicular character, which the patient did not suppose to be of syphilitic origin. On the chest, sides, and back, there were distinct annular eruptions of small vesicles or blisters, and red patches, which were troublesome and tender. The upper lip and right side of the nose were also the seat of the same eruption. The left eye had become involved so as to exhibit a distinct alteration in the iris, and considerable injection of the whole surface. This was one of the simpler syphilides, but sufficiently alarming and distressing to the patient. There could be no reasonable ground for doubt as to its true nature, owing to its history and the antecedent chancre. The treatment was antisyphilitic and specific; soon the eruption disappeared, and the patient returned home apparently quite restored. The iodides were of the greatest use in this case.

PAPULÆ *(Pimples)*.—The chief characteristic of this class of syphilitic exanthemata is the minuteness of the elevations, which has given to its most prominent and common type the name of Lichen. It is only sometimes fully to be recognised by passing the finger over the part affected, when a roughness of the surface will be observed, which on closer inspection will be seen to be caused by slight projections above the surface of the skin. The eruption is, as a rule, preceded by a loss of tone in the general health; sickliness in the expression of the countenance; the patient is pale, and has a dirty, cadaverous appearance, which he cannot on other grounds account for. His usual vivacity of course leaves him, and his friends cannot fail to see a marked loss of flesh, and depression in his animal spirits. Ere long an eruption such as I have described appears, of which he is reminded by a slight itching or irritation occasionally, although this may not be a constant symptom. It may occur on any part of the body,

but usually selects for its habitat the abdomen, and inside of the thighs: there it assumes a rosy colour, that shortly passes by the usual transition into the characteristic coppery tint. It is to be found always in clusters or patches, varying much in dimension, sometimes covering large sections of the body, at others being very circumscribed. When the eruption occurs independent of the syphilitic taint, it is usually of but short duration, and is to be regarded as a simple phenomenon indicating a slight constitutional disturbance; but when associated with the venereal virus, it may continue a long time, and be the source of considerable inconvenience. Ordinarily it dries and forms a whitish exfoliation, which rubs off, leaving a slight roughness of the part that is the seat of the eruption. The same counsel which I have hitherto given in reference to medical assistance applies here also. The simplicity of the eruption is no argument in favour of allowing it to take its course. The active principle underlying the eruption, that has lowered the general health, and induced the debility of which this papulous eruption is the outcome, should be made the subject of special treatment. The infected person should have recourse in this case also to his medical adviser, or to some member of the profession competent to render him efficient relief.

Case III.—*Papular Syphilide. Annular eruption over the whole back; confluent on sides and abdomen.*

Mr. James W——, of B——, consulted me in July, 1866, with one of the most remarkable annular papular syphilides that I have seen. The trunk was the chief seat of the eruption, very few spots occurring in the upper or lower limbs. Two or three large rings were to be seen on the outer aspect of the right thigh. The back, however, was the locality

that attracted my attention more particularly. The eruptions were so regular and numerous that the back appeared to be tesselated with them. Divergie mentions cases of a similar nature.* This one was singular amongst the many which I had seen. The centres of the rings were many of them of the normal colour, while the eruptions around them changed in the usual way to the characteristic coppery tint. On the sides and abdomen the eruption was confluent, although annular. The patient had contracted syphilis about three years previously by impure coïtus, which was followed by chancre as well as ulceration of the fauces. At the time of his consulting me he had mucous ulceration of the tongue, with very offensive breath. A course of antisyphilitic treatment, with the use of the permanganate of potash, completely restored him.

PUSTULÆ *(a circumscribed elevation containing pus, or matter).*—The Pustular syphilides are by far more serious eruptions than those which have hitherto been noticed, involving as they do greater destruction of tissue, and vital changes which operate with greater influence upon the animal economy. The disease is to be seen most frequently on persons of a cachectic condition of body, or what is usually termed bad health. There is then little vital energy to resist the inroad of the disease; and those morbid changes to which the constitution of the patient may be prone, proceed uncontrolled to exhibit themselves in the shape of pustular eruption. The common situation of these syphilides is on the lower limbs, although they are to be seen on every part of the body in some patients, and when on the face they sometimes give a most revolting aspect to the countenance. They do not occur in the palms or on the soles of the feet. They are extremely tedious, continuing

* Divergie—*Maladies de la Peau.*

to appear in successive crops for a long period, baffling all attempts to check their development that are not based on correct principles of treatment. The pustules are first red, and form elevations, which afterwards change to vesicles containing pus. This soon dries into a yellow crust, generally leaving an elevated sore, which is prone to run into a chronic state. So striking indeed are these crusts in some rare cases, that the patient has the appearance of one recovering from small-pox, or who has become the victim of that terrible plague known as leprosy. This disease is in an especial degree aggravated by bad or unscientific treatment—as I have frequently witnessed—and by want of cleanliness. Some of the scabs are, in bad cases, as large as a shilling, continually increasing in size by reason of the constant purulent discharge, so that in many instances the scab rises to nearly half an inch above the skin. There have been periods when this form of syphilis prevailed as an epidemic, nearly every one who had contracted the taint exhibiting the same disgusting phenomena. Modern science and greater attention to sanitary regulations have, however, so far controlled it, that it seldom is found in so aggravated a stage. It does nevertheless sometimes assume its worst forms, accompanied by an enfeebled constitution and loss of appetite. In all such cases the nutritive functions are imperfectly performed, and the virus acts with uncontrollable power. Extensive mischief often results from bad treatment or neglect. Portions of the body become discoloured, dark, and coppery, and the ulcers irregular, sluggish, or indolent; the attack upon the neck and scalp is more serious as the parts are exposed; the hair follicles are invaded so as to destroy the bulb, and thus cause destruction of the hair itself.

There are varieties of this pustular eruption, which each require a separate notice. They are—*Ecthyma, Acne,* and *Impetigo.*

S. ECTHYMA.—This syphilide occurs in large isolated pustules, depressed in the centre, and which, like small-pox, leave marks behind them. It is also the most common. There are occasionally instances in which all three of these eruptions are presented at the same time on the same individual, but as a general rule they are manifested singly. The pustules may be isolated or confluent—*i.e.*, running together, and in groups, always accompanied by ulceration, which is more or less deep and enlarged. This disease commences by a slight elevation of the skin, as though it were injected, having a reddish hue. It is papulous, and soon appears to have under it a watery or serous fluid, which ere long changes to pus. The pustule may be very small, no larger indeed than a pin's head; still it sometimes reaches the size of a nut, which is in fact the most common approximation, the colour being a yellowish white. The pustule at length breaks, and the pus spreads out, forming unsightly crusts or scabs, thick and irregular. After these crusts have accumulated by accretion they fall off, generally leaving a cicatrix or mark behind them. Very frequently a sore is exposed instead of a cicatrix, which may be soon healed, but nevertheless a mark is left on the formerly ulcerated spot. There is in some constitutions a proneness to repeat the formation of crusts indefinitely, and to so superinduce the scales on each other as to resemble the eruption called rupia. Under the best treatment ecthyma will generally require three or four months for cure.

CASE IV.—*Syphilitic Ecthyma. Vesicular and pustular stages on back and shoulders, and upper and lower limbs. Eruption annular. Infected three years previously.*

Mrs. L——, of Emerald Hill, Melbourne, came to me about the end of October, 1868, having a most distressing

and offensive skin disease. It was at once apparent that it was a well-marked case of the pustular syphilides. It also presented both the vesicular and pustular characteristics. There were central crusts surrounded by a border of pale skin; near and beyond this pale portion there was an inflamed space, on which were herpes in vesicular and pustular stages. It reminded me of some cases recorded by Divergie,* being exceedingly close in parallelism, and rather unusual. The eruption was present on the trunk, especially on the back and shoulders, and on the upper and lower limbs. It was also on the forehead and face. The spots on the body and thighs were thickly distributed, and varying in colour. The patient stated that she had been suffering from the eruption in rather less development for upwards of six months, and could get no relief. She had been constantly subject of late to sore throat, and at the time of her consulting me had severe ulceration of the tongue. Her husband, according to her report, had contaminated her three years previously, from which she had shortly afterwards ulcers on the genitals with discharge, which healed spontaneously after some time. A course of anti-syphilitic treatment for nearly five months restored her to perfect health. This syphilide is more frequently seen in women than in men. It is in development between the ordinary pustule and rupia.

S. **ACNE**, groups of hard, inflamed tubercles, which sometimes remain for a considerable time. It first appears in isolated pustules, coalescing by degrees, with a hard base, which are slow in forming and disappearing. It is much more indolent in its course than any other pustule; thus it is not so pustular nor so corroding and destructive to the body. It is slightly conical in form and hard to the touch. A small crust

* *Maladies de la Peau.*

of yellow dry matter forms on the top, which soon falls off in minute scales. Numberless persons have these acne or small pustules on their faces, and in many cases they are very numerous, covering most of the forehead and cheeks. There is a simple acne, which is to be distinguished from the one with the syphilitic complication by the practised eye, but without experience it is difficult if not impossible to determine it; therefore they who are troubled with these pustules should take the precaution to ascertain whether this troublesome and obstinate affection is complicated with syphilis or not—*i.e.*, whether it is a syphilide.

Case V.—*Inveterate Acne, in both stages, absorbed and suppurating.*

H. P——, of Lonsdale-street, Melbourne, consulted me in the month of March, 1865, with a most inveterate case of the acne syphilide. He was suffering at the time from ulceration of the fauces, and nocturnal pains in the legs from the hips downwards. He had also a discharge from the urethra of a syphilitic character. A gentleman who had treated him before pronounced it gonorrhœa, but on examination with the urethroscope I found urethral chancre. He had well-marked acne *all over the body*, with a hard, raised, and red base, especially on the face and back. Some of the pustules had gone on to suppuration, and others to ulceration. The inveteracy of the eruption, which had existed a considerable time, and resisted every effort at amelioration; the history of the case from the original chancre, which had appeared four years previously; and the accompanying symptoms, determined the diagnosis as to its being syphilitic acne. I accordingly treated it with small doses of mercury and the iodides, and with the best results; for in the course

of thirteen weeks the eruption and accompanying symptoms had completely disappeared.

As a general rule simple acne has the face and the upper part of the trunk as its places of selection, while the syphilide occupies the inferior extremities. This is, however, by no means invariable with the syphilide, for the acne of the face is often found to be modified by the more serious disease. One very simple diagnostic sign is that the syphilide leaves a coppery spot, which the simple acne does not. In addition, the syphilitic acne has been preceded at some time by other evidences of the venereal taint.

S. **IMPETIGO.**—*(Pustules about the size of a split pea, on a ground of inflamed skin, terminating in a yellow-brown crust.)*—This syphilide occurs in groups, and it is even more difficult to discriminate between the syphilide under this name and the common Impetigo. It is frequently seen to attack the beard and the hair of the head, and is then still more difficult of recognition, requiring much experience and correct observation, especially where there are not co-existent with it some one of the more determinate forms of syphilis. It is one of the most annoying and disfiguring of the syphilides, and has been in many instances of long duration. The patient will in some cases find that the glands of the neck are involved at the same time, being swollen or engorged, which symptom will be of service in guiding to a recognition of the true character of the disease. When this accompaniment is observed the anti-syphiltic course should be adopted.

These pustular syphilides are amongst the most annoying and offensive of the eruptions which the syphilitic taint induces, and unless wisely treated are prone to become chronic, to sap the foundations of the constitution, to depress the spirits of the patient, and bring on premature death.

S. RUPIA.—This name is given to pustules that form larger crusts than any other of the syphilides. It is a tuberculo-vesicular eruption which forms unhealthy, foul, burrowing ulcers, that exude a reddish, ill-conditioned matter. It is also an eruption which is later in appearing, sometimes not occurring for years after the taint has been contracted. The other syphilides which I have described appear at earlier periods, some of them a few days or weeks after the virus has been absorbed. Rupia, however, is one of the last forms that syphilis assumes, and is remarkable for its size, colour, and form. It is eminently a syphilitic disease. It is frequently seen in our hospitals, and even in private practice. During my long connection with the Melbourne Hospital several cases came under my notice, and I have also in the course of a large private practice met with a considerable number, in nearly all which cases many years of infection had preceded the eruption. When it appears it is an indication that the health of the patient is much reduced, and that there has been considerable declension of the vital forces. General debility is nearly always a concomitant of this exhausting affection. The pustules are in some instances the size of a large grape, and the fluid which they contain is at the commencement clear, but, as in all the other pustular syphilides, soon changes to the pustular condition. Having ripened in the course of two or three days, the pustule breaks, and the pus exudes, dries, and forms a cake or scale which remains adherent. The flow of pus continues day after day, and drying increases the thickness of the already-formed crust. This gradual formation of the scab goes on until it assumes the form of a semi-conical elevation, of a greenish-brown colour, that contracts, leaving the sides or edges of the ulcer exposed. When the crust is detached, either spontaneously or by accident, it is found to conceal an ulcer of considerable depth and of variable

extent, being deep in proportion to the duration of the crust. Sometimes the ulcer does not form the conical accretions, but retains the open form, presenting a foul surface, thin, livid, or pale, with excavated edges and an inflamed areola. The ulcer is also exceedingly difficult to heal, and leaves a livid and purplish stain.*

There is another variety of *Rupia* which does not exhibit the conical crust as before described, but which forms a large convex crust that covers the whole of the ulcer, giving the appearance on a miniature scale of the back of a turtle, or of a helmet. These convex hard scales are generally a dark green, sometimes approaching to a black, but the base is always of an earthy hue. They are as a matter of course indications of the extreme gravity of the disorder, and sufficient to warn the sufferer of the peril in which he is placed.†

Sometimes it will happen that the secondary syphilide called Rupia will appear but in one, two, or three ulcers; and may select the face, where it may occupy nearly the whole of one side. From a central hard crustaceous tubercle it will spread by continuous and confluent tubercles until it occupies a large portion of the cheek.†

It sometimes forms a zone or belt round the body, and may be found existing in all stages at the same time. Some of the sores are much more corroding than others, not forming with such rapidity or regularity the characteristic protecting crust. This syphilide is common to the lymphatic temperaments.

In fact, *Rupia* is so characteristic that once seen it can never afterwards be mistaken, and the patient who may be unfortunate enough to have such an eruption upon him will at once recognise it from this description. Successive crops of the pustules appear, so that the sufferer on observing

* Erasmus Wilson. † Divergie.

the healing of one ulcer is not sure of the final departure of the disease, but may expect to witness fresh pustules cropping up in other places. This form of syphilide is so exhausting to the constitution—which is generally in a pyogenic state, *i.e.*, disposed to form pus—that vigorous and judicious measures ought to be taken to restore the *vis medicatrix naturæ*, or nature's own reactionary forces, and to neutralise the action of the venereal poison. When this stage has been reached, every effort that science and skill can suggest should be applied to save the constitution, if possible, from succumbing to the dreadful power of the disease. Modern science has done much to reduce its virulence, and overcome it. The following are illustrative cases.

CASE VI.—*Pustules in every stage of development. Rupia; Chancres; Crusts, an inch and a half in prominence.*

This patient, A. G., a carpenter, residing in one of the suburbs, presented himself on the 11th of December, 1867, having about sixteen or eighteen distinct pustules in every stage of development. Most of them had the peculiar well-marked shell-like covering, and were generally of a dark, dirty-green colour; some of the incrustations being convex, others having the contracted conical form, leaving the edges of the ulcers exposed. The patient was of a nervo-sanguine temperament, with an infusion of the lymphatic. Other eruptions of the same character were found on the arms and sides, but much larger and if anything more malignant than those on the face. There were at the same time some bullæ which were in the initial stage, rapidly progressing to the full-formed Rupia. This patient had several times had chancres, and remembered having been twice confined to his bed by suppurating buboes. One of the crusts was an inch and a half in prominence, and several were at least half-an-inch from

the depressed base to the point of the cone. Some of the oldest ulcers had healed, the crusts having been rubbed or knocked off, and the usual discoloured cicatrices left behind. As is well known, this syphilide is extremely difficult to heal, and often defies the most able administration of the physician and surgeon. This patient, however, being only about 32 years of age, and of a naturally good constitution, was, by the end of March or the beginning of April of 1868, completely free from ulceration, having no external indication of the disease beyond some very decidedly characteristic cicatrices here and there.

CASE VII.—*Ulcerations on upper and lower limbs, face, and back. Nodes on legs. Ulcerated throat and tongue.*

In August, 1866, I was sent for by a man who had just arrived from South Australia, having a well-marked Rupia Syphilide in every stage of development. On entering his room, I observed on the face several large crusts—three on the left cheek, two on the chin, and one immediately over the right eyebrow. Those on the chin had deep, offensive ulceration round them, from which protruded a series of concentric scales, diminishing slightly in size, the apex being nearly half an inch from the base. On examining him further I found several scabs of the same kind, varying in size, colour, and development. On the back and sides were some sores, with but thin, limpet-shaped laminæ upon them, but extended, and having all the marked characteristics of the worst kind of Rupia. The arms also presented examples of different kinds, some being yellow, others green, elevated and hard. He complained of nocturnal pains, and I found two nodular prominences on anterior portion of the left tibia. For a long time he had been constantly suffering from sore throat and tongue. He stated that he had been infected

seven years previously, and then had chancre and bubo. He had also taken mercury without much benefit. He left in nine weeks, with his skin clean and his health restored.

S. **BULLÆ** *(watery bubbles or large blisters).*—Another form of syphilide passes under the name of *Bullæ,* which signifies that the eruption takes the form of a large blister, and pus may be mixed with the serum in the blister. They are thus distinguished from the ordinary vesicle, which is always much smaller. The largest type is called *Pemphigus,* and is rare. Even in its simple form, uncomplicated with syphilis, it is seldom observed, and less still in the compound state. It is not often seen in the adult syphilitic patient, but generally in the young. Ricord gives examples of it occurring in young people, and I have myself met with such cases in this colony which have been well pronounced. It is hazardous, however, to give an opinion in favour of any case of *Pemphigus* being syphilitic, without the existence of corroborative indications about which no doubt can be entertained. Should there be a chancre or other typical expression of the taint, it may then be wise to conclude that the bullæ or pemphigus is thrown out by it. The highest authorities have differed in opinion as to the existence and frequency of this syphilide, but there are names of great weight on the affirmative side, amongst whom may be mentioned Ricord and Bassereau. It is a disease that not unfrequently is noticed in newly-born infants, and is thought to be—as doubtless it often is—an hereditary taint given in utero by the mother. The course of the eruption is that the skin at a certain spot becomes uneasy and red. Upon this red patch a whitish spot appears, and the skin rises and fills with a serous or watery fluid. The eruption almost exactly resembles a burn, the pain being absent, or it has the appearance of a blister from the use of cantharides. In a few days it

breaks, the fluid is discharged, leaving a reddish surface, with a slight exfoliation of dried serous matter. Whenever these phenomena are noticed, it is desirable that they should be submitted to the inspection of a competent medical man, who may render the required assistance, and set at rest the anxiety of those who may be interested in the health and constitutional soundness of the patient. Several children have been brought to me covered with these syphilitic bullæ, having been treated by other practitioners for native-pox, without advantage. The disease yielded at once to anti-syphilitic treatment.

TUBERCULÆ.—*The Tubercle is a solid, rounded elevation under the skin, which is moveable under the finger.* It is amongst the syphilitic phenomena which occur at a late period, when the constitution has been long under the influence of the virus, and when it proceeds to ulceration—as it is always prone to do—it is difficult of management, and on healing leaves an indelible mark. It presents itself in several forms—1st, scattered or diffused; 2nd, in groups; 3rd, as a penetrating ulcer; 4th, as a serpiginous eruption. The tubercle is a sluggish eruption, and indicates the period of transition between the secondary and tertiary phenomena, and the entering upon a stage more alarming and destructive than any of the preceding. It will frequently occur many years after the primary symptoms of infection have passed away, suddenly, as it were, arousing the patient from the delusion that the enemy had for ever disappeared. It unfortunately is not an uncommon syphilide, but is seen in our streets and hospitals, represented in the disfigured countenances and consumed features of its victims. It is one of the most terrible forms of the syphilitic invasion, and by the rapidity of its progress often strikes terror and amazement into the heart of the unfortunate sufferer and his friends. No part

of the body is exempt from its ravages, but its especial seats of destructive activity are the face, the forehead, the nose, the shoulder blades, the inside of the legs, the genital organs, and even the mouth of the womb. It also attacks the tongue, the palate, and the throat.

Mr. Acton says, when writing on tuberculæ—"I have witnessed examples in which a large portion of the thighs, as well as the whole organs of generation, vagina, and neck of the uterus, have been entirely covered with a crop of tubercles, attended with such local irritation and offensive smell that the patient was a most disgusting object. In this case rubbing one part against the other caused pain. By inattention to cleanliness the disease has a tendency to extend."

There is also what is called the deep or penetrating tubercle. These tubercles are late in appearing, not presenting themselves until the system has been for some years under the influence of the virus. They are painless and indolent, and become frequently as large as a nut. They are either absorbed or ulcerate. In the latter case the ulcer is deep, and gives much trouble during treatment, being slow to heal. In most cases of this kind there are other syphilitic indications which leave no doubt as to the peculiar nature of the disorder.

Occasionally it is seen in large irregular circles on the arm, where the tubercles have arranged themselves in a certain order, leaving the central portion, or most of it, of the natural colour, the portions only near the rings being altered in tint. The tubercles have a semi-livid and raised firm base, which is so characteristic in most of the later syphilides. There is always after such a severe alteration of the integument, a decidedly marked residue, in the form of discoloured skin, covering the whole seat of the recent eruption.*

* Divergie.

CASE VIII.—*Tubercular syphilis on the face, in all stages—in the initial stage, confluent, and corroding. Nose seriously involved. Dark, hard ulcers on the arms.*

E. M. ——. This patient called upon me in 1867, and stated that she had been for nearly two years under the treatment of one of the so-called specialists of the city, but had not obtained any permanent benefit; she was gradually getting worse, the disease making rapid strides towards the destruction of tissue. In this patient the tuberculous syphilide appeared in several forms, and in nearly every stage. On the face could be seen almost every state of tuberculous development. In some places, small isolated tubercles could be felt, being just in the initial stage. Near them were others of a larger size, and more developed. Large patches of ulceration involved the whole of the nose and portions of the face. The ulcers had become confluent and run together, so as to form a large and unseemly patch. The wings and point of the nose were covered with a dense scab, which gave to the countenance a most forbidding aspect. The arms also were covered with large scabs, which were in the worst possible condition, being dark, hardened, and raised, surrounded by coppery discolorations of the skin. The genitals also exhibited extensive ulceration. Some of the ulcers were found to be corroding, and consuming the integument with great rapidity. This was a very bad case of secondary syphilis, the patient having not only contracted it more than once, but having been so drugged with mercury that the original disease was seriously and distinctly complicated by it. In the course of three months the patient was much improved, having been treated with the bromides. There was then no ulceration of the integument and its appendages, and nothing remained, save in some parts the distinct discoloration which this tubercular disorder leaves; and cicatrices,

which in time might disappear if the proper eradicative treatment were continued.

Case IX.—*Syphilitic tuberculous ulceration of the forehead, back, throat, and mouth. Cured.*

Mr. R. P., from Hokitika, New Zealand, consulted me in last March, having the following symptoms :—Copper-colored spots and ulcerations appeared on his forehead, the latter discharging a considerable quantity of characteristic pus or matter. Over the situation of the kidneys, and on the back generally, similar ulcers were found in an advanced stage. His scalp was covered with favus, and nearly all his hair had disappeared. There was extensive ulceration of the throat and fauces; and on the inside of the cheek, opposite the last molars, there were ulcerations of the lining membrane, in addition to which the breath was very offensive. He stated that four years ago, prior to his departure for New Zealand, he contracted syphilis by impure coïtus. The surgeon to whom he applied at that time healed up the chancres which appeared with black wash and caustic, but gave no internal remedies. The patient afterwards felt little or no inconvenience from the taint, until about a year ago, when the above-named symptoms set in, and continued to increase in virulence until the time of his arrival again in Melbourne for medical aid. He complained of humming noises in the ears, but on examination with the auroscope, no lesion of that organ could be discovered. He is now (May) under treatment. The favus has all disappeared, and the hair is growing rapidly. The ulcers have healed, and the patient is rapidly recovering his standard health, having gained flesh considerably during the last fortnight. The treatment was confined chiefly to the several iodides, the system not tolerating mercury in any of its cruder forms.

CASE X.—*S. Lepra from head to foot. Great emaciation. Enlargement of both knees. Loss of hair. Condylomata on the tonsils. Rawness of scrotum.*

Mr. J. R———, from Queensland, called upon me about five months ago, after being told by a medical man that his case was incurable. He had become extremely emaciated, with a dirty-yellow or cadaverous hue of the skin. He had pains in all his joints, with considerable enlargement of both knees, which were very painful at night in bed. The whole of the hair of the head had fallen off, save a small patch on the occiput. Another remarkable circumstance, which I had often noticed before, was, that the hair, which was naturally curly, became perfectly straight. His lips were ulcerated and bleeding; his tongue swollen, ulcerated, and well marked with dental impressions. On each tonsil there were condylomata or syphilitic vegetations; the same appeared at the verge of the anus. He was covered from head to foot with syphilitic lepra. Small ulcers were to be seen in each nostril. The scrotum was raw over its entire surface, requiring the greatest care and attention in dressing. The patient was under treatment two months, and was dismissed as convalescent, with directions to continue the medicines for six months by way of eradicative treatment.

CASE XI.—*Confluent pustular syphilide all over the body. anus, legs, and scrotum most seriously involved. Hereditary. Cured.*

Mr. H. S., of Melbourne, age 34, consulted me during the present year in reference to an eruption which had for some time been gradually extending over his body. I suspected at once that the eruption was syphilitic in its origin, but was much surprised to hear him positively affirm that he

never had anything approaching a syphilitic connection; and from my knowledge of the patient, and the absence of any necessity for concealment in his case, I was ready to accept his statement as a reliable one. On examination I found large pustular eruptions, which had coalesced, forming considerable ulcerations that had a distinct tubercular base, surrounded by extensive coppery and erythematous discolourations. The anus, legs, and scrotum were the parts most seriously involved, and from its manifest resemblance to the syphilides, the eruption could not be accounted for on any other ground. The patient, however, informed me that his father was decidedly syphilitic for many years of his life, and that he had been during his infancy and childhood very subject to skin diseases. The remaining fact which determined the correctness of the diagnosis was, that the disease in all its manifestations yielded completely to the course of anti-syphilitic treatment adopted.

CASE XII.—*Tubercular syphilide or syphilitic lupus. Destructive ulceration of the nose. Body covered with coppery spots. Visceral syphilis. Death.*

Mr. D., well-known in Victoria in 1858, was attended by Drs. Sconce and Thompson for copper-coloured spots which covered nearly the whole body, especially the forehead, palms of the hands, and chest. Superficial ulcers of a tuberculous character occurred at the end of the nose and the corners; one large one destroyed the left wing completely. The treatment which he received from the gentlemen mentioned arrested the progress of the disease for the time, and the patient was under the impression that the virus in his system had been entirely neutralised. In 1859 the disease returned with redoubled force, and attacked the other wing, presenting at the same time the

condition of skin over the whole body which was noticed during the first attack. He called upon me, and put himself under my care. I succeeded in saving this wing of the nose, and in causing the spots to disappear. He then left for New Zealand. During the existence of the secondary symptoms just described he married a young wife and infected her. Eventually visceral syphilis set in, of which I heard that he died.

SERPIGINOUS, OR CREEPING TUBERCLE.—This is a syphilide which ulcerates rapidly, and has a tendency to spread and become very destructive, forming unseemly furrows on the skin, and extending sometimes in all directions, although commonly the ulcer is noticed to proceed in one direction while healing at the opposite border. This syphilide is much to be dreaded, by reason of its great disfigurement of the face. It is usual for it to appear about the angle of the nose, on the forehead, and chin; in fact it sometimes wanders about, encroaching upon any and every portion of the face, leaving as it proceeds ugly and depressed white scars, that give a forbidding expression to the countenance. This kind of tubercle rarely is seen in the genital organs, according to the observations of some syphilographers; I have, however, met with it. That ulceration which is found on the genitals commences sometimes as a chancre, which the tubercle does not, the only resemblance between them being their tendency to spread. What appears on the genitals usually is better known as the phagedænic chancre; that on the face, as the serpiginous or creeping tubercle. They are both very destructive in their progress, and are the cause of considerable alarm to the patient, who will do well, if he values his life, to avoid anything like quackery or hazard in the treatment of his disease. The creeping and corroding ulcer now under special consideration does some-

times invade the covering of the testes, and is occasionally very destructive to this tissue, consuming it with great rapidity, indeed so far as to lay entirely bare the organs which the covering is designed to protect. Whenever this syphilide has made its appearance on this appendage the most prompt and careful measures should be taken to arrest its progress, and this cannot be done by a resort to the dangerous and multifarious nostrums which are everywhere forced upon public notice.

The tubercular syphilides are of such serious consequence to those affected by them, that every possible step should be taken to eradicate the virus from the system before it has so fructified as to reach that terrible stage which has been faintly sketched. When that stage is reached, the constitution is a prey to a devouring influence that will, save under the highest scientific treatment and the greatest care, eventuate in miseries that must render life a burden, and cause the unhappy wretch to hail the approach of that hour that shall throw its dreary pall over all earth's miseries. Thousands of individuals having the venereal taint are actually in that state which is favourable to the development of those terrible phenomena; and thousands more, by neglecting the primary symptoms and living irregularly, are certainly passing to the second stage, from which their disease will reach its more advanced position, and introduce its victims to a new and more virulent set of symptoms, which, were prudential measures adopted, would never appear.

As a surgeon having large opportunities for many years in this city for extended and special observation, I am warranted in saying that syphilis in Victoria is a wide-spread evil, and that a large proportion of the ailments which reach the consulting-rooms of our physicians and surgeons owe some of their worst characteristics to their association with the venereal diathesis. Both sexes, and at all ages, from the infant at

the breast to the old, carry with them the brand of the common enemy, and suffer more or less from its inroad upon their constitutions. So readily is the taint communicated that an infant which has received it from its mother may, by contact with the breast of a wet-nurse, transmit the taint through her to other children, and so on *ad infinitum*. No idea can be formed by the uninstructed of the wide-spread influence of syphilis on the health of the people. It often remains latent for years, giving no palpable warning of its existence; but suddenly after a variable period makes its appearance when least expected, and in a form more or less disagreeable and threatening. It generally happens that a person may have contracted the taint, and yet be quite unaware of the insidious march of the disease until it appears in some cutaneous eruption that may or may not rouse him to a consciousness of its existence. There can be little doubt but that the syphilides might be very materially lessened in frequency and force if more care were taken, and a more rational treatment generally adopted. It is however a blessing to humanity that the errors which have so long ruled the practice of physicians in reference to this disease are giving way before the light of science and more extended observation.

S. PSORIASIS.—PALMAR AND PLANTAR SYPHILIS.—These syphilides are of a squamous or scaly nature, varying from slight to extensive exfoliations, having chaps or fissures exposing red and slightly tender surfaces. The disease presents itself on the palms of the hands as a hard and semi-horny condition of a portion of the skin. It is sometimes found in separate patches, at others it occurs as one uniform group of pustules, which develope into brown elevations that after a brief period suppurate, after which the hard skin exfoliates, leaving a tender and often an ulcerated base. It may be seen in three different stages at the same time: in the form of the simple

isolated pustule; in groups; and in a state of exfoliation. In fact it is frequently of a compound character, exhibiting the characteristics of pustule and papule. It has however most commonly been pronounced syphilitic psoriasis. It is in my opinion of that type, and I therefore give it that rank in discussing its characteristics.

The crusts that form on the hands are generally very hard, and cause painful and deep fissures or cracks. In some patients the crusts are considerably elevated and extremely hard, so hard in fact as rather to resemble horn than an ordinary concretion of pus. At the same time there are shrivelled portions of skin which exfoliate or peel off, so that altogether the palm of the hand, with its ulceration, horny excrescences, and ragged appearance, is in anything but a fit condition to be advanced towards a friend for salutation. This is perhaps one of the most difficult forms of syphilis that can be brought to the consulting-room of the surgeon. After the exfoliations fall off, they leave a coppery red surface, which is more or less contracted. It sometimes defies for a long time the ablest efforts of the surgeon, and unless judiciously managed will remain year after year, to annoy and inconvenience the unfortunate patient. Modern practice has however made vast improvement in the method of treatment, so that much relief is to be gained in a comparatively short time. The earlier it is subject to medication, the easier it is to control it. (*See* Plate.)

In common parlance all forms of Psoriasis are called scrofula, but this is scarcely a correct designation. Scrofula is a state of "constitutional debility, with a tendency to ulcerative diseases, and to the deposit of tuberculous matter in various tissues and organs." Psoriasis—as will have been seen by the definition above—is a scaly disease, accompanied with chaps and fissures, even when the patient is in robust health. There is, therefore, a considerable difference in

their typical manifestations. Scrofula by some writers is said to be of syphilitic origin, but I am not prepared at present fully to endorse that opinion, nor in this place to enter upon the discussion of the question. Psoriasis is very often syphilitic, and when it occurs in the hands and feet it may almost always be found associated with some other syphilitic phenomena. As a syphilide it assumes several forms, showing itself in the face, the forearms, and the hips, as well as on the palms of the hands and the soles of the feet; but its main feature is exfoliation or peeling off, from the small, bran-like scales that sometimes rub off without leaving any alteration in the skin beneath, to the large flakes that detach themselves in plantar disease, or syphilide of the sole of the foot. When Psoriasis is of a syphilitic character, there is little difficulty in detecting its true nature. It may be known by its occurring usually in the hands and feet alone. In common Psoriasis, uncomplicated with the syphilide, the hands and feet are free, the rest of the body being considerably affected. It is a very obstinate form of syphilide, and in some cases defies for a long period every form of treatment.*

Psoriasis itself, uncomplicated with the syphilitic contagion, is not of serious prognosis or import; it is more inconvenient and annoying than dangerous. When, however, it is associated with syphilis it becomes a question of some gravity, and demands prompt attention. Syphilitic Psoriasis is by no means an uncommon disease, but is one of the earliest and most frequent of the eruptions which follow contagion. The papulæ vary in size from a lentil to a shilling, and even larger. They begin in rosy-red spots, starting generally from a hair follicle. In a few days the colour loses its brightness, and the cuticle scales off. If the papulæ are

* Berkeley Hill, Divergie.

small, and the desquamation is confined to a silvery border of loosened cuticle, it is termed Lenticular Syphilide; if the papulæ are large, and desquamation extends all over its surface, it takes the name of Syphilitic Psoriasis. No part of the body altogether escapes this eruption; it appears across the forehead from temple to temple, close to the scalp, where the eruption is called "corona veneris." The eyelids, the nape of the neck, the shoulders, trunk, wrists, and inner aspect of limbs, are usually the seats of scattered groups of papules, assuming the form of Psoriasis.*

This syphilide is said by some to belong to the class Papulæ, and would have been considered by me under that head had I not wished to draw attention particularly to the palmar and plantar form of the disease, occurring as it does so frequently, and not generally being well understood. Ricord, Acton, and Divergie have paid considerable attention to this syphilide, notwithstanding which much difficulty and uncertainty are sometimes involved in its diagnosis. Mr. Acton gives a diagnostic sketch in the following words: —"Effusion of a horny substance takes place immediately beneath the epidermis; a hard corn, about the size of a split pea, is felt, which presents a copper colour. The thickened cuticle now presents little cracks, and desquamation follows. If the disease is allowed to go unchecked, the delicate and unprotected cutis cracks, crevices form which become very painful, and considerable irritation follows when any acrid substance comes in contact with them, and they pour out a secretion which forms crusts upon the surface; in fact the palm of the hand becomes so horny that the patient is prevented from making use of it." Although the palm of the hand is often so much involved in this disease, and presents such a disagreeable aspect, as well as being

* Berkeley Hill.

extremely painful, still the disease assumes in other cases a much milder form, being but slightly prominent, and not forming painful fissures. The slightest indication of its existence, however, should not be allowed to go on without specific treatment, owing to the tenacity with which it holds its place when once it has appeared.

CASE XIII.—*Syphilitic Psoriasis. Dense scaly eruptions all over the body. Hands and feet raw. Tubercular nodes in testes. Severe ulceration of mouth. Syphilitic neuralgia. Cured.*

Mr. J. H. sent for me about twelve months ago to visit him at one of the leading hotels of the city. He informed me that he had been under a popular surgeon in Melbourne for eight months, and was then at the close of the treatment in the following condition:—I found dense scaly eruptions over the whole body, save the palms of the hands, the soles of the feet, and the buttocks, which were completely raw. Being in this state he was unable to move, and had to be fed by a nurse. The scrotum was filled with tubercular nodes or lumps the size of marbles, which were particularly painful. He complained of constant itching of the nose, and ulcerated spots at the roof of the mouth, which interfered with the act of swallowing. Having had a very fine head of hair before his illness, he grieved over the rapid loss of it since the occurrence of the eruption. He was afraid that his head would be soon entirely denuded of hair. He suffered great pain at night in his shoulder joints, and evidently was severely afflicted with syphilitic neuralgia of the head. In this state I took charge of his case, and placed him under a non-mercurial course of treatment, as is recommended and practised by some of our ablest European syphilographers. In a fortnight he was enabled to leave his bed.

In two months all eruption had disappeared, and I was in a position soon afterwards to pronounce him cured. As he was going to New Zealand, I gave him a course of eradicative treatment for two months. At the end of that time he presented himself in my surgery quite well, and had made arrangements for a speculative enterprise of some magnitude to Japan.

Case XIV.—*Syphilitic Scrofula. Ulceration of nose and mouth. Ulceration of legs. Cured.*

Mr. W. F. T., ætat 42, arrived from New Zealand on January 12, 1869, purposely to place himself under my care, suffering from what he supposed to be a scrofulous disease. He was a miner, and, owing to the extreme hardships he had endured, his constitution was shattered, although his pocket had been benefited. He expressed his regret that his money had been accumulating at the expense of his health, as he thought. On presenting himself in my surgery he had all the appearance of emaciation and defective nutrition, the vegetative system having lost its functional activity and vigour. He was of the nervous and lymphatic temperament. The external phenomena were extensive ulceration of the legs below the knee, and exfoliations on the interior aspect of the thighs. On the face, and especially on the nose and mouth, there were thick crusts, which covered the wings of the former organ, and extended up the nostrils. The posterior nares, or back part of the nose internally, was also sore and considerably involved. Under the crusts on the face was observed a red and indolent surface, not presenting the indications of very active ulceration. The corners of the mouth were encrusted in the same way with ulceration that extended downwards under the chin on the left side. The forehead also at the time of his arrival at my house had over

a portion of it a reddish or erythematous discolouration, which he said had but lately appeared. The history of the case was, that he had suffered more or less for three years from these eruptions, their first appearance on his legs being preceded by what he termed small hard lumps under the skin, which inflamed, gradually enlarged, and ulcerated, discharging a thin and reddish fluid. At an early period of his becoming ill his neck had suffered from what he judged to be boils, which had left indelible cicatrices that furnished certain evidences of the nature of the malady afflicting him. He had undergone much suffering from medical treatment, generally in the form of caustic applications, purgings, preparations of iron, &c. It was evident that the patient had what might be termed a scrofulous syphilide. By a mixed treatment, determined upon in harmony with the diagnosis, the patient about the beginning of February exhibited decided indications of a cure setting in, the colour of the skin having changed from the dark cadaverous hue to a more healthy one. The crusts gradually ceased to be renewed, the ulcers on the legs healed, and by the end of March the patient returned to New Zealand in the enjoyment of robust health. This person had about twenty years before contracted the venereal taint, and remembered having then had a chancre.

There are few persons who are not aware of what is generally understood by scrofula, as well as how very general the disease is amongst the civilised races. That it appears all around us every one knows, and it is universally believed to be the recognised cause of enfeebled constitution and cachectic conditions. That it is an evil against which every one desires to guard himself is admitted, and a dread of its existence and contamination frequently deters individuals from entering into matrimonial life. Nor is the precaution unnecessary, so serious frequently are the afflictions which

scrofulous unions give rise to. Opinions are divided as to its origin and true character, some high authorities holding that it is of syphilitic origin, and that its phenomena are often eminently those of the syphilides. There is not the slightest doubt but that thousands of persons said to be scrofulous both by their friends and by their medical advisers, are actually the victims of the syphilitic taint, carrying about with them the dangerous element of destruction without any scientific measures being taken to neutralise it, the treatment, if any, having no specific relation to the disease whatever. Hence the thousands of miserable objects said to be incurably scrofulous. Whether it be true or not that scrofula is essentially a syphilide, there can be little doubt of one thing, viz.—that a vast amount of what is called scrofula is syphilitic. This is especially apparent in children born of parents supposed to be scrofulous, who may at some time have had impure coïtus. Multitudes of children exhibit phenomena readily put down by ordinary observers as scrofulous, but which are actually allied to the syphilides. It often requires the observation of experts in this disease to determine for the satisfaction of parents what may be the nature of the taint with which the child is affected. The most frequent situations occupied by the scrofulous eruptions are the neck and the head, and they are eminently so in the young, who are subject to what are termed running ulcers of the neck, and scrofulous ulcerations of the scalp. I have been obliged, from physical evidence, to pronounce many of these cases undoubtedly scrofulous syphilides, and have, by way of corroboration of the opinion given, several times been able to elicit facts which have fully borne out the original diagnosis. An instance may be taken from my syphilide cases which will illustrate this statement. A lady called at my consulting-room with a child of four years of age in the arms of her nurse, which was said to have an aggra-

vated form of favus, or scald-head; also an open tuberculous ulcer on the left side of the neck. The medical attendant, who had treated it for a considerable time, had given no hope of immediate restoration, being persuaded in his own opinion that the disease was in a marked degree a scrofulous one, which would in a year or two be outgrown by the child, the resisting force of the constitution overcoming it. On examination I had no difficulty in coming to the conclusion that the child's case was one of decided syphilitic scrofula, and that the little sufferer had inherited it from its parents, or had contracted it from the nurse. The information given to the parents did not by any means allay their alarm, but rather increased it. I however was able to encourage them by stating that the child would soon be restored. The fact of the child being tainted was not admitted by the parents, as both affirmed that they were perfectly free from any infection of the kind. I continued to treat the child as for a syphilide, under which course it soon recovered, and nothing more was said on the subject. A few months after, I was summoned to attend the father of the child in low fever. I took occasion to search for evidences, if there were any, of the opinion which I had hazarded when treating the child, and on several places I found well-defined and characteristic discolorations that at once set the question at rest in my mind.

Constitutional syphilis is very commonly manifested with decided phenomena in newly-born infants, and if fully understood would account to the accoucheur for many of the abnormal conditions which appear at birth. The infant, having gone the full time, is shrivelled and imperfectly developed, as though it had been badly nourished in the womb. There is at the same time exfoliation of the skin of the hands and feet, and sometimes of the whole body, as I have noted; and here no doubt need exist as to the taint having been given by the father to the fœtus in utero.

CASE XV.—*Syphilitic Scrofula. Ulceration of face, back, and legs. Nodes on shin-bones. Glands of neck and arm-pits engorged. Cured.*

Mr. G. W. This patient called upon me in July, 1868, and although apparently in robust health as far as general functional action was concerned, presented an appearance externally of more than ordinary repulsiveness, from severe ulceration of the face. On examination I found that the back and the legs were covered with extensive scaly incrustations, and with ulcers in every stage of development. The patient informed me that for a long period—nearly four years—the sores had continued to heal and reproduce themselves, successively occupying a still larger portion of the limbs each year. Many of the ulcers which had healed had left evident discoloration of the characteristic type, and in some cases a slight cicatrix. The glands of the neck and arm-pits were also involved, being engorged and tense. The face, however, was the most important seat of the disorder, the whole nose and portions of the cheek being covered with thick, dark yellow incrustations. This patient described the advent of the disorder in much the same terms as one of the late cases mentioned, viz.— that the first symptoms were in the form of small lumps in the skin, which were first colourless, then assumed a reddish tint, and eventually ulcerated. The skin in front of the tibia or shin-bone had always been tender, and prone to ulceration. The crusts, after falling off, left (as in the last case) an indolent red surface, which continued to form new crusts, and thus prolong the disorder without any apparent disposition to heal. I had no difficulty, from the history of the disorder as well as its physical characteristics, in pronouncing it a scrofulous syphilide, and I treated it accordingly. In about two months the patient was perfectly

restored, as far as any external indications were concerned; and should he have been prudent enough to adopt the advice given him, there may not again be any further trouble of the kind. He remembered having had a hard chancre some years before.

As I briefly noticed, when treating of palmar syphilis, or the disease affecting the palm of the hand, that the feet also are sometimes involved in the same way, I think it advisable to make a few remarks in reference to the character that the syphilide assumes on the foot. It is not so frequent as the rest of the syphilides, nevertheless it appears very often, and I happen now to have a case under my care. In this one it takes the pemphigoide form, appearing at first as bullæ, or blisters. When the foot is affected, the sole is generally covered with these bullæ in every stage of development, from the simple isolated blister to the confluent and ruptured. The seat of the eruption will first be noticed to be redder than usual, and uneasy; then large watery elevations of the skin will appear; these after a short time, say two or three days, will rupture and discharge their fluid, and the thick dead cuticle will remain to peel off by degrees. On the same foot the bullæ or blisters will be seen in all stages. They are troublesome in the extreme, sometimes being very tender, and interfering with comfortable locomotion. When associated with chancre or ulceration of the throat, there can be no doubt of its being a syphilide. A competent surgeon will have no difficulty in extracting from the history of the case, and its local phenomena, sufficient to determine the diagnosis.

Generally this affection of the feet assumes more of the scrofulous characteristics, having a dry and scaly exfoliation similar to the palmar syphilide, but there are many cases where the feet are covered with the pemphigoide eruption such as I have just described. This disease of the foot is

almost equally obstinate with that of the palm of the hand, and requires much patience as well as judicious treatment. As Mr. Berkeley Hill observes—"The prognosis of this syphilide is not good. It is a sign of great obstinacy in the disease, and its duration when no treatment is pursued is very long."

I have but briefly referred to the several forms of secondary syphilides, or syphilitic diseases of the skin, and I have by no means exhausted the numerous forms in which these syphilides appear. Enough has, however, been said to apprise the reader of the very grave character of such disorders, and to lead him to dread their inroad, as well as to admonish him of the extreme folly of trusting to anything like doubtful or extraneous aid. The frightful disfigurement of the face, and the torments of the several eruptions as they appear in every part of the body, cause the miserable victims generally to hide themselves from the public gaze, either by a retreat to the public hospitals or to their chambers, whence they seldom emerge, save at night, when the evidences of the horrible affliction cannot be seen. All impure connections may not eventuate in such repulsive phenomena, but there is always more or less danger lest the poison should be brought into special activity by some peculiarity in constitution. Syphilitic disorder of the skin is by no means so uncommon as the public generally suppose, for vast numbers of persons are occasionally troubled with eruptions which they do not for a moment suppose to be syphilitic, but which are so; and many are carrying year after year syphilitic sores which they never dream are of a malignant nature, nor do many of those from whom they generally seek relief recognise their true character. Charlatans and uneducated specialists prey upon the sufferers in these diseases with unmeasured rapacity, and in almost all cases both mistake the character and stage of the disease, as well as

fail miserably in affording that positive relief which the patient seeks in his distress, and which relief he would be sure to obtain from those regular practitioners who wisely make every branch of their profession their daily study, and give to it their earnest consideration.

The diagnosis of syphilitic eruptions is to be determined —1. From the history of the case. 2. From the symptoms accompanying the eruption. 3. From the eruption appearing in several forms at one time on the body. 4. From the general coppery tint of the eruption. 5. Little or no itching. 6. The form the eruption assumes: round perpendicular edges and unhealthy sores.

I shall now pass over, for want of space, and for fear of being too prolix in this branch of the subject, much which might be said in further illustration of the syphilides of the skin, and will glance at two kindred disorders which bear a close analogy to those just treated, viz.—syphilitic disease of the nail—Onychia; and of the hairy scalp—Alopecia.

S. ONYCHIA—DISEASE OF THE NAIL.—This affection is in its results sometimes a very serious one, inasmuch as it tends generally to the destruction of the nails of the hands and those of the toes. The virus attacks the matrix and surrounding tissues, and so disorganises the structure as to entirely destroy it, leaving a distinct and festering ulcer. It commences by redness, swelling, and painfulness of the extremity of the finger, which extends so as to involve the nail in the inflammation. Soon a purulent discharge is seen to exude round the nail, accompanied by a certain amount of serosity, or clear fluid; the skin commences to thicken and overlie an ulcerated surface, that continues discharging on pressure a sero-purulent fluid. The nails may not always be attacked by the tuberculous syphilide; there is an ulceration which is not so deep or malignant, being of a more

superficial character, and which does not prevent the growth of a new nail.

There are some attacks upon the nails by the syphilitic poison which are especially malignant, and proceed at a rapid rate towards their complete destruction. This kind is nevertheless rare, and happily so; but when it does appear it resembles a well-determined case of mortification, or death of the part. In this kind there is little or no ulceration seen, as in the other syphilides; but the end of the finger or toe presents a dry, shrivelled, and brownish appearance. A portion of the bone is also involved, and at length falls off, never to be renewed. All these several forms of Onychia are seen occasionally, as examples of this special selection of the venereal poison. They have been several times met with in my practice. As a rule, not more than one nail or one toe is affected at the same time, though there are rare instances in which all may be involved; this last condition is however exceptional. As before stated, this is one of the most painful of the syphilide diseases, is tedious and perplexing, and in almost all cases destroys a part, if not the whole of the nail.

Mr. Hutchinson, a surgeon in high estimation on syphilitic diseases, and who contributes largely to the *Lancet* on this subject, is referred to in that journal as follows, pointing out the malignant nature of this syphilide in its worst form:—

"Two very instructive cases of the so-called 'onychia maligna' have recently been treated by Mr. Hutchinson at the Metropolitan Free Hospital. In the first of the cases referred to, a girl aged nine was sent by the surgeon whom she had attended to have her right thumb amputated on account of a most severe form of the affection. The history given of her case was suspicious, but by no means positive. The result of treatment, however, fully bore out the diagnosis, for although no benefit accrued during the first ten days of the mercurial treatment, and indeed the ulceration threatened to

become phagedænic, yet no sooner was the constitution brought under the influence of the remedy than the most rapid healing resulted. . . . . The second case was a much more valuable one as regards positive evidence concerning its pathology. A child three years old was brought to the Hospital, presenting an onychia maligna of well-marked features, which had followed a slight trap of the thumb in the door. Her mother stated that she had been Mr. Hutchinson's patient in infancy, and on referring back to the notes it was found that when a few weeks old she had been treated for congenital syphilis. This recorded fact was the more valuable, because, excepting the onychia, there was nothing in the child's present appearance which would have suggested a suspicion of hereditary taint. It was evident that the injury received had merely been the means of exciting and localising a latent predisposition. Mercurials were prescribed, and the thumb soon got well. It follows as a consequence that if this pathology of the disease be the correct one, amputation is never necessary. It has long been acknowledged by many surgeons that onychia maligna in the adult is the occasional though very rare symptom of acquired constitutional syphilis. Mr. Hutchinson holds confidently that this affection, when met with as it usually is in cachectic children, is in a vast majority of instances a manifestation of hereditary syphilitic taint, and curable by mercury."

In this quotation I am reminded especially of the many unnecessary amputations which I have met with where the disease has been undoubtedly an unrecognised syphilide. Persons with amputated fingers and thumbs have frequently consulted me for other ailments and for syphilides, in whom I have seen distinctly that the fingers had been syphilitic, and had been mistaken for gangrene and necrosis. It is to be hoped that those suffering from onychia will be less willing

to yield to officious amputations, and that surgeons will determine well the nature of the disorder before using the scalpel.

The nails are attacked in three ways:—1. The matrix —while a scaly rash is present elsewhere,—is beset with papules, which destroy the nutrition of the nail, and acting like a foreign body, cause obstinate ulcers. 2. The nutrition of the nail is altered; it becomes brittle, and its edge notched and ragged. 3. The superficial layers of the nail split and peel off, so that the nail becomes spotted and opaque at places where the nail is breaking away.*

S. ALOPECIA—LOSS OF HAIR.—The absolute loss of hair goes, in medical nomenclature, under the name of Alopecia, and when as the result of the venereal taint, Syphilitic Alopecia. It always indicates that the constitution has been seriously affected, the nutritive processes being much lessened in functional activity. Very often the patient loses his hair without being at all aware that it is owing to a syphilitic cachexia. There are many who seek medical aid for the premature or rapid loss of hair, who manifest extreme surprise when told that the difficulty has had its real cause in some syphilitic taint, either hereditary, or personally acquired from impure coïtus; nevertheless it is often evident to the well-informed surgeon that it has no other origin. It is not an uncommon disease amongst children, and is too frequently referred to other causes—such as favus, or scald-head, and herpes of the scalp. Great uncertainty also hangs about its progress, as to whether the bulbs are finally destroyed; hence it is highly important that correct and effective treatment should be adopted at an early stage, before destruction of the hair-bulbs takes place. The loss of the natural

* Berkeley Hill.

covering of the head is to both sexes a very serious misfortune, but especially is it felt to be so with those of the fair sex.

It is not saying more than can be borne out by actual experience, that very many women lose their hair by reason of syphilitic taints, contracted by having sexual intercourse with husbands who have at some time had their systems poisoned by the venereal virus, thus being subject to the peculiar syphilitic fever which dries the scalp and checks the nutrition of the hair. It is always necessary to examine carefully into the antecedents of the patient, and to search for concurrent indications of syphilis, which will be found much oftener than is suspected in cases of alopecia. The skin of the patient will be a sufficient index when any of the accustomed syphilides are present, or have existed. A constant tendency to sore throat I have frequently discovered to accompany this unhealthy condition of the scalp, and to lead from its nature to a decided conclusion as to the active principle that was destroying the hair. Had I space within the limit that I have set myself, I could detail several cases from my own records where, in females, a chronic sore throat has accompanied the alopecia.

Case XVI.—*Loss of hair. Urethral chancre. Herpetic eruptions. Condylomata on genitals. Cured.*

Mr. ——, living in Melbourne, consulted me in reference to a return of syphilitic eruption occurring after an intermission of six years. He stated that it was about that time when—in Liverpool, England—he contracted the venereal taint, and had his sores healed up by what is commonly called black wash. He had a discharge, which must have been from the description a urethral chancre. This subsided. When leaving England the only indication of his being troubled with the syphilides

was the existence of some spots on the chest, which remained during the voyage out. On visiting me a short time ago he had syphilitic eruptions on the genitals, and a crop of condylomata or syphilitic warts on the foreskin. He also had buboes on each groin and under each armpit. The symptom over which he mourned most was the rapid loss of his hair, which had been gradually falling off for twelve months. This case is therefore illustrative of the tendency of syphilis to damage the hair-bulbs and cause baldness. Many persons owe their premature baldness to the syphilitic taint, who might have retained their hair during life had the injurious virus been removed from the system. This patient was completely cured after a brief course of anti-syphilitic medicines.

CASE XVII.—*Complete baldness from Syphilis. Impairment of vision. Syphilitic ulceration of the ear near the tympanum. Fibrous deposits on the fingers, producing contraction. Body covered with Herpes Syphilitica. Cured.*

In the year 1863 a man, aged 36, presented himself at the out-patients' department of the Melbourne Hospital, quite bald, but he had only been so six months. He was covered from head to foot with eruptions *(Herpes Syphilitica)*. During or synchronous with the falling off of the hair, he had suffered great impairment of vision. He also had much pain in the left ear. On examining that organ with the auroscope, an ulcer was found near the tympanum, which was decidedly syphilitic. He complained of frequent twitches of the hands and feet, and on the shin-bones there were hard nodules or lumps, which were extremely tender on pressure. The whole of the joints of the fingers were enlarged, with fibrous deposits on the bend of the third and fourth fingers, which flexed them down firmly on the palms of the hands. He experienced great pain during the alvine

evacuations, which were commonly mixed with blood and slime. On examining the anus I found fissures or cracks of a syphilitic character. When making pressure on the sternum the tenderness was so great as to make him feel sick. The palms of his hands were covered with annular scales. This patient was placed under my treatment, and after a long and tedious course was discharged cured, and his hair restored.

This tendency to loss of hair, and baldness as the result of venereal contamination, is exceedingly common, and will be seen to be a generally prevailing symptom in the cases distributed throughout this work; hence it is unnecessary to give many special illustrations. I shall therefore conclude this chapter, and proceed to the next, believing that I have said sufficient to lead the general reader to recognise the eruptions known as syphilides, should he be so unfortunate as to be afflicted by any of them.

CHAPTER II.

SYPHILITIC DISEASE OF THE TESTICLE.

This is a form of disease that involves serious and momentous changes of function, tending as it does not only to destroy the power to procreate, but also the desire for union with the opposite sex. It is, however, not so alarming to the patient in point of suffering, being almost painless, and on that account likely to be endured without recourse to medical assistance, until the tissues of the testicle have become seriously disorganised. It also differs from other forms of disease of that organ, by seldom involving the scrotum, or covering of the testicle. The period of its attack is frequently as long as three years after the original syphilitic infection, hence it is regarded generally as one of the late products of the taint. It does, however, appear sometimes within twelve months after infection, but such an occurrence is rare; and it is also accompanied—as a rule—by some syphilitic symptoms in another part of the body.

The name given by M. Ricord is that of *Syphilitic Sarcocele*, and has been written upon by Astruc, Bell, Hunter, Dupuytren, and others, much pains having been taken by the several writers and observers to describe a correct diagnosis, and thus separate it distinctly from the other forms of diseased testicle. Its point of attack is especially central, not

peripheral, seizing on more than one spot at once, from which centres of localization it proceeds to the surface, and creates nodes, or lumps, on the testicle distinct from the scrotum, which are hard and fibrous, and disappear as the testicles increase in size. These nodes gradually enlarge and involve the whole testicle, which at length becomes uniform in structural change, also heavy and pyriform, or pear-shaped. The prostate gland does not suffer in this disease, but always in others of a kindred character that are not syphilitic, such as tubercular sarcocele. Its advance is slow, indolent, and not well marked, so that patients frequently do not discover its existence until it has made considerable progress. Sometimes it will remain stationary, as in one instance where I knew it to have reached a certain stage, and for years not to have altered in the least. Even the nocturnal pains which some writers have mentioned do not always exist, being in fact seldom present. In none of the cases which have come under my care has that symptom occurred. At the close or subsidence of the disorder in one patient, the testicle became atrophied, and lost of course its functional uses.

As the syphilitic testicle is always admitted to be one of the more advanced expressions of the constitutional taint, it commonly occurs as the sequela of that long train of symptoms that follows the indurated chancre—such as the scaly affection of the skin; the excavated ulcer of the throat; iritis, or inflammation of the iris; and nodes, or hard swellings, on the bones of the legs. It usually does not happen until these symptoms have passed away, and the patient imagines that he has finally got rid of his unwelcome companions, the syphilides. When the testicle begins to be affected the patient is apt to refer the uneasiness to a blow, or a squeeze, or to look upon it as a gonorrhœal infection. Sometimes the testicle will attain the size of a turkey's egg, and even become much larger than that. It is generally ovoid, or egg-shaped, being heavy and

smooth, not painful, except by its weight, which causes a dragging sensation in the spermatic cord, and loins. It is also usual for but one testicle to be affected at once, though instances do occur in which both are involved. Although the organ continues to increase both in size and weight, it does not suppurate.

Another form has been described by eminent writers under the term *Tubercular Syphilitic Sarcocele*. In this the testicle is enlarged to four times its usual bulk, is of an irregular shape, presenting an uneven, hard, and knotty mass. It is not painful of itself, but causes pains in the loins and cord from its weight. In this form of disease both testicles are usually involved, but one is always worse than the other. All sexual desire is lost. In these cases suppuration sometimes occurs, followed by a discharge of pus, but it is exceptional. The formation of openings in the scrotum, and the protrusion of the testicle in a fungoid state, also is met with. This form occurs in persons of a broken and cachectic constitution, who are suffering from the advanced and tertiary stages of syphilis, especially in the bones and throat.

In reference to the period of attack in syphilitic testicle, I have found the statements of all writers on the subject to be in perfect accord with my own observations, with the exception of one case that occurred in my practice. This case I give as one of the illustrations of diseased testicle selected from a great number which have come under my observation during the last few years. Amongst my cases of hereditary syphilis will be found a rather remarkable one of syphilitic enlargement of the testes in an infant, which phenomenon is rare, and said by some authors not to occur. The child to which I refer had a very marked type of the enlargement, as will be seen by the reported case. (Case XIX.)

Another circumstance of importance which accompanies

this syphilide is, that there may be a frequent recurrence of it, unless it should have been properly treated. It has, in some patients who have consulted me, returned eight or nine times, at intervals of a few months, and this continual reappearance has been the chief inducement in them to seek medical aid. There is manifest danger to the functional integrity of the organ in allowing it thus to be the frequent seat of disease, as by so doing it will eventually shrivel, and all virility will be lost. This is a *denouement* that is to be dreaded: hence the necessity for pointing out the danger that is incurred by neglecting to obtain medical aid of a truly scientific nature. Amongst those who have consulted me for diseased testicle I have met with more than one person in whom all desire and ability for physical union with the opposite sex were lost. Castration could not have been more effective. There is, however, this hope left in many instances where the procreating power is lost—viz., that although much of the testicle may be seriously involved, so long as any portion of the tissues are intact, a wise course of treatment will bring about a return of the virile power and appetite. In reference to the prognosis, or prospects of cure, M. Ricord may be cited to advantage:—"Syphilitic degeneration of the testicle is not an affection that endangers the patient's life. But as it produces certain peculiar and very disagreeable modifications of the organ, it becomes a rather serious matter. The prognosis will greatly vary according to the time when the treatment has begun. It may in general be said that the more recent and circumscribed the syphilitic degeneration is (and consequently less likely to become organised), the less serious it is. If, however, while the patient is being treated, and resolution is going on, the hard neuclei are noticed to retain their induration, the ultimate result should be looked upon with distrust; for in many of these cases there is total

destruction of the substance of the testicle, and actual atrophy has already begun. But if, on the contrary, the normal consistence and elasticity return in proportion as the resolution proceeds, the prognosis should be favourable. When syphilitic sarcocele has reached a certain period, the plastic effusion may become organised, and therapeutical means have then no longer any power over it; and it would, in such cases, be perfectly useless to persevere in the treatment."

CASE XVIII.—*Fibroid degeneration of both testicles. Syphilis in the left eye. Forehead tuberculous. Ulceration of the larynx. Nodes, &c. Cured.*

Mr. M. N., from Sydney, consulted me in February, 1868, in consequence of one of his testicles having increased slowly to a very large size, and he had been under treatment, according to his own statement, for a long time, without having derived any benefit whatever. As he entered, my attention was drawn to a dull and watery appearance of the left eye. When questioned about it, he stated that he had always understood it to be a blight. I, however, on examination, found the eye was suffering from syphilitic iritis, with a tuberculous deposit on the lower border of the iris, and narrowing of the pupil. The testicles were large, heavy, and nodulous, and their condition seemed evidently to be that of degeneration of a fibroid character. His forehead was covered with syphilitic tubercles, and his voice was hoarse. After he had been a few days under treatment, the hoarseness became worse, the breathing embarrassed, and a dry cough set in, with great difficulty in swallowing. When pressure was made over the windpipe it gave him great pain. This led me to examine the larynx with the laryngoscope, where I found distinct syphilitic ulceration on the mucous membrane of that tube, and on the vocal cords. Beneath both knees he had

large patches of syphilitic lepra, with well-defined nodes on each shin-bone. Antisyphilitic treatment of the most energetic kind was adopted, together with topical applications to the larynx. Under this treatment he soon recovered his voice and normal breathing, and in eight months and a half he was as well as ever.

CASE XIX.—*Congenital syphilitic disease of a child's testicle. Palmar syphilis. Father syphilitic. Cured.*

J. R., an infant 20 months old, was brought to me from Williamstown, in July, 1868, with enlargement of the left testicle, which the nurse stated that she had noticed at the birth. The mouth was ulcerated, and there was a large condylomatous growth at the orifice of the anus. The palms of the hands were spotted with the palmar syphilide. The testicle was large, hard, and its surface smooth. The father of the child said that he had syphilis several years prior to his marriage, but the mother had never shown any symptoms whatever. The usual antisyphilitic course cured the patient in about seven weeks.

CASE XX.—*Tubercular ulceration of scrotum. Condylomata on the anus. Ulceration of nostril. Mental disturbance.*

Mr. ——, from Sydney, consulted me last year (1868), having the scrotum enormously enlarged and inflamed, with extensive ulceration on each side. The edges of the ulcer were indurated and intensely painful to the touch, discharging an ichorous and unhealthy humour. The covering, or purse of the testicle, was thin and attenuated, so that the testicle could be seen through the skin, although not absolutely exposed. There were condylomata or syphilitic vegetations at the anus, and similar growths on the throat. At the corona glandis, behind the bulb of the penis, was a

cartilaginous growth of the size of a small bean, where a chancre had formerly been. There was an ulcer in the right nostril, which was so thickened or tumefied that he could not breathe through it. He had lost flesh considerably, and his mental state was one of great despondency. After being under a course of antisyphilitic treatment, as recommended by latest authorities, he was completely cured in about four months.

CASE XXI.—*Syphilitic sarcocele. Spots on the tongue. Syphilitic vegetations on the tonsils. Cured.*

Mr. F. R. consulted me on June 16, 1868, complaining of a swelling of the right testicle, which he said had been swollen about two years. Three years prior to the enlargement of the testicle he had contracted syphilis by means of an impure coïtus, for which he was treated and pronounced cured. Three years after this similar spots appeared on the tongue, which alarmed him, and caused him to seek medical advice. The surgeon upon whom he called informed him that the sores he felt were signs of secondary syphilis. While under treatment the testicle commenced to enlarge, and continued to increase up to the time of his consulting me. On the first appearance of the swollen testicle it might have been taken for hydrocele, from its pyriform character; but on tactile examination it could at once be felt to be syphilitic sarcocele. There were at the same time some superficial fluctuations in the outer part of the swelling, into which I thrust a trochar and canula, and drew from it four ounces of hydrocelic fluid. There were syphilitic vegetations or condylomata on each tonsil. I placed him at once under a course of antisyphilitic treatment, and in about six weeks he was free from every symptom of a syphilitic character, and in his normal health.

Case XXII.—*Syphilitic testicle. Herpes. Urethral chancre. Cured.*

Mr. C., a contractor in the neighbourhood of Melbourne, was inoculated by impure coïtus, which gave him urethral chancre. He was treated a long time for supposed gonorrhœal discharge, and on its cessation was believed to be cured. Spots, however, soon appeared on the prepuce, which induced him to consult me. I found on examination that they were syphilitic herpes, conjoined with swelling of one of the testicles, which enlarged rapidly, assuming the character and shape usually present in that organ when attacked by syphilis, as the syphilitic sarcocele. It was not painful on pressure, but from its weight gave pain when not supported. I notice this case because the symptoms in the testicle occurred at a much earlier period than usual, as they seldom manifest themselves under twelve months after the ordinary train of symptoms which follow chancre. A short course of non-mercurial treatment completely restored him.

Case XXIII.—*Fungoid testicle. Failing health. Fissures in tongue. Loss of hair. Cured.*

A patient was admitted into the Melbourne Hospital and placed under my care in the year 1864, with the following symptoms:—A large fungoid mass was protruding from the scrotum on the right side. He stated that the symptoms commenced two years before, in the form of hard irregular lumps or nodules on his testicles. These continued without much change for a length of time, during which his health gradually gave way, and he became unfit for exertion of any kind. He had sore throat, and fissures in the base of the tongue, which were extremely painful. His hair fell off, and

his weight was reduced from sixteen stone to twelve. The pain in the joints at night was so severe that he could not sleep. In this case I followed the practice of Professor Syme, of Edinburgh, by paring the fungus, detaching it from the adherent edges of the scrotum, returned it and brought the edges together with silver wire. In a short time there was no evidence that the testicle had escaped from the scrotum, and a course of anti-syphilitic treatment saw my patient completely and safely through his troubles.

CHAPTER III.

SYPHILITIC DISEASE OF BONES, JOINTS, AND MUSCLES.

BONES, JOINTS, MUSCLES.—This is a branch of the subject that will furnish many illustrations of the operation of the syphilitic taint, and under circumstances readily and frequently mistaken for disorders of another nature, and having a less serious origin. Pains of bones, muscles, and ligaments are so exceedingly common that they are almost universally set down as of a rheumatic character, especially when no immediate cause for the ailment can be traced. Every surgeon knows nevertheless how many such cases present themselves before him as simple rheumatism—according to the story of the patient—which really are not, but which are of syphilitic origin and character. It is often difficult to get at a truthful history of the patient's antecedents, but usually in connection with the pains complained of there will be found phenomena of such a kind as will at once neutralize any design on his part to deceive, or dispel any doubt. It is a rule with me to investigate the character of obstinate rheumatic affections very carefully, in order to ascertain that they are truly idiopathic, and free from complication with syphilis. This habit has been of real service to me in such cases, and I am correct

in saying that it has released me in many instances from a great deal of unnecessary trouble that would have fallen upon me by the attempt to treat, and cure, a disorder of the bones or muscles of syphilitic complication, not believing or knowing it to be so. There are thousands of persons carrying about with them diseases of these tissues now under consideration, which they believe to be simple rheumatism, that will never be cured until they are treated for what they are, viz.—syphilitic lesions, infiltrations, and deposits.

One striking and almost invariable feature or symptom about the pains which occur as syphilitic rheumatism is, that there is generally exacerbation or increase of them at night in bed. This with most people is an invariable rule, and is the more distressing because it deprives the patient of rest and sleep, and thus wears out his energies and augments his sufferings. The causes of these nocturnal exacerbations are not yet very satisfactorily accounted for. By some they are supposed to arise from the warmth of the bed; but this is not sufficient, as the same warmth of the bed during the day does not always produce the same effect. Others have judged it to be caused by some meteorological influence; and should the latter be an approximation to the truth, the reason will be found in the ordinary electro-vital change which occurs in all animals during the twenty-four hours, and especially after sundown. It would thus appear that the syphilitic virus has the property of reducing the power and volume of the electro-vital currents, and as it were demagnetising the great vital magnet, as the human body has been very correctly named. Those writers who attribute the pains to meteorological influences doubtless mean to convey some such idea as the one I have hazarded. There are many cosmical laws operating around us and in us which we do not yet discern, but it is already apparent to many of the leading minds of Europe and America, who

have made electro-vital and psychological phenomena their special study, that we are, in certain diseased states, especially brought under the influence of unknown forces. I attribute the peculiar nocturnal exacerbations of syphilis to some of these yet occult influences, believing as I do that such a disease cannot be in the system as a constitutional affection without deteriorating the vitality of every portion of the organism, and especially the nervous fluid.

It has been said that men whose avocations transform night into day—*i.e.*, work at night and sleep in the day—reverse the usual period of pains; but this I have not found to be the case, the opposite being the rule. These pains very often are exceedingly severe, and their seat appears to be between the body of the bone itself and the periosteum, as though the latter were being separated from the former. There is also extreme tenderness in the part that is said to ache. The pain, however, does not always co-exist with swelling, as it may be felt long before any external phenomena, such as nodular swelling, take place. There is nevertheless a serious organic change going on wherever these pains are severe—either a slow kind of inflammation which gradually causes disorganisation of the bones, or between the bone and the periosteal covering; or there might be infiltration of all the adjoining tissues. The existence of such pains should be a forcible admonition to the subject of them to obtain the best assistance within his reach, as they may end in caries and necrosis, *i. e.*, ulceration and death of the bones. One cogent reason for promptitude in this matter is that this bone-pain is one of the later symptoms, and is indicative of a very far advanced condition of the constitutional affection. In my own practice I have known it to be several years after the appearance of the early chancre, and in almost all cases to be the prelude to very serious organic changes.

The **BONES**, like every other organ of the animal economy,

are liable to *tertiary* syphilitic invasion, declaring itself in the form of nodes or soft tumours, inflammatory enlargement, dense or hard tumours, ulceration, and finally mortification or death of the bone. It has fallen to my lot to treat a very large number of these cases, and I find they most frequently occur in persons, whose health has suffered from intemperance, exposure, and insufficient nourishment, and who thereby have the blood reduced to a low state of vitality. Tertiary syphilis generally attacks the bones which are thinly covered by soft tissues, as the bones below the knee, the bones of the fore-arm, the collar-bones, the bones of the nose, skull, palate, and upper jaw. (See Plates.)

Nodes or soft tumours evidence themselves as circumscribed swellings of an ovoid (egg) shape, somewhat elastic to the touch, and ranging from half an inch to an inch and a half in diameter. They begin beneath the periosteum, or surface of the bone, as an inflammation, which is followed by the deposition of a gummy substance of the character of what is termed scientifically caco-plastic lymph. The periosteum and bone at the seat of the node may become acutely inflamed, softened, and ulcerated; the skin may finally give way, and thus allow an escape of pent-up fluid. The course of a node is usually chronic, is often attended with severe pain, which is neuralgic, of an intermittent character, and invariably worse at night. There is generally great constitutional disturbance, and the health gives way. Caries, or ulceration of the bone, occurs in the shin-bones, skull, palate, and jaw-bones, and the bones of the nose; large pieces frequently dying and sloughing away, causing the most frightful mutilations and disfigurement. The part most conspicuous for its ravages is the countenance, which suffers from destruction of the bones of the nose, with consequent flattening of that organ, which may be altogether hopelessly destroyed. I

have seen skulls completely riddled by ulceration; accompanied by the most loathsome discharge.

CASE XXIV.—*Syphilitic nodes on the shin-bone of the left leg; on the frontal bone of the skull; with caries of the right collar-bone.*

H. T., a digger from Hokitika, New Zealand, came to me about twelve months since, complaining of ulcerated throat, loss of flesh, and great debility. He said that he had had chancres seven years ago in Adelaide, during the treatment of which spots of syphilitic roseola (as I judged them to be from his description) appeared all over his body; but although the soreness of the ulcer and the eruption completely disappeared, he states that for eighteen months afterwards there was "a hard substance" to be felt where the chancre had been. By slow degrees, however, this induration subsided, and since then he has been sorely troubled with what he thought was rheumatism, and has taken large quantities of medicine for it. Latterly his attention was drawn to some "lumps," as he termed them, on the shin-bone, which were exceedingly tender, followed by others of a similar character on the forehead and collar-bone. The swelling on the latter became very large and more painful than the rest. The skin was intensely red, and finally gave way, followed by a very disagreeable discharge. When seen first by me he presented a most pitiable appearance. He was very cachectic, and extremely emaciated; his spirits were broken, and his nights were distressing from want of sleep. On the forehead there were several well-defined nodes, which were tender on pressure. The collar-bone at its middle was twice its normal size, and the skin had ulcerated over this portion of the bone, from which exuded a sanious, ichorous, and extremely offensive discharge. On the left leg there were tumours analogous to those observed on the skull. At the posterior

part of the pharynx a large ulcer could be seen, which gave him great pain on swallowing. He had also lost nearly the whole of his hair. The course of anti-venereal treatment in this case extended over a period of eight months, and terminated in complete restoration to health.

CASE XXV.—*Tertiary syphilitic disease of the bones of the leg. Chronic syphilitic arthritis. Swollen ankles, wrists, and knees. Emaciation. Cured.*

Mrs. M'S. called upon me, and said she had been married eight years, prior to which she had enjoyed good health. Twelve months after marriage she suffered from sores in her genitals. These were treated and healed up, and she seemed in tolerable health until three years ago, when she began to suffer from pains and swelling of the joints, which she said the doctors called rheumatism. After undergoing a course of treatment for this so-called rheumatism, she noticed lumps growing on the shin-bone of the left leg. She was then directed to take cod-liver oil, as from her emaciation she was considered to be consumptive; but as this treatment did not seem to better her condition, she was advised to try change of air from the country to town. On her arrival in Melbourne she put herself under my care. I observed that she was much reduced in flesh, being exceedingly emaciated; she also had a short, dry cough. She complained of pain in her ankles and the bones below the knee, where I found several well-defined soft syphilitic tumours, pressure on which gave her great pain. The ankles, wrists, and knee-joints were swollen, especially the latter, which were enormously so, of a globular shape, very like the "hydrops articuli" of chronic rheumatic synovitis (inflammation of the membrane that exudes the clear, egg-like fluid of the joints). The pain that she suffered at night she described as something awful, especially when warm. The simile she used was that it felt as though

dogs were gnawing her legs and joints. I at once put her under a course of anti-syphilitic treatment, ordered a liberal diet, and I soon had the satisfaction of seeing her gain flesh and lose the cough ; the nodes on the bones and the swelling of the joints entirely disappeared. When she returned to the country her friends looked upon the case as one of consumption cured, little thinking for what disease she had been treated during her stay in Melbourne.

These cases will suffice to point out the serious nature of the lesions which occur in the tissues now being considered. Many of a more horrible character might have been described, but as my object is to instruct, and not to terrify, I have withheld those cases which present the more revolting phenomena of syphilis. I will present an extract from Virchow's great work on constitutional syphilis, published in 1859, in which he gives a detailed description of the ravages made on the bones of the head by this serious disease, and which forcibly reminds me of cases that have come under my own observation. The following is a brief sketch :—"In the bones of the head the process often begins at isolated spots on both surfaces of the bone, proceeding most rapidly and extensively at the external surface. Action commences by the processes of cellular tissue, which pass into the medullary canals from the pericranium or endocranium, increasing in size, while bone tissue is cleared away before them. Presently a shallow funnel-shaped pit is formed on the surface of the bone, filled with a tissue consisting more of cells than fibres. Besides this pit the canals radiating from the starting point are opened up in a similar manner; those lying on the surface are converted into tortuous grooves. A bone so altered presents when macerated the worm-eaten appearance of the skulls in the museums. This is not the only change. While this excavation and tunnelling is going on, a change of an opposite character is developed in the osseous tissue of

the neighbourhood: that is condensed; the cavities are filled with calcareous matter, and the thickness of the bone increases by rapid development of smooth hard bone on the surface. By this means an irregular wall or elevation of bone is formed around the excavation, of sufficient height in some cases to be readily felt through the scalp. Gummy nodules often occupy some of the hollows excavated by the dry caries, out of which they may project above the surface, and form even large masses. When this is the case their coverings slowly ulcerate, allow the gelatinous matter to escape, and leave rugged cavities, in which parts of the bone that have undergone condensation remain firmly adherent to the skull, without possessing sufficient vitality to form new bone for closing the cavity. In this way necrosed patches sometimes remain open for several years." Necrosis and ulceration are not the invariable accompaniments of these slow changes in the bone. The covering of the bone may so thicken as to double the size of the bone itself. M. Boys de Loury gives a case of a young woman suffering from long-standing syphilis, in which the frontal bone expanded into a mass several inches across. Eventually it caused her death.

The **JOINTS** are not so frequently the seat of syphilitic lesions as the bones themselves, hence the records of this disease in these articulations are at present comparatively few; still it may be that the large field now explored by the European physiologists and pathologists will bring considerable additions to our as yet meagre examples of such lesions. Mr. Berkeley Hill has evidently been at some pains to search for cases in which it has occurred, but has not been able to find many authorities who have witnessed it. I have not seen much mention of such lesions in the works which I have consulted. Lancereaux gives some cases of syphilitic effusion into the knee-joint which are characteristic, but they are

rare. Others have not met with them, and amongst them Mr. Coulson, the eminent surgeon of London. Some continental writers have mentioned a few cases which appear to have been well marked. In my own practice I have only met with a few cases, which I judged to be sufficiently distinct to warrant their being recorded as reliable illustrations of this particular lesion. That which last came under my notice presented the following phenomena:—There was tenderness on pressure upon both the inner and outer aspects of the joints, with puffiness in the cellular tissues. The pains were not severe; weakness, uneasiness, and lameness, being the chief causes of complaint, but whatever was experienced was chiefly at night. The state of the joints varied considerably, being much worse on some days than on others. At the same time the patient had an impetiginous eruption on the skin, of a syphilitic character, with distinct syphilitic ulceration of the throat and tongue. The synovial membranes and bursæ of the joints were evidently the seat of some morbid irritation, and yielded only to the course of treatment that was prescribed and adopted for the removal of the cutaneous syphilide. Local applications of various kinds had been freely employed, under the impression that synovial rheumatism was the cause of pain and lameness, but nothing of that kind seemed to afford any amelioration. It was remarkable, however, that when the anti-syphilitic remedies were commenced the pains in the knees were the first to cease as a symptom, completely disappearing in three weeks. This circumstance I think worth noticing, because in more than one case I have observed that pains in the joints have rapidly disappeared under anti-syphilitic treatment, but the fact did not generally obtain much notice from the patients in the presence of more serious evidences of the disease.

The **MUSCLES** as well as the bones are attacked by syphilis, and that too in a painful degree. The muscles of the fore-

arm and legs, as well as those of the scapula and tongue, become the seat of syphilitic degeneration. The tongue frequently exhibits nodules in its muscular substance, and hard lumps of fibroid tissue are not uncommonly met with in the general muscular system, sometimes enveloping the muscular fibres in their mass.* The tendons of the extremities also become thickened and contracted, giving to the fingers and toes a most unsightly appearance. Tumours of the peculiar syphilitic type have been found in nearly every large muscle of the body, and even in the diaphragm,† as well as in the laryngeal muscles.‡ Their distribution in the muscles is very general, occupying several parts of them at once, the tumours being found imbedded everywhere in the mass, and often in the tendons, their origins and insertions.

That these tumours produce contraction of the muscles, M. Ricord makes mention, in one of his lectures,§ in the following words:—"As soon as this syphilitic degeneration begins, the muscular tissue, which seems to undergo a sort of coagulation, contracts; but this contraction is hardly noticeable so long as the muscle gets passively (painlessly ?) shorter. The phenomena which I have pointed out as marking this affection in the testicle, reappear in such a case. There is first a simple plastic degeneration, which may by proper treatment entirely disappear, without any sort of deformity being left behind; but if the disease is allowed to reach a more advanced stage, the result may be either a complete atrophy, through re-absorption, or a fibrous, fibro-cartilaginous, or osseous transformation. In the latter of these two cases there is shortening of the affected muscle. This degeneration generally attacks the flexor muscles, as for

* *Pathological Transactions*, vol. xi. p. 246.

† Dr. Murchison, *Pathological Transactions*, vol. xiii.

‡ *Gazette Médicale*, page 543—1846.

§ *Lancet*, vol. i.—1848.

instance the biceps, &c. I have seen this plastic alteration situated in the anterior part of the leg, causing a flexion of the foot; I have also observed the same affection in the gastrocnemii.* I remember a celebrated singer who consulted me for such a syphilitic contraction of the biceps,† which interfered with the proper use of the arms on the stage.

"This complaint is not at all painful, and the patients become aware of it simply by the difficulty they experience in performing the different motions of the limbs. I have seen in the course of my practice cases of complete atrophy of the flexor muscles of both legs." Mr. Acton has mentioned several cases which came under his own observation, both in France and in England. They have also been observed and examined by the great pathologist, Virchow.

Nelaton also has described these tubercles,‡ and states that they are sometimes so distinct as to be felt when the muscle is contracted. Another leading writer, in a work on constitutional syphilis, gives several cases, and one where the knee was permanently flexed to a right angle by the contraction of the tendons and muscles of the back of the thigh and knee.§ Other observers have seen them in almost every muscle, and I have had in my own practice many such nodular diseases of the muscles to treat, and always with good results, save in two instances where I lost sight of the patients, who, after having been a short time under treatment, took their departure to some distant goldfield. In one of these there was a deposit on the left pectoral muscle; in the other the gastrocnemeus of the right leg was the seat of lesion. The last case is remarkable on account of the locality of the syphi-

* Muscles forming the calf of the leg.

† Large muscle of the upper arm.

‡ *Gazette des Hospitaux.*

§ Zeissle, *Constitutionelle Syphilis.*

litic deposit, as it is a general rule that the muscles of the trunk, and those of the upper limbs, are most frequently invaded. The man had been treated about five years previously for Hunterian chancre, and about three years ago had suffered from what must have been, according to his own description, a papulous syphilide. He also had at the same time such extensive ulceration of the fauces and the cavity of the mouth, as to be almost unable to swallow. On examination of his body I found some small cicatrices, as though he had been afflicted with *Rupia,* and several isolated coppery-coloured patches, that gave evidence from the deepness of their tinge that the syphilitic taint was decided. It appears that from the commencement of the eruption, from which he stated he had suffered, it was more than a year and a half before all external phenomena had disappeared, and then the muscle of the calf of the leg became affected. I have not seen him since he left for New Zealand. I mention this case simply to bring into notice the locality of the nodular deposit, as I have not—trusting to my memory—often read of that muscle being especially implicated. The following cases present points of some interest, and will serve as illustrations of the lesions to which the tissues under consideration are subject.

Case XXVI.—*Contraction of fingers of both hands, and of the right great toe, &c. Cured.*

E. J., from Woodend, consulted me about three years since in consequence of three fingers on the left hand, and two on the right, having become permanently contracted. The great toe on the right foot was also contracted so much as to give him great uneasiness in walking. The fingers were so much flexed that their tips nearly approached to the palms of the hands. I learned that some years ago he contracted syphilis with double bubo, for which he was treated

in St. Thomas's Hospital, London. Soon after his arrival in this colony he suffered from ulceration of the tongue, together with nodes of a syphilitic character in his forehead; and three years since noticed that his finger-joints became painful, but especially so at night. Since then they have been slowly contracting. At the time that I saw him there appeared to be dense masses of fibrous deposit over the second and third joints of the fingers, which I cut through with a bistoury, placed the fingers on splints, and after a course of anti-syphilitic treatment he completely recovered. The proper use of the fingers was fully restored.

Case XXVII.—*Contraction of fingers. Cicatrices on the forehead. Syphilitic nodes.*

This patient stated that ten years ago he had a chancre on the left groin. Three years subsequently he suffered from secondary Syphilitic Psoriasis, with ulcer of the tongue, fauces, and throat; at the same time he had swelling of the joints, and nodular swellings in the shin-bones, which were painful at night. After a long course of treatment these symptoms in a great measure subsided, and he thought he was well, until he felt pains in his fingers, and found that he could not straighten them properly. When first seen by me, he had syphilitic cicatrices on the forehead, and nodes were still visible on the shin-bones. His fingers were contracted and drawn to the palms of the hands, as in a preceding case. Upon the first and second joints of the fore-fingers there were fibrous deposits, which were extremely hard. These structures were divided under the skin with a tenotomy knife, the fingers were forcibly distended, and placed on finger-splints. A course of anti-syphilitic treatment was then commenced, during which the fingers were repeatedly extended and flexed, to restore the proper functions of the joints. The whole of

the "materies morbi" was absorbed. When he left he had recovered perfect use of his hands, the nodes on the shin-bones had disappeared, and he became stout and high-spirited.

At a meeting of the Pathological Society of London, held Dec. 6, 1859, Mr. Sidney Jones exhibited specimens of syphilitic tumours in muscles. He said—"He considered that these tumours were deposits depending on syphilitic inflammation of the muscle. He alluded to a specimen of tumour of the muscle on the dorsum of the scapula, which he had exhibited three years ago. In this case also there were isolated deposits in the latissimus dorsi and teres muscles, and those on the venter of the scapula. He had also seen such tumours on the sterno-mastoid."

The specimens he showed were from a woman, aged 30, who had severe and well-marked syphilis, with caries and necrosis of the bones of the skull, nodes on the periosteum, &c. There was a tumour two or three inches in length in the triceps, and there was also dead bone in the neighbourhood of these lesions.

A large number of cases of this class have presented themselves for treatment during my residence in Victoria, where, I believe, as much disease of a syphilitic character can be seen in proportion to its inhabitants, as in any part of the world.

CHAPTER IV.

SYPHILITIC DISEASES OF THE EYE AND EAR.

There can be no more appalling spectacle in the array of diseases to which we are subject, than the invasion of syphilis upon the organs of special sense—as, for instance, to observe its bursting in upon the organ of vision, shutting out the light of heaven, and plunging the miserable victim into the drear and fatal gulf of irretrievable darkness. Fortunately this calamity is rarely met with, because science, sanitary regulations, and public benevolence have so provided that medical assistance of a specific nature is always available. There are, however, sometimes seen most pitiable instances of the devouring influence of this disease on both the organs now being considered. By reason of some cachexia in the constitution, or some error in treatment, the disease proceeds with uncontrolled force, until it reaches these important localities, and at once establishes a state of things worse than death itself. As will be seen in another chapter, the neighbouring tissues are especially subject to syphilitic visitation and corrosion. The mouth, throat, and posterior nares are almost always more or less the points of attack whenever secondary syphilis occurs,

and are subject to very rapid disorganisation. The Eustachian tube is frequently involved in the general inflammation and ulceration, being lined by an immediate continuation of the same membrane which lines the throat and fauces. So long as the ulceration is confined to the mucous membrane, and does not reach the sub-mucous tissues, there is no very serious mischief to be dreaded, yet continued inflammation may cause thickening of the membranes of the inner ear, and, as a matter of course, loss of that delicate sensibility on which the sense of hearing depends.

Mr. Acton states that, in his opinion, "few syphilitic affections of the throat occur without more or less implicating the Eustachian tube, and thus interfering with the hearing. The irritation, inflammation, ulceration, and sloughing which we have seen attend these syphilitic affections of the throat, may readily extend up to and implicate the Eustachian tube. That they do so in many cases I feel confident, but I am not prepared to describe the appearances, having been as yet unable to detect them. Practice teaches us, however, that temporary deafness comes on during the existence of these affections of the throat, and almost invariably disappears as the throat recovers." This statement I can fully endorse from my own observations, for I have always found that the deafness disappeared under the influence of the specific treatment employed against the syphilitic disorder, save in one case where the deafness had been chronic for many years, not having risen originally from the venereal taint, but preceded it. I have on the other hand witnessed cases where the hearing has been completely destroyed, but these were instances in which there was complete destruction of the internal ear before specific treatment was begun. It is sufficiently manifest that the hearing, depending as it does upon such extremely delicate organs, would be speedily affected by the destructive agency of tertiary syphilis.

The **EYE** is an *organ* which is very often the seat of inflammation, and is frequently implicated in the early syphilides, being subject to invasion simultaneously with them. Iritis, or inflammation of the iris—as seen in one of the plates representing a syphilide on the face—is by no means an uncommon ailment, but occurs when the face is the seat of pustular or tuberculous eruptions. It also appears amongst the later phenomena of tertiary syphilis. There are thus two kinds of iritis, varying in severity and danger, from the fact that one occurs during the early exanthemata, and the other during the later and more destructive tertiaries. The patient suffers more acute pain in the former than in the latter; there is then more constitutional disturbance, and the local disease in the eye runs a quicker course. There is pain in the supra-orbital portion of the forehead, with inability to tolerate candle or gas-light. There is as usual the nocturnal exacerbation, which prevents sleep, and requires the use of opiates to overcome it.

The later, or nodular form, is after the character of the other tertiary lesions which it accompanies, and is of a far more serious nature, and tends to the complete destruction of the organ. The course of the disease is slow and insidious, not so painful as the first and early form, but no less dangerous on that account. The sight is dim at the early stage of its progress, and soon almost entirely departs, unless by active medication the nodular development is checked. Should the disease not be arrested, the nodules change into pus, and a discharge supervenes. The iris often appears to be crowded in a portion of its surface with small yellow points, about the size of a pin's head, which rupture and dry up, forming sometimes adhesions of the iris to the lens. The whole eye appears to be more or less sympathetically affected by the presence of the nodules, being swollen and congested. The vessels of the surface of the eye are considerably

injected, so as to give to portions of the conjunctiva a blood-red appearance, also forming as it were a red zone, or ring, round the iris. Although the nodules only occur in limited portions of the eye, and pass through all their accustomed stages, still the organ is lost by atrophy, as well as by a corroding ulceration. Another characteristic which I have seen, and which I find others have also met with, is the peculiar changes of colour to which the diseased iris is liable. Blue, green, and yellow are the colours which may be observed to replace the natural colour of the eye, thus presenting, in some patients, a singular and ominous symptom. At this time the photophobia is troublesome and distressing, and the patient complains of shooting pains in the eye-ball.

M. Ricord says, when writing on this subject—"In order to be convinced that there is such a thing as iritis of a purely syphilitic nature, it will be sufficient to watch the evolution of secondary symptoms, and to notice the close relation they bear to the different forms of iritis. The lesions which the iris present are but the repetitions of the cutaneous lesions; for iritis may be either exanthematous, papular, vesico-pustular, or tubercular.

"Exanthematous inflammation, or roseola.—The syphilitic affection of the iris often occurs at a very early period of the secondary manifestations, and its outset is marked by inflammatory phenomena. The vessels of the part become congested, and the colour changes. A blue iris becomes green, and a black one turns to a fawn colour. A vascular areola forms under the conjunctiva; its nature may be distinguished by its deep situation and its radiated form. This is, in fact, the *exanthematous form, or roseola,* attacking the iris. Lesions of sensibility may in this early stage already be noticed; there are usually headache and photophobia, but these affections are much milder than in unspecific iritis. They may even be entirely absent, and the affection then

assumes a chronic form. It has even happened that the inflammation which characterises the outset of the disease depended on a complication, arising from a cause entirely independent of syphilis.

"The symptoms in most patients become aggravated in the night, through an increase of the inflammation. Photophobia comes on, and, if the iritis is allowed to progress unchecked, certain modifications arise both in the sensibility and in the different lesions which have already taken place. The dimensions of the pupil and its shape are altered: the first is contracted by an increase of sensibility; the second is changed, owing to alteration of texture."

The ophthalmoscope has revealed to us still further the seats of lesion in the body of the eye, in those parts which are not capable of being examined by external and unaided observation: such as the choroid, the vitreous humour, and the retinæ. It has discovered to us that the retina is sometimes seriously involved, and the humours of the eye also, so that the frequent suspicion of deeper lesion has been fully confirmed. On several occasions I have, by the aid of this important instrumental auxiliary, been able to discern congestions, and in some cases ulceration of the retina, accounting for alterations in vision and other symptoms for which there were no adequate outer manifestations. Frequently the eye in its external expression does not appear to be deranged or disorganised when very considerable photophobia and uneasiness exist, and it is only by the use of the ophthalmoscope that the real and proximate cause of the suffering is discovered. It has been my lot on two occasions to ascertain that a severe and threatening amaurosis, which had been treated by bleedings, setons, belladonna, &c., was owing entirely to the syphilitic virus having invaded the optic nerve and the vessels of the retina. These circumstances led me to further research by means of opthalmoscopic inspection,

and I have been forced to the conclusion that more general and extended observation of the diseased eye by the profession will eventuate in valuable records of syphilitic invasion of that important organ in its deeper tissues. The retina and vitreous body being liable to alteration from syphilis, it is imperative that they should always be examined, now that such facilities for doing so are in the surgeon's hands. When the outer tunics of the eye are not involved, there is no difficulty in exploring the interior; but when there is severe photophobia and external inflammation, it becomes difficult, and sometimes impossible to do so. The dimness of cornea and irritability of the iris will often effectually prevent any successful exploration of the retina.

Another symptom, which is not very frequent but which is occasionally met with, is **PTOSIS** (falling of the upper eyelid). During the present year I have seen one case of the kind, accompanied by a vesicular syphilide. This symptom is productive of great inconvenience, and is disfiguring to the countenance, but yields rapidly to specific treatment. I met with a report some few years ago by Mr. Thomas Bryant, of Guy's Hospital, in which he described the case of a man in whom the symptom occurred in a marked degree during the eruption of a syphilide, with the usual accompanying characteristic sore throat. The eyelid soon recovered its normal position after the commencement of specific treatment. One remarkable circumstance in this man's case was, that he had at the same time tertiary ulceration, and that mercury in the pure form had been taken freely without much benefit. This combination of symptoms occurred two years after the disappearance of a Hunterian chancre.

The Medical Times and Gazette, when treating in a most able article on "Modern Syphilography," March 11, 1865, refers to the valuable work of M. Diday on *The Natural History of Syphilis;* and in a lucid summary of the questions

discussed, refers in the following words to the branch of the question I am now treating:—"Among the nerve lesions witnessed in syphilitic subjects, paralysis of a motor nerve of the eye is not uncommon: the third pair of nerves are the most frequently, then the sixth, and the fourth pair the least frequently, affected. . . . We have ourselves seen more than once in syphilitic subjects an affection of the orbit, giving rise to undue prominence of the eyeball, diplopia, pain, and lachrymation." Syphilitic affections of the internal eye (retina and choroid) are recognized forms of disease, and there are some very beautiful plates illustrative of the appearances under the ophthalmoscope in Liebrich's "Atlas d'Ophthalmoscopie." This state of the eye under the influence of syphilis will be seen in the cases which I cite from my own and other records.

One of the largest contributors to our medical literature on syphilitic diseases of the eye is Mr. Jonathan Hutchinson, surgeon to the Metropolitan Free Hospital, London; and he has furnished a large number of cases illustrative of the several forms in which syphilis expresses itself in the eye. A very remarkable circumstance brought out in his records is the great frequency of iritis and its kindred diseases in infants and young children. From his cases I shall take some of the most illustrative, especially as they exhibit the changes in the vitreous humour, choroid, and retinæ, which have been discovered by the valuable aid of the ophthalmoscope.

CASE XXVIII.—*Syphilitic Retinitis of one eye a few months after the primary disease. Recovery under long specific treatment.*

"George F., aged 20, was admitted on March 31st, complaining of impaired vision in his left eye. His left retina

was found by the ophthalmoscope to be congested and hazy-looking, as if thin gauze were before it. There was no iritis. He said that he had suffered from chancres a few months before, and that rash and sore throat had followed. The rash was now gone, but healing ulcers were still visible in his tonsils. His other eye was not affected. When the course of treatment was relinquished, he had regained almost perfect sight. All ophthalmoscopic evidences had vanished, and the retina was perfectly transparent."

CASE XXIX.—*Extensive turbidity of the vitreous humour in both eyes. History of primary and constitutional syphilis.*

"Mrs. M., aged 36, was admitted in July, 1859. The two eyes were equally affected. She complained of dimly-seen muscæ and 'clouds of smoke' before them, and was unable to tell the time by the clock, or to read the largest type. The attack had, she said, commenced about four months ago, rather suddenly; the left was first affected, and soon afterwards the right also. With the ophthalmoscope the vitreous humour in each eye was seen to be turbid and full of white, silvery films, floating in its structure. The choroids and retinæ could with difficulty be seen. Mrs. M. was the mother of nine children, and was nursing a baby ten months old. On her shoulders was a well-marked syphilitic rash, and she stated that her husband had communicated the disease to her in November last. Specific treatment adopted."

The following cases occurred in my own practice, and are illustrative of the importance of the ophthalmoscope in arriving at a correct diagnosis of disease of the eye :—

CASE XXX.—*Extreme turbidity of the vitreous humour. Iritis. Choroiditis. Cured.*

Mr. R. V., of Collingwood, called upon me in November, 1868. He was accompanied by a friend, who led him to my surgery, he not being able to see with sufficient distinctness. He stated, on inquiry, that he had been suffering from pain and general uneasiness in the eyes for the last twelve months, but that during the last three months they had rapidly got worse, and he was fast losing his sight. I at once examined one of the eyes (the right) with the ophthalmoscope, and discovered that the vitreous humour was turbid, and presented the usual white silvery films floating in its structure. The choroidal pigment was patchy, and could be observed with difficulty, on account of the turbid state of the humours. The retina also could not be accurately explored, for the same reason. The left eye was suffering from iritis, which he stated was recent, and there was very considerable congestion of the sclerotic. He complained of great pain shooting along the axis of the eye to the back of the head, and was seldom able to sleep on account of the pain being more intense in the night than in the day. The history of this person is remarkable, on account of the distance of time between the original chancre and the present phenomena. He stated that he had not had any evidences of impure coïtus for twelve years, until about ten months ago, when an eruption appeared on the palms of the hands, and was then in existence in a bad form. I saw that it had all the characteristics of Syphilitic Psoriasis. Besides this he was troubled with a lichenous eruption on the thighs. I commenced with an anti-syphilitic course of treatment, and in about a fortnight after the vitreous humour had so far cleared, that I could explore the retina, and found that the optic entrance was much smaller

than normal, and the retinal vessels were much engorged and dilated. I took no measures towards improving this state of things beyond the anti-syphilitic course, and had the satisfaction of seeing every symptom pass away, and the sight of the patient completely restored.

CASE XXXI.—*Syphilitic Choroiditis in the left eye. Great debility. Diseased retina. Cured.*

Mrs. M'M. sent for me to consult as to the state of her sight, as she was daily anticipating the entire loss of it. On examining her eyes with the ophthalmoscope I found the choroid patched with small fragments of lymph, and the vitreous humour was turbid, containing a few films floating about in its substance. The retina was especially the seat of disturbance, the optic entrance, as in the last case, being nearly occluded, and the retinal vessels much distended. A white patch was observed on the inner side of the retina, which appeared to be slightly ulcerated. The pain was sometimes considerable, and worse at night than in the day. The right eye was sympathetically affected, threatening an attack of iritis, with photophobia. The patient informed me that her husband had communicated the syphilitic taint to her five years previously, when she had ulceration of the genitals, and some time after soreness of the mouth. Treatment with the iodides soon relieved her, and she was cured in about nine weeks.

CASE XXXII.—*Turbidity of the vitreous humour in both eyes. Papular syphilide on the body. Loss of vision in one eye.*

W. F ——, a miner, came to me in August, 1869, having lost the use of one eye, and being able to see very little with the other. On examining the eyes with the ophthalmoscope,

I found the vitreous humour of the left one so clouded that it was impossible to make any observation of the retina. It was crowded with the usual whitish and flocculent films floating about in it, and the vitreous humour itself almost opaque. I concluded that there was ulceration or lesion of the retina. The right eye was also far advanced, the vitreous humour being turbid, with several white films floating in it. The retina could be observed in this eye, and appeared congested, the vessels being more conspicuous than in the normal state. The choroid in both eyes was dull and patchy—more so in the left. This patient also had several spots of papular eruption on his body, and one on the right forearm. He stated that he had suffered from chancre and buboes four years previously, but did not know that syphilis was the cause of the disorder in the eyes. He attributed it to blight. He complained of great pain in the back of the head, running from the eyeball. A course of anti-syphilitic treatment restored him to health, but the sight of the left eye never fully returned. Having treated him during the latter portion of the time by correspondence, I have not had an opportunity of examining the left eye again instrumentally.

Another branch of this subject is the frequency with which syphilitic disorders of the eye, and especially iritis, occur in infants and young children. It is a symptom that has been often seen, but seldom recorded as a syphilitic phenomenon, attention not having been so much directed to infantile syphilis as of late. I can, however, confidently predict that in the future many of the instances of diseased eyes occurring in children, and attributed to other causes, will be relegated to the syphilitic category. It is not at all times an easy matter to diagnose these cases, owing to the difficulty that sometimes stands in the way of ascertaining the correct history of the parents, and the surgeon or physician not being brought in

contact with both parents—the mother alone attending to the requirements of the child. These cases require all the ingenuity and acumen that the medical man possesses, in order to determine whether the disease is derived from hereditary venereal taint, or is simply idiopathic.

In the majority of cases, however, there will be symptoms of a leading character present on other parts of the body, which will render it unnecessary for the surgeon to push his inquiries concerning the history of the case, should he find that there is a desire to conceal, or a disinclination to volunteer any information of the kind required. There will generally be condylomata, psoriasis, eczema, sore mouth, snuffles of a characteristic nature, copper-coloured spots, disorders of the nails, &c. When these conditions are present, it may be readily concluded that the disorders of the eyes are in keeping with those of the rest of the body, and that they owe their origin to the same syphilitic taint.

In most cases it will be seen that the disease in the child is congenital or hereditary, and owes its inception to the fact of the parents being in some degree syphilitic. There are cases undoubtedly, as will be shown in the chapter on hereditary and communicated syphilis, which arise from other causes than the hereditary taint; being communicated directly through other channels; these are, however, much less frequent than the cases which depend upon parental contamination. The denial of the parents that they have ever been tainted by impure coïtus is no reason for diverting the surgeon from the search for evidence wherever he may suspect infection, and should not have any weight whatever in influencing the diagnosis. The physical signs usually are sufficient to destroy the value of the most positive assurances on the part of the parents.

Mr. B. Hutchinson, whose opinions on syphilis are of the greatest value, expresses himself very strongly on the question

of iritis as a symptom of infantile syphilis. He has paid considerable attention to this branch of the general question, perhaps more than any other syphilographer, and treated it exhaustively in a paper in the July number of the "Ophthalmic Hospital Reports." His conclusions appear to me to be perfectly sound, and in keeping with all that I have seen in reference to infantile eye diseases, and I am compelled to admit that much experience and careful observation lead to no other conclusion than the one so pointedly set forth by this able writer and syphilographer. He says—"Acute iritis as a symptom of infantile syphilis is rare; but on the other hand it almost never occurs during the first year of life, independently of such origin. If, therefore, there be found in the eyes of a young adult the remains of iritis, either in adhesions or obliteration of the pupil, the history given of which is that they were left by inflammation in infancy, the presumption is considerable that the child then suffered from syphilis. As the subject of inherited syphilis advances from childhood to early adult age, he becomes, however, liable to other much more common forms of inflammation of the eye. These are of the utmost value in establishing a diagnosis. The disease *hitherto* known as "strumous corneitis," which consists in the interstitial deposit of lymph in the substance of the cornea, is, I am certain, in a very large majority of instances of *direct syphilitic origin.*"

In my own practice I am guided almost entirely by the external phenomena that present themselves, and seldom find that the iritis is not associated with a syphilide. The following cases will illustrate this fact, and convince the reader that it is frequently useless to attempt to throw impediments in the way of the medical adviser. It is also worthy of consideration, that as the treatment must be of a specific character, the restoration of the child to health by that means should overcome all doubts.

CASE XXXIII.—*Infantile Iritis. Coppery-coloured eruption. Condylomata at the anus. Snuffles. Sore mouth.*

Mrs. H., the wife of a miner from the neighbourhood of Ballarat, having with her an infant of three months old with the following symptoms:—There was on both hands Palmar Psoriasis which the mother stated was present at the birth of the child; also several condylomata at the anus, and considerable vesicular irritation about the genitals, and on the adjacent skin. These phenomena, together with the general appearance of the child, led me to the conclusion that a syphilitic taint was the cause of the disorder of the system, and of the iritis. There was much haziness of the cornea, which symptom is not frequent in children, notwithstanding its frequency in adults; also injection of the ciliary vessels. The normal colour of the eyes had altered to a greenish tint. The cornea seemed to have been the source of the inflammation, which had extended to the iris. There was also in one eye a pinkish zone, indicating considerable congestion. The sight of the child, according to the statement of the mother, was defective. The mother informed me that during her pregnancy she had a rash on her body, and a sore throat at the same time, but did not suspect its nature. Her husband had had sores (chancres) about five years before. There could be no doubt as to the real character of this case. The child had been tainted in utero, and thus the secondary phenomena occurred after birth, being, as it were, photographed on the child by the mother during gestation. The anti-syphilitic treatment adopted completely restored the child to health. The snuffles—which had continued almost from the birth—and the sore mouth, rapidly disappeared.

The case which has just been given had not been suspected by the person consulted prior to its coming to me, and it is

but just to say that many more cases occur where the actual cause of lesion is not suspected. Had this child not been treated anti-syphilitically, there is not the remotest doubt but the sight would have been lost in one, if not in both eyes. The disease is often very insidious in children, not producing much pain or uneasiness, hence the attention of the nurse is not especially drawn to it; it is therefore often overlooked until serious mischief has occurred to the functions of sight. The desirableness of a correct diagnosis is manifest, as owing to the destructive character of the lesion the sight is always imperilled.

I have found that in most of the cases which have come under my notice there has been the very troublesome symptom called "snuffles" also nearly as often condylomata of the anus. These two symptoms being present, I generally find that they give the key to the whole history, and lead to further investigations, which reduce the difficulty of forming a correct diagnosis.

In reference to infantile iritis, or inflammation of the iris in the eyes of infants, Mr. Jonathan Hutchinson has collected a large amount of information, and he says in his report of the result of his labours that "the form of iritis which is occasionally met with in syphilitic infants, is of great interest to all engaged in the extensive practice of our profession. Several circumstances combine to make this affection of much greater importance than its admitted rarity would seem to indicate. Among these may be mentioned its insidious nature, and the ease with which it may be, and usually is, overlooked; its very serious consequences; and lastly, the facility and certainty with which its destructive effects upon the function of sight may be prevented if a correct diagnosis be early formed." He goes on to enumerate a considerable number of cases of infantile iritis, and states "that infants suffering from iritis almost always show one

or other of the well-recognised symptoms of hereditary taint." In the cases to which he refers the following symptoms were present at the time of the outbreak :—

"Psoriasis of the general surface.....	in	9 cases
Papular rash	2	,,
Psoriasis palmaris	1	,,
Erythema marginatum	2	,,
Peeling of the skin.....	1	,,
Falling of the eyelashes.....	2	,,
Snuffles	10	,,
Sore mouth and aphthæ.....	4	,,
Condylomata at the anus	5	,,

"Most of those children who suffer from syphilitic iritis are born within a short period of the date of the primary disease in their parents."

CASE XXXIV.—*Occlusion of the pupil. Snuffles. Cachexia—Scaly rush. Condylomata.*

Mrs. S——, in January, 1869, brought her infant of seven months to me because, as she said, she thought it was losing its sight. I at once observed that the sight of the child was almost gone, occlusion of the pupil of one eye being nearly complete, that of the other not so far injured. There was both red and yellow organised lymph which produced the occlusion of the left eye, and had been secreted—by report—about six weeks, though I judged from the progress of inflammation and effusion it had occupied a much longer time. The child apparently had not much pain, but its nights had generally been restless. It was much emaciated. There was a scaly rash over most of its body, and the colour of its skin was of a syphilitic tint. This woman had had three children, but they all died soon after birth. She had been tainted by her husband about eight years previously, and had

had a cutaneous eruption about three years ago, that continued for nearly a year. It then left her after a course of mercurial pills. Her system was however still suffering from the venereal poison, her countenance and her hands and arms having the same dirty yellow tinge that her infant exhibited. The mother and child both were put under treatment, and in three months had completely recovered.

These cases are given simply as representative ones of the disease as it appears in Victoria, and are selected casually from many more which present phenomena of a more destructive character. I find also that the disease is more frequent than is generally supposed, and although I may not be ready at once to endorse the statement of Von Graefe, that syphilis is the cause of 60 per cent. of iritis from all causes,* still I do believe with him and many other eminent syphilographers, that it is a very frequent cause of that terrible disease.

* Deutsche Klinik, 1858.

CHAPTER V.

SYPHILITIC DISEASES OF THE TONGUE, MOUTH, THROAT, AND NOSE.

S. DISEASE OF THE TONGUE.—This serious invasion by the venereal poison deserves especial notice on account of its frequency, its inconvenience and its threatening character. It is generally associated with some other form of the syphilides, and even with chancre, bubo, or tubercular ulceration of the genitals. All parts of the tongue are liable to be the seat of ulceration, though the base and sides are seen to be the most frequently attacked. The ulcers are also deep and indurated with greyish borders, and are preceded by small, hard, red, and painful tubercles, which soon ulcerate. There is generally little suppuration. Every movement of the tongue is painful in the extreme, and when the ulceration is at the base of the tongue, as is very often the case, the act of swallowing is one of great difficulty. In some cases the ulcers are deep, and as it were chiselled or sharp at the edges, with a grey base, and sometimes discharging a sanious and acrid fluid; at other times they proceed on to a more destructive condition. Frequently the tubercles are seen in hard red lumps upon the tongue, being very sore, and causing great inconvenience, but which do not pro-

ceed to severe ulceration, some of them being covered merely with a thick and tenacious mucus. It does however sometimes happen that the disease takes on an aggravated form, so severe indeed that it is mistaken for cancer, and many cases of supposed cancer I have cured by anti-syphilitic treatment alone. This alarming state of ulceration is sometimes arrested by applications that are not specific, but they only mask the real disease, putting it out of sight temporarily, to break out hereafter with redoubled force. By the use of suitable specific remedies, and careful hygienic measures, the virus which is the active cause of such serious lesions may be kept so far in check as to be absolutely inert, and even eradicated finally from the system. I find several persons in my record of venereal patients, who, after having been treated several years ago for very severe ulceration of the tongue, have not again been attacked ; one especially, where the entire destruction of the left half of the organ was threatened, but which after nearly three months careful treatment was effectually averted, and the tongue restored to its normal condition. This patient has not had a return of the ulceration of the tongue, nor that of the scrotum, which existed during the invasion of the tongue. I have frequent opportunities of seeing him, and know that his health has been uninterrupted since the course of treatment I refer to.

The tongue sometimes presents—when invaded by syphilis—a very peculiar appearance, which cannot be better described than in the language of Mr. Erichsen,* the eminent surgeon. "It has a semi-transparent or gelatinous appearance, which gives the organ a thick and misshapen look. In other instances the epithelium is dry, white, and opaque, in patches, the surface of the tongue looking as if it had been dyed white here and there. Occasionally ulcers form upon its surface and sides ; these are usually irregular in shape, with a foul

* Science and Art of Surgery.

surface, and a good deal of surrounding induration, and unless care be taken may be readily confounded with scirrhus or epithelial cancer of the organ. Occasionally a hard, elevated circumscribed tumour of a dark red or purplish colour slowly forms towards the centre of the organ; it increases without pain, and in a gradual manner, and principally occasions inconvenience by its bulk, and the impediment it presents to the movement of the tongue." Sometimes there are distinct circular spots with red centres and pale borders, as though the covering of the tongue had been cut out by a punch.

Mucous pustules are found to occur in the **MOUTH** at the time that a similar eruption is developing on the back, arms, and legs. They are also concurrent with disease of the scalp, where the pustules throw off what have been before termed impetiginous crusts. When the lip is inverted by pressure of the finger, a group of mucous papules or pimples appear, elevated, and having a greyish yellow colour. (See Plates.) The rest of the mucous membrane in the mouth, even that which immediately joins the sore, appears sound and healthy. The papules occur at the sides of the tongue and at its base, but are circumscribed, and not so dangerous as the tuberculous syphilide which has been described before. The ulcerations are also more superficial, and do not indicate so advanced a state of venereal infection. This affection goes sometimes by the name of syphilitic aphthæ, and is often mistaken for the common sore mouth, neither the patient nor the medical attendant being aware of its true character. Its favourable feature is that, like all the so-called mucous syphilides, it is not so phagedænic, or corroding, as the tuberculous kind. It also yields more readily to treatment, a month or less of proper medication causing it to disappear, and leave the mucous membrane sound as before, without cicatrix, or other such indelible scars as follow the healing of tuberculous

ulcers. It is necessary to point out to the reader that he may have a syphilitic eruption on the lips, tongue, or cheek, without any other indication of the taint existing elsewhere, and that the occurrence of sores in the mouth should lead him to obtain proper professional aid.

The **NOSE** is especially subject to invasion during the secondary syphilis, and is very frequently the seat of herpetic and vesicular eruption. By reference to the plates it will be seen what form the disease commonly assumes, although it is often to be seen in a less degree, as well as in a more destructive one. The earlier attacks, or those which accompany the simpler syphilides, are not very difficult to deal with, nor are they dangerous, generally passing away readily under simple treatment, and leaving no indication of their having existed. In the later forms of invasion, however, there is a much more serious set of phenomena. The bones and cartilages of the nose are destroyed, and the upper portion of the organ falls in, giving to the countenance a repulsive aspect. Sometimes the ulceration breaks through the integuments, eating away the whole of the organ, and thus destroying for ever all hope of restoration. The reader will notice the following case of the kind, which occurred in the Melbourne Hospital, where the patient was restored to health, but with the complete loss of his nose.

CASE XXXV.—*Tertiary Syphilis. Tuberculous destruction of the nose. Emaciation. Nodes on both legs. Deep fissures on the hands. Deep ulcer in the back of the throat. Cured.*

Soon after my connection with the Melbourne Hospital I was requested by Dr. ——— to admit into one of my beds a patient of his who was suffering from one of the worst forms of tertiary syphilis, and on whom he had exhausted all his resources. He stated that he could do nothing for him, and that he wished to get rid of him, as he was quite convinced

that his case was utterly hopeless; in fact, that all that could be done for the patient was to put him into bed, and in charity let him die as comfortably as possible. I wrote to the house-surgeon requesting that he might be admitted, and visited him at 3 p.m. the same day.

He was one of the most pitiable objects that ever entered the wards of any hospital, apparently irretrievably prostrate before the consuming ravages of a fell disease that had fixed on every tissue. He was extremely emaciated, with tuberculous copper-coloured spots distributed all over the body. His hair was nearly all gone. Large bony projections or nodes appeared on the shins of both legs, and deep fissures existed on the palms of the hands, and the bends of the fingers. There was an ulcer on the back of the throat, of such a depth as almost to expose the bones of the neck. The uvula was completely destroyed, and the hard palate eaten out. The stench from him was of the most horrible and offensive character, so bad, indeed, that the wardsman never approached him save when it was absolutely necessary. The whole of the soft structures of the nose were destroyed, and the corroding ulceration extended over the cheek, threatening to invade the ears. He was slightly deaf, with loud noises in the ears, and required very strong sedatives to procure a night's rest. It would be scarcely possible to find a case which should offer so little hope of recovery as this one, so prostrate did the patient seem under the dreadful force of the disorder. Still I determined to put to the test the best methods that science has recently directed, and raise this hitherto hopeless patient, if possible, from a state worse than death. Under the most assiduous care, and aided by the untiring efforts of Mr. Horne, the then resident dresser—who carried out my instructions to the letter—the patient soon manifested signs of improvement, and I am happy in having to record that the treatment was brought to a successful

termination by his restoration to health. I had intended to give him a new nose by the art of Rhino-plasty, either from the forehead or arm; but having suffered so much, he postponed indefinitely any further surgical aid. He, however, got an artificial nose, and eventually occupied a situation as clerk in a merchant's office in Melbourne.*

The following formidable case of syphilitic destruction of the tissues of the nose and the neighbouring structures, taken from the *Medical Times and Gazette*, is worthy of introduction as corroborative testimony of the serious inroads sometimes made by the syphilitic virus.

Case XXXVI.—*Hernia of the mucous membrane of the nose, the result of syphilitic ulceration of the os frontis, or frontal bone.* By Dr. Rizet.

"The patient presented an opening near the median line, just above the left eyebrow, through which at nearly each respiration a small tumour appeared, which was easily reduced, and the beating of which closely resembled that of the brain. To the touch the tumour gave the sensation of hernia of a membrane through a bony opening. From these appearances the first impression was that it was a case of cerebral hernia.

"The history of the case was, that a year before, he had, while suffering from secondary syphilis, severe pain in the head, with fever, followed by swelling of the forehead and eyelids. A small abscess formed, which was opened; the pain in the head then diminished, and the opening closed. A month later, swelling again appeared in the place where the abscess had existed, but without pain. This place opened, and sanious fluid escaped. To check this, iodine was injected, and it was found to escape by the nose. Soon after this he had aggravation of

* A cast of this man's face, taken by Mr. Pardoe, dentist, may be seen in my surgery.

the secondary symptoms, sore throat, and syphilitic eruption of the skin. He had previously taken iodide of potassium, and used sea-bathing without any material benefit. Some months later, when blowing his nose, a piece of dead bone escaped, and for several weeks blood in small quantities was discharged. By means of a piece of lead, he was enabled to keep the membrane from protruding."

CASE XXXVII.—*Syphilitic ulceration of the lining membrane of the nose. Bone diseased. Offensive discharge. Ulceration of palate. Cured.*

A gentleman from Parramatta, N.S. Wales, consulted me in December last, complaining of great soreness within the nostrils, together with offensive discharge therefrom. He stated that he had contracted syphilis about four years ago, for which he was treated. Two years later he suffered from ulceration of the tonsils, together with copper-coloured eruptions all over the body. The mercurial vapour bath was at that time prescribed, and the throat was cauterised. The symptoms disappearing, he thought he was cured, until about ten months prior to his visiting me, when an ulcer appeared on the soft palate. Simultaneously his nose became sore, tender, and swollen, and latterly a discharge set in, which was so extremely offensive, that his friends told him they observed it whenever they sat in the same room with him. When I saw him his nose was red, swollen, and hard, and his breath was very offensive. On examining the cavity of the nose with a speculum, there were several small ulcers on the mucous membrane. The bones of the nose were exposed and ulcerated, from which the offensive discharge ran. There was also a large ulcer about the size of a shilling on the palate. He was thin, emaciated, and complained of great tenderness when I pressed the sternum. He also had nodes on the shins. This patient was cured in five months.

CASE XXXVIII.—*Syphilitic ulceration of the lining membrane of the nose. Destruction of nasal bones. Falling in of the organ, causing great deformity. Cured.*

A fine-built young man of 30 years of age called upon me in 1865, suffering from extensive disease of the nose, and falling off of the hair. He also had deafness of the left ear. He appeared very desponding; had lost his appetite, and could not sleep at night. He stated that seven and a-half years ago he suffered from Hunterean chancre, and bubo of the left groin. He was under medical treatment, but before the induration left by the chancre had passed away, his tongue, lips, and anus became ulcerated, and copper-coloured spots appeared on the chest and abdomen. After undergoing a long course of medical treatment, he was pronounced by his attendant cured. Three years ago he felt his nose very uncomfortable, an itching sensation being always present, and a feeling of fulness in the organ. These symptoms persisted so long, and the nose became so painful that he could not blow it, in fact he could scarcely touch it with his hand. On application then to a medical man, he was informed that his ailment was simply a common cold, and that it would soon pass away. The symptoms gradually became worse; ulcers attacked the nasal cavity, accompanied with great pain in the forehead, followed by a discharge like bloody water from the nostrils, which gradually became thick and most offensive. For these symptoms he had undergone several kinds of treatment without any benefit, and latterly small pieces of bone came away, and his nose began to flatten. When seen by me this feature presented the appearance of being broken. On examining the cavity of the nostril with the speculum, the whole of the lining membrane was ulcerated, and I removed several pieces of loose bone with the forceps. By injecting

the nostrils twice a day, and a careful course of constitutional and specific treatment, I dismissed him cured in little over four months.

A very common form of attack is syphilitic ozena, which continues so long as the ulceration of the periosteum and mucous membrane goes on. While it is in progress the voice becomes thick and nasal, and the patient is much plagued by the foul odour he bears about with him. If the disease is not checked in time, the whole of the bones of the nose are destroyed and removed, the bridge and soft parts sink in till a hollow replaces the natural prominence of the part. The periostitis and osteitis extend downwards towards the mouth, and upwards through the spongy bones of the base of the skull, to the hard palate and the bones above it. In time the nose, mouth, and pharynx become one cavity, lined—when cicatrization is reached—by a greyish tough membrane, the thin secretion of which readily dries into painful crusts. By this destruction the sense of smell is lost, and to a great extent that of taste also. In these patients the yellowish pallor of the countenance is well marked, which with some history of previous syphilis is often the sole evidence of the origin of the disease. Now and then a patch of serpiginous ulcers may co-exist on the skin.*

It has happened to me to attend a very large number of cases of the so-called ozena as described in the text books, and I believe that in the majority of these cases the symptoms may all be traced to syphilis hereditarily transmitted, as the largest number of cases are found amongst young people.

Death of the nasal bones occurs also in hereditary syphilis. It is sometimes seen in infants, but is more common in later childhood, at the time that the eyes and teeth are attacked.

* Berkeley Hill.

Erichsen, the celebrated surgeon and writer on the science and art of surgery, gives the following description of the invasion of the nasal tissues by the venereal virus:—"The nose is commonly affected in constitutional syphilis, and often destructively, especially in individuals much exposed to changes of temperature, and who are unable to pay proper attention to their treatment. There is intolerable itching of the nose. The mucous membrane becomes chronically thickened with discharge of blood and pus, coryza, and habitual snuffling. In other cases ulceration takes place, with fetid odour of the breath, and the formation of ecthymatous crusts on the septum, between that and the alæ. This ulceration is of a very persistent and troublesome character. In many cases the ulceration will proceed to the destruction and perforation of the septum, or necrosis of the spongy bone, the vomer and ethmoid—sometimes excavating the nose, and clearing it out into one large chasm! When this happens the nasal bones are usually implicated, being flattened, broken down, and destroyed, the alæ and columns ulcerating away, and producing vast disfigurement. Occasionally the disease extends to the bones at the base of the skull, and in this way may occasion amaurosis, epilepsy, or death."*

* Erichsen's Science and Art of Surgery.

VISCERAL SYPHILIS.

CHAPTER VI.

SYPHILITIC DISEASE OF THE LUNGS AND AIR PASSAGES.

I NOW come to treat of syphilis in its unseen operations, where its phenomena are unknown, save to the surgeon and the pathologist; to treat of its terrible onslaught on the viscera or special organs of vitality, and to point out as clearly as non-professional terms and modes of expression will permit, the destructive progress the disease sometimes makes, even when unsuspected. It will be my aim in this chapter, as in some others, to show that in reference to organic and visceral disorders, mistakes of a fatal nature are made in not recognising the real cause of sickness, thus allowing the subtle and unsuspected evil to continue its ravages even to death, under the covering of another name, and an incorrect diagnosis. I shall have no difficulty, I think, in making this painful fact apparent to my readers, and by this means I shall be able to lead them to a more ready recognition of the symptoms which indicate syphilitic visceral disease. Too much information of a general character cannot be afforded to the public on a subject of such deep moment as the approach of syphilitic lesion in the central organs, for when that stage of contami-

nation is setting in, time and knowledge are of immense value, and the latter should be brought to bear upon it with the utmost diligence. Every organ of the body is more or less subject to the ravages of syphilis. We have seen how severely the skin and the appendages are affected by it, but it also preys upon the heart, the blood vessels, the lungs, the larynx, the liver, the trachea and bronchi, the stomach and the intestines, the spleen, the pancreas, the mouth, tongue, and pharynx, the brain and spinal column, the nerves and organs of special sense, the kidneys and generative organs of both sexes. Thus it is seen how wide a range of destructive action this disease attains, and how much the functions of life must be perilled when it is permitted by negligence or ignorance to proceed unchecked. It is concisely sketched in No. 67 of the British and Foreign Medico-Chirurgical Review, as follows:—"The internal and external organs are equally affected, not only the cranium, but the brain within it, or the nerves; not only the pharynx, but the œsophagus; not only the larynx, but the trachea, bronchi, and lungs, besides the liver, spleen, and other viscera." Such great authorities as Ricord, Virchow, Lancereaux, Mink, and Parker, have written much to teach us how serious are the lesions that take place in the internal organs, and have demonstrated beyond dispute that the simulation of organic diseases by syphilis is by no means an unfrequent occurrence. So searching indeed is the virus, that it invades even the nerve tissue itself, and is often on this account lamentably injurious to the integrity of the mind. Its ravages in this tissue have called forth special observation from Virchow, Ricord, Gross, Lancereaux, Mayer, Lagneau, and others, and some of the ablest works in our physiological and pathological literature are rich in research on this seat of syphilitic action. Our medical literature has never been more copious on any branch than it now is upon this special one of constitutional

syphilis, and the profession are thus invited to a more precise examination of the many grave forms in which it manifests itself. It is only in recent years that the subject has been so exhaustively treated, and has attracted the attention of so many distinguished observers. Ricord, the great syphilographer of the age, has led the van in this valuable and important course of investigation, and has by his acumen and skill placed humanity under a deeper obligation to him than to any other of the medical luminaries of which this century is so proud.

Pathological demonstrations have been made in abundance to verify the opinions that have from time to time been advanced in reference to organic syphilis, and each organ has been found to exhibit varied indications of the virulent action of the syphilitic poison. The results of such observations in the valuable records that are now accumulated, go to show how much was till lately unknown of this direful plague of the human race, owing to the absence of precise information and intelligent recognition of its operations. Being so little understood, it is not to be wondered at that at certain periods of our history, as a race, it operated as a destructive epidemic, and slew thousands with the rapidity of a plague. It was, however, only known by its external phenomena, the fact of its invasion of all the tissues being scarcely surmised, although now there is no doubt but that when it was so alarmingly fatal, it became so by reason of the poisoning of the functional sources of vitality. There is even now a little scepticism left in the least advanced minds, and unwillingness to accept the new discoveries, holding—for the sake of old associations—to the ancient opinion of the skin and appendages being the sole seat of syphilis.

This unwillingness is, however, bending before the weight of accumulating evidence, so that few in the profession who have had opportunities of investigation now oppose the

doctrine of constitutional syphilis and visceral taint. Dr. Wilks, physician to Guy's Hospital, London, has done much to bring about this important change in medical opinion regarding syphilis, and although when a few years ago he first took his pathological specimens of syphilis to the Pathological Society, as material illustrations of his views on the subject, he was met with general scepticism, he has lived to see his opinions embraced, and a host of enthusiastic coadjutors in the same path of investigation. He suggests the reason for the long neglect of visceral syphilis by saying, "That so apparent a conclusion was not arrived at before was due probably to the fact previously alluded to—the division of our profession into surgery and medicine, and thus, as syphilis belonged to the former department, the external relations of the disease were alone studied." He goes on to say, "What we now maintain, therefore, is that, owing to the greater attention paid to morbid anatomy, we have found the internal parts of the body affected in a similar way to the external." The surgeon had long observed the skin diseases and the nodules on the bones, condylomata on the mucous outlets, and exudation of lymph on the iris, &c., but now it is known that perfectly similar syphilitic nodules are to be found on every organ of the body.

Syphilis will henceforth be considered and observed as a very different disease from what it was wont to be regarded. It will now rank with variola and kindred diseases, but with a position of much greater importance, more dangerous in its advent, and more constant in its hold upon the constitution. It will henceforth be viewed as the *most baneful of the animal poisons;* less rapid in its development but more penetrating and disorganising in its ultimate operations, frequently destroying all the tissues it may attack, before it exhausts its own force. We are confirming by pathological experience the presumptions of the physicians of the fifteenth and

sixteenth centuries, who "not only recognised syphilis as the result of a specific poison or virus, but they firmly believed it was capable of profoundly affecting the system, and of giving rise to many and specific internal derangements, as well as combining with and modifying other diseases."

Lallemand, Brown-Séquard, Hutchinson, Lagneau, and a host of others, have done much by correct observation and pathological research, to verify the surmises of the old physicians, and to finally establish the doctrine of organic syphilitic lesion. These distinguished investigators, who have gained a world-wide fame by their profound researches and unremitting industry, have devoted their great talents and opportunities also to the investigation of syphilitic phenomena in the nervous system, and have brought to light many forms of nervous derangement depending upon this virus, which before had not been supposed to have so remarkable an origin. It has been said that Benjamin Bell was the first writer who placed to the credit of syphilis many internal disorders, and boldly taught the same, as well as supported it by recorded facts. Since his time overwhelming evidence has been adduced of the general influence of syphilis over the entire organism, in all its tissues and secretions, and the profession now is almost unanimous in its admission that syphilis is a constitutional as well as a contagious disease.

I have referred thus much to the discussion on the question, and to the great authorities who have made it their business to give decisive teachings on the subject, that the general reader may more confidently accept the statements I may make in reference to the class of diseases now to be brought under notice. The early portion of this work has been devoted to a general sketch of the outward phenomena of syphilitic activity, and to illustrations of the *modus operandi* of its development. The following portion is devoted to a

far more serious phase of the malady, and one which ought to engage the attention of every intelligent person in the community. So important is a more extended knowledge of syphilitic poisoning, that it will frequently happen that its recognition by an experienced observer at once solves a perplexing difficulty, and by directing a special course of treatment in harmony with the newly discovered light thrown upon the diseased phenomena, will cure the patient, thus disposing of symptoms which had before defied every effort to modify them.

It is to be observed that constitution and temperament cause modifications in the course and virulence of the disease, the lymphatic generally being the most susceptible to its influence, experience showing that in such constitutions it is more rapid and more fully developed than in others. It is true that it is sometimes seen in other temperaments in its worst forms; but, as a rule, the observation just made in reference to the lymphatic temperament holds good. There are also some families more predisposed to suffer from syphilis than others, just as we find in some a special receptivity for other animal poisons. Mr. Acton relates a case which sustains my own observations; it is as follows:—"I have seen a case of severe tertiary affection in a gentleman in whose family it is well-known that there is almost an hereditary tendency towards affections of the bones when once syphilis is acquired. This gentleman, after returning from India, died in England from the ravages of syphilis attacking the bones and internal organs." In my own practice, I know families and individuals in whom syphilis seems to find a most genial habitat for its development, and whom I have difficulty in saving from positive destruction whenever it may appear. Not only is there this occasional but unfortunate aptitude in the system to yield to the syphilitic virus, but there are also many predisposing causes which it will be well

to cite before leaving this part of the subject. It has also been discovered by Ricord that syphilis tends to lessen the number of the blood globules.

Any conditions which tend to the degeneration of the vital functions, and the inducement of cachexia, or a state of low vitality, are eminently favourable to the rapid and destructive progress of syphilis, presenting no barrier of vital resistance to its fermentative process. The usual concomitants of poverty are so many auxiliaries to its career, and by lessening the activity of the *vis medicatrix naturæ*, aid the virus in its consuming march through the tissues. It is not unusual to find that any debility induced in the system by want of food, accident, common sickness, will give rise to syphilitic symptoms in persons where the taint has been known to be latent.

As a matter of course organic syphilis, or what some term the tertiary manifestation of the disease, is to be looked for with certainty, proportioned to the severity of the attack of the primary and secondary phenomena, and proportioned to the plan of treatment adopted at the time. It is quite possible for the surgeon who may have the management of the case in the two first forms so to control the force of the virus as to protract its latency, or even destroy it altogether. It is equally possible by inappropriate treatment to give intensity to the disease. It is to me a by no means unreasonable presumption that the tertiary stage may be completely prevented by judicious treatment in accordance with the teachings of the leading authorities of the day, and the valuable light that science has recently thrown upon the therapeutics of syphilis. But while admitting this, it is unfortunately too apparent, as thousands of unfortunate victims can testify, that not only does unscientific treatment not prevent the accession of the tertiary stage, but it hastens its approach, and augments its destructive power. This fact is daily presenting itself to me in the

consulting-room, where I am called upon to treat the most lamentable cases, which owe their terrible characteristics to the absence of earlier rational and specific treatment, to the unwise use of mercury, and the legion of abominations that are flaunted before the world as infallible remedies. There is no desire on my part to disown mercury altogether as a curative agent; it is, however, but one of them, and should be used with infinitely more discretion than is usual. Its excessive use will undoubtedly produce that kind of dyscrasia which determines the rapid course of syphilitic development, and by lowering the vital condition of the system, leave it a prey to the ravages of the worst tertiary lesions.

These are some of the circumstances which tend to modify the nature of that serious category of diseases which I am about to describe. I may, however, add that the character of the primary and secondary attacks will not be unimportant circumstances in their bearing on the tertiary stage. Hunter himself noticed that the character of the primary sore bore some relation to the more advanced phenomena of the disease in subsequent stages; that is to say, that there is a relation between the severity of the later phenomena and the phagedænic aggravation of the primary sore. Other writers have made the same observations, and expressed themselves in accordance therewith, and it embodies an idea which has long occupied my mind in reference to syphilitic invasion, viz., that at an early period it is possible to determine the extent to which the body will be affected by the disease, or the power of resistance in the constitution. As stated in the *Medical Times and Gazette*, "A cutaneous syphilide earlier in its appearance (from thirty to fifty days after the appearance of the chancre), wide in its extent, and very superficial in its character, denotes the milder degree of constitutional infection; while the discreet and localised morbid processes, affecting the deeper tissues of the skin and mucous mem-

brane, have the opposite character of a severe degree of syphilitic infection." The same theory holds with reference to the secondary phenomena; thus, to continue the quotation from the same authority—"When the secondaries are rather late in appearance, when they at first or speedily assume particular and mixed forms—such as large papular elevations of the skin, which suppurate when numerous superficial pustules or vesiculo-crustaceous scales form upon inflamed patches of skin, accompanied by similar affections of the scalp, when the engorgement of the throat is well marked at first—not a mere snail-track throat—and when there is an elevation of mucous membrane about the palate, as if from a product effused into its substance or underlying its surface—these symptoms express differences of severity from the first type every bit as great as between the throat affection of the severe and of the mild types of scarlatina. The gravity of the prognosis increases according as we perceive by the early and subsequent softening and degeneration of these lesions, that the lymph is more or less destitute of plastic elements. The marasmus (wasting of the patient) only too often advances, *pari passu,* with the degenerate action going on in his tissues. The above expresses in its worst forms a profound syphilis, or bad constitution, such as the strumous (scrofulous); but there is another type difficult of cure, out of proportion to its apparent effect on the constitution. . . . . When a large papular elevation appears at some part (say the groin); inflames, softens, and becomes an ulcer, it assumes very peculiar characters, and exhausts our ingenuity to heal it."

It is under this aspect of the case that I deem it advisable to afford the lay reader as much information respecting the malady he is suffering from as may be conveyed in a work of this nature, and thus save him from many of those serious results which want of knowledge might entail upon him. So

grave are the final operations of syphilis which pass under the generic term "tertiaries," that any information which may conduce towards the anticipation of them, and an amelioration of their severity, must be a manifest advantage. The quotations which I have just made show very plainly that there are states of syphilitic development which are of so aggravated a character as to defy medication, and tax to the fullest extent the skill of the physician or surgeon, but at the same time it is inferred that even in the worst cases—similar to some I have described as under my own treatment—if legitimate and specific courses are taken to neutralise the poison, the risk of fatal consequences will be materially reduced. In no disease is it more imperative that truly scientific treatment should be adopted, and none in which so much real and enduring mischief is done by a non-specific form of medication. The terrible consequences of internal syphilis read a lesson of extreme seriousness to the sufferer, and ought to induce him to exercise great caution in selecting his adviser, and in the medicines he may take.

The diagnosis in many cases is difficult, requiring long and attentive observation; especially in reference to lesions of the heart and lungs. It will be seen by the plates given to illustrate a few of the organic changes, how determinately the syphilitic character is stamped upon the most important viscera. The disease is often masked by a class of symptoms which simulate other coincident diseases of the organ deranged, but which would not exist if the main agent in the lesion, viz., the syphilis, were overcome. Hence the great necessity that the syphilitic diathesis should be easily and readily recognised and removed out of the way, as a hindrance to recovery. Dr. Moxon, assistant physician to Guy's Hospital, bears out my observations in reference to the necessity that exists for more careful analysis of the symptoms of disease where syphilis is suspected. He says, "that he

is persuaded that the frequency of syphilitic causation of medical disease is not usually so familiar and ready to the mind as it should be, in order to the early detection of it under the very various forms in which it comes before the physician." Again, "until the doctrine which ascribes to syphilis the lesions in question is universally and fully allowed, and put into practice, I conceive that those *who have considerable means* of testing the truth of the view, lie under obligation to state publicly their experience. For, as is usual and is right in the rise of new doctrines, there are those who oppose a sceptical face to the new opinions, and deny the syphilitic nature of the affection. Such natural and useful doubts expressed by observers of distinction are very powerful to hinder the spread of the recognition of visceral syphilis among those practitioners who have little or no opportunity of personally examining *whether anything characteristic of syphilis is in the viscera of cases which have been unsuccessfully treated—perhaps because the suspicion of syphilis as the cause of the trouble was never aroused.*"

The hint thrown out here is strikingly *en rapport* with occurrences in my practice, and I was gratified to find that other observers had noticed the same important circumstance in relation to those doubtful and intractable diseases which sometimes baffle every effort at cure by reason of the syphilitic complication in the lesions. The same writer further remarks:—"It must be allowed that there are sure to be cases truly syphilitic where no account of the syphilis can be got from the history; circumstances often render it imprudent or improper to ask directly after such a disease, and the truth of replies cannot be relied on when the question is put; and further, if we could always learn all that the patient knows about his own case, we should find much difficulty, from the confusion of the non-infecting sore with the truly syphilitic chancre, so that after the primary disease

has long passed by we may be quite unable to learn whether a scarce remembered disease of the genitals was really syphilis. . . . . Every one will, however, see that syphilitic cachexia is a thing which it is of the first importance to recognise."

A case strongly illustrative of the point under discussion is the following :—

R. A., a young man of respectable parentage, residing in St. Kilda, had, prior to his calling upon me, been under the care of two of the ablest physicians of the city, by whom he had been treated for a considerable time for phthisis. He called upon me in the hope that I might be able to render him more efficient aid in what he fully believed to be consumption. Knowing the deserved reputation and skill of one at least of the gentlemen who had treated him, I felt assured that if it were phthisis alone, I should not be more successful. On auscultation I found many of the physical signs sufficiently distinct to be quite convinced that the left lung was the seat of considerable lesion, and that there was hepatisation of a portion of the right. Both percussion and auscultation determined considerable alteration in the condition of the left especially. There was dulness on percussion on the upper third, with slight crepitation near the clavicle, and harsh respiratory murmur, also a moderate amount of vocal resonance. The cough was very troublesome, especially at night, and the patient suffered much inconvenience from nocturnal perspiration. The sputa was abundant, dense, and yellowish. The appetite was tolerably good, although he was very thin. His having received no benefit from the treatment of the gentlemen referred to, induced me to suspect that this might be a case of compound syphilis, and my first attempt towards testing it was to knead his sternum, which I found gave him intolerable pain. This led me necessarily to prosecute my investigation further, and I

eventually ascertained that about two years previously he had been treated for chancre, and had since then had a rash for which he was not treated, but which I determined from his description to have been *Lichen Syphilitica*. There was unusual tenderness of the anterior portion of the tibia in both legs, with patches of characteristic discoloration over the seat of tenderness, extending to the right and left. These indications caused me to treat his disorder as though it were one of pure syphilis, and I had the extreme satisfaction of seeing a marked improvement in the course of fourteen days. In less than three months he was quite restored.

This case was so well marked, and so decisive in support of my opinion as to the influence which syphilis often exerts in many diseases, especially where there is any peculiar dyscrasia, that I have many times since been induced to suspect its presence when treating idiopathic disease, in which I had unusual difficulty in controlling existing symptoms; and have modified the treatment with the best results.

My experience so far has led me to the conclusion that medical men are little aware how often they are baffled in their efforts to relieve their patients by this unwelcome taint lurking unsuspected and unnoticed. The discovery, therefore, of the intrusion of syphilis into visceral disorganisation is one of the most valuable additions to modern therapeutics, and has thrown much light upon diseases which otherwise were obscure.

LUNGS AND AIR PASSAGES.—Diseases of the lungs and air passages are so common, and at the same time so intractable, that they naturally present themselves first for consideration, on the supposition that the difficulties generally surrounding their treatment may be found sometimes to arise out of the syphilitic association. Every practitioner is frequently painfully aware how little help he can give to the

suffering invalid, who is supposed to be the victim of that serious dyscrasia, consumption; how often his best efforts, though guided by the most recent lights of science, are of no avail towards checking the onward march of tubercular deposition and degeneration. Much has been done by physical exploration, thanks to the discovery of the immortal Laennec, so that the stethescope enables us to trace the extent and character of the lesions to which the lungs may be subject, but we are not so powerful to cure such lesions as we are skilful in discovering them. We can determine the formation, progress, and decomposition of the dangerous tuberculous deposits, but we are seldom fortunate enough by our medications to arrest them. It is one of the opprobria of medical science in this case, that it has only learned yet how to observe with accuracy, but is almost powerless to assist. I am, however, able confidently to state that there are many cases where a cure can be attained by an anti-syphilitic course of treatment. This to me is an encouraging circumstance, and I have frequently had occasion to feel gratified that my observations had led me to search for syphilitic indications in cases of phthisis.

In my private record of cases, I find two or three excellent ones which will fully illustrate the value and advantage of such a method of investigation, as well as the fact that syphilis does occasionally lie concealed under the mask of pulmonary consumption. It will be a circumstance of sincere congratulation to me if the suggestion embodied in these statements should induce any members of the profession, who have not yet taken this view of the subject, to prosecute carefully a series of observations, tending further to elucidate this important branch of medical knowledge. The magnitude and profound interest of this area of investigation cannot be overstated, involving as it does so large a number of diseases that have for ages taxed to the utmost the skill

and acumen of the profession. In addition, I hope that my lay readers, for whom this book is especially designed, will also notice the possibility of syphilitic complications. I advise every one who finds that his disease or ailment baffles the skill of his medical attendant, to search himself in his own history for hereditary or acquired syphilis. I advise him not to be deterred by false delicacy, fear, or ridicule, from such a course of investigation. The avenues by which the syphilitic taint is conveyed are so numerous, that it is often impossible to ascertain by what channel it has obtained access into the body. I now have a gentleman under my care, whom I have known for several years, in whose truthfulness I have the utmost confidence, and who has neither reason nor inclination to disguise the cause of his ailment, whose case furnishes a singular confirmation of my opinions. I mention his case here, however, to give point to the statement that it is sometimes difficult to know how the taint was acquired. In the case of this gentleman it was received by his repeatedly shaking hands with a person who suffered severely from palmar syphilis. They frequently met during the hottest portions of the summer season, when the pores of the skin were fully dilated, those of the hand especially. The contamination was evidently by absorption, without breach in the continuity of the skin. The case is remarkable, but admits of no question on my part as the observer. The effect of contamination was to produce palmar syphilis in the gentleman to whom I refer as under treatment at this time.*

The case just cited furnishes a reason for the advice which I give to the reader of this book to make examination in reference to the probability of his protracted illness being due

* It is the opinion of many foreign authors as well as Mr. Langston Parker, that the symptoms of the cutaneous disease communicated from the secondary form are often exactly the same as those of the individual who communicated it, and that there are *no primary symptoms*. Psoriasis gives psoriasis, lichen gives lichen, &c., and condylomata give rise to condylomata; just as the pus of primary syphilis produces a primary sore.

to syphilitic taint. The patient suffering from consumption is especially urged to make himself certain on this point. If he should not be able alone to satisfy himself, a conversation with his medical adviser would probably soon dispose of the doubts that may exist. The ordinary phenomena of phthisis, or pulmonary consumption, most people are acquainted with, such as frequent cough, nocturnal sweats, wasting away, considerable expectoration (especially in the morning), harsh and difficult breathing; sometimes what medical men call cavernous sounds in the chest when the ear is placed against its walls whilst the patient is speaking. There is also what is called the hectic fever, with many other symptoms sufficiently familiar to every one. There are, however, frequently unseen circumstances, generally unknown even to the medical attendant; those significant nodules and gummata that everywhere indicate the existence of the syphilitic virus, and which are found occupying positions in the lungs, and simulating the physical signs and characteristics of phthisis. It is well to remark here, that many persons are very often found suffering from supposed phthisis, or pulmonary consumption, who are quite at a loss for any cause in the antecedent history of their parents. These persons will generally be found to be the victims of the venereal dyscrasia, which I term syphilæmia, and which is very much easier to manage than the tuberculæmia of those having hereditary phthisis, or in whom the dyscrasia has been induced by poverty and privation. As I before remarked, the diagnosis is by no means easy, but wherever there are in any sense reasonable grounds for a presumption of taint existing, a course of treatment in harmony with such presumption will frequently be followed by the most salutary results, and at once confirm the opinion of syphilitic complications. As a matter of course the previous history of the patient, if it can be accurately arrived at, is the first thing to be attained; then whatever sequelæ the

expert surgeon may be able to detect, and I may here observe that these sequelæ are by no means so uncommon as is generally supposed. Many people are carrying about on their persons the characteristic coppery stains, who are profoundly ignorant of their indications.

It has been propounded by high medical authority that there are many persons who suffer and die of phthisis who would never be the victims of that fatal disorder were it not for the invasion of syphilis, which determined the hereditary or accidental pulmonary lesion. When the constitution becomes fully impregnated with the virus, the poison often attacks the tissue most disposed to give way in its interstitial structure, hence hereditary debility in the pulmonary tissue leads to the invasion of the syphilitic poison upon the lungs in preference to any other.

The appearances after death have been distinctly confirmatory of the opinions advanced. Many of the greatest authorities and most systematic observers, amongst whom are Virchow, Wilks, Lancereaux, and Hutchinson, have pointed out that the lungs after death have presented unquestionable evidences of syphilis in the form of gummy nodules, and they are found in almost every part of the lung. These nodules are of a peculiar character, being often roundish, greyish, or yellowish white masses, varying in size from rather less than a pea to a filbert. They are firm and cheesy, similar in consistence to what is frequently coughed up by some people singly, and may be crushed between the thumb and finger. They obstruct the portion of the lung on which they are situated, and interfere with the respiration. Sometimes they present large solid cheesy formations of a truly syphilitic kind in the lung, thus leading to degeneration, and a breaking down of the lung tissue. These phenomena are closely represented in simple pulmonary disease uncomplicated with syphilis, but I am now speaking of cases where

syphilis was the undoubted origin of the lesion, and gave character to it. The nodules have been seen most unmistakably in infants as well as in adults. When the disease makes active progress, it causes what has been called syphilitic phthisis, and is marked by loss of flesh and strength, sweating, cough, pallor, occasional attacks of pleurisy, harsh breathing, and moist ronchi.*

There is also what has been denominated *syphilitic bronchitis,* which is peculiar in this respect, that the membrane lining the bronchial tubes is sometimes covered with a well-marked and continuous ulceration. In an advanced state of the disorder, and where the dyscrasia is serious, the ulcers penetrating and corroding into the cellular tissue, and the cartilages which form the rings, become in a serious degree destructive. The ulceration extends to the smaller branches of the bronchi, and give rise to dyspnœa, as well as to a most distressing cough, with sanious and purulent expectoration. In the autopsies which have taken place after suspected cases, the extensive and typical nature of the ulceration has been noted, as valuable pathological evidence of syphilitic agency in this disorder. The patient will be able to recognise one symptom which is invaluable in this disease, viz., the tickling under the sternum, as well as the extreme tenderness of that bone under pressure. This last test he can himself apply, and it will commonly be a reliable indication, on which the supposition of syphilitic complication may be founded. The disease is often slow in its development and progress, and ends in emaciation and death, unless proper treatment be applied.

There could be few better illustrations of what has just been written on this subject, or on syphilitic disease of the lungs, masked by ordinary phthisis, than the one cited by Mr. Dowling, M.B., London, in an able paper read before

* Berkeley Hill.

the Medical Society of Victoria about three years ago, in which he demonstrates how distinctly visceral syphilis may simulate phthisis. The case is that of a gentleman in England who called upon him in haste one day, having—as is usual in the advent of consumption of the lungs—spat up a small quantity of arterial blood. Auscultation furnished indications of apparently tubercular condensation of a portion of the right lung, with the usual crepitus of congestion. The patch of solidified lung was well marked, and was verified by two distinguished experts of pulmonary diseases in London. Mr. Dowling treated his patient for some time in the usual way for phthisis, but without many of the anticipated results. His patient improved somewhat it is true, but never became robust, or regained anything like his standard health. Mr. Dowling determined at length to have what he terms "a thorough overhaul of his chest again." The following condition of things induced the determination: "The appetite failed; the pulse kept persistently too frequent; there was slight cough, more dullness of the lung, with marginal crepitation; no expectoration nor night sweats, but a gradual loss of flesh, which in about six weeks amounted to nearly two stone. He was hardly laid by, and could hardly be called able to go about, the symptoms varied so from day to day. The usual treatment for early phthisis was being carried out, and he seemed gradually wasting." Such was the position of affairs when the "overhaul" was determined on. Mr. Dowling goes on to say—"As the patient pulled off his shirt, I noticed a scab on the upper part of the belly. I asked him what it was, to which he answered, 'Oh, nothing; it has been there a few weeks, and began with a pimple.' He admitted it was getting slowly larger. It was about half-an-inch in diameter at the base, conical and crusted; inflamed at the edges, from which occasionally a little sanious pus exuded. To my mind it was an unmistakable patch of rupia. I

inquired as to primary syphilis—to use the accustomed form of expression—and found that about three years back, and two prior to the first-spoken-of hæmoptysis,* he had had a small sore on the penis, which had healed in a few days with the application of black wash, and he thought no more of it. Now, however, he admitted that a small hardness like a pea remained for some time after; none remained at this time, but some of the glands in the groin presented unmistakeable remains of what Ricord calls 'the adenopathy† peculiar to the infected chancre,' a painless circumscribed hardness, with perfect mobility in the tissues around. From the period which I now decided was that of infection by syphilis, I could make out none of the usual concomitants—sore throat, roseola, &c.; and now there was but this one spot of rupia, the condition of the glands in the groin, and the account of the little sore and the remaining hardness to guide to a diagnosis. I decided at once to commence the treatment for syphilis by mercury. . . . As the mercury began to affect the system, the appetite improved; he got stronger, and more healthy in appearance; he gained flesh, and the sore on the belly healed; the dullness on the lung lessened, the crepitus disappeared, and the cough ceased. In three months he had recovered his usual weight, and appeared well in every respect. Remembering Ricord's caution as to giving up treatment too soon, I continued it for four months, but could not prevail on him to submit to Ricord's recommendation of six, so strong and well had he become. At this time the dullness in the lung had disappeared so far that, had I not known what had been, I should hardly have said there was any, and I hear occasionally from England now that he continues in perfectly good health."

This case is in a high degree apposite and telling, and is

* Spitting of blood. † Gland disease.

worthy of prominency as a representative one, furnishing as it does so conclusive an instance of syphilis under the mask of phthisis. Many more could be adduced from writers who have lent their sanction to the doctrine, by reason of cases which have come under their own observation. As is seen in the case just cited, Mr. Dowling was only directed to a correct diagnosis by the suggestive spot of rupia. Had he not seen that, he might, to all appearance, have continued the orthodox treatment for phthisis until his patient had sunk into the grave.

Syphilitic lesions in the lungs have been long ago described by Morton, Sauvage, Portal, Morgagni, and more recently by Graves, Stokes, Walshe, Wilks, Virchow, Ricord, and others. Two forms of syphilitic lesions of the lungs are recognisable. 1. Bronchitis, or bronchial irritation at least, with fever, which in many cases precedes the skin lesions, and disappears wholly or partially when this is established; and if the syphilitic eruption suddenly disappears, bronchitis may ensue. (Walshe). 2. The patient may have all the symptoms of phthisis, tubercles being absent from the lungs. The tendency of syphilis is thus to induce bronchitis and phthisis in those especially and constitutionally predisposed, and where mercury has been taken *injudiciously*. (Aitken).

Mr. Chippendale, one of the house surgeons of St. Bartholomew's Hospital, London, mentions the particulars of the following instance of death from phthisis, which had just happened:—The patient was a man, aged 27, who had been repeatedly an in-patient during the last three years, suffering from various forms of tertiary symptoms. He had taken iodide of potassium most largely, and often with temporary benefit. There had been very extensive destruction of the pharynx and soft palate, and a large portion of the upper jaw had necrosed and come away. He had ulcerated nodes in several parts. His voice had for long been hoarse, and finally,

in conjunction with those of pulmonary phthisis, symptoms of laryngeal ulceration manifested themselves. Under this combination he at last sank exhausted. At the autopsy the lungs were not allowed to be examined, but most extensive disease of the larynx was ascertained to exist. In an abscess on one side, a portion of loose cartilage was found. The case furnishes us with an example of a class of cases now fortunately very small, in which constitutional syphilis resists all the usual specific remedies, or if it does not prove wholly intractable, *relapses occur so frequently*, and are of such severity, that the result practically amounts to a successful resistance.

This case is deserving of special notice for several reasons, not only because it points out clearly the severity of the disease when attacking the air passages, but that these places may be suspected to give way when the throat and pharynx are perceived to be involved. It is to be regretted that the lungs were not examined at the autopsy, as it is but reasonable to presume that some nodules or other syphilitic deposits would have been discovered. He had nodes in several parts which came under observation; and it is much to be regretted that a case so suggestive of pulmonary syphilitic lesion should have been allowed to pass unobserved, when our literature is so barren of illustrations of that special characteristic of organic syphilis. Another point in Mr. Chippendale's report that attracts notice is the extreme virulence and intractability of the disease when it attacks the tissues now under consideration; hence persons who have a tendency to ulceration of the throat, pharynx, or air passages, ought to exercise all possible diligence to eliminate the virus from their bodies as speedily as scientific medication will achieve it.

Aitken says—"In tuberculous patients those tissues are apt to be involved in the syphilitic lesion, which are most prone to ulcerate and to have tubercles grow in them. Hence

syphilis is often set down as a cause of phthisis. The mucous membranes are most prone to suffer in such cases. Hence syphilitic growths develope themselves in the lungs, glands, brain, pharynx, and larynx."

SYPHILITIC DISEASE OF THE LARYNX.—I have in the last chapter given a brief sketch of the mode in which syphilis invades the nose, and the neighbouring tissues, such as the mouth and pharynx: it is therefore necessary to allude to its invasion of the larynx, which also becomes involved in the general contamination, unless active curative measures are taken at an early period. The ulceration which has commenced in the neighbouring portions extends rapidly into each section of the air passages, and destroys the mucous membrane and submucous tissue; hence the larynx often suffers severely, being almost destroyed, and the voice so altered as to be scarcely intelligible. Whenever the advanced forms of syphilis occur, and select any portion of the throat and air passages as the seat of their destructive lesion, the patient should be on the alert. It is in this region of the body that syphilis presents some of its most hideous, revolting, and pitiable characteristics, and more readily causes the system to succumb to its ravages. The premonitions of the category of symptoms just enumerated, and others allied to them, are sufficiently important to be stated, as they assume the features of ordinary catarrh, and may on that account be overlooked when they ought to be specially noted. With this inveterate catarrh, the whole mucous membrane extending from the fauces down the larynx is of a rosy hue, with congestion, and sometimes œdematous swelling of the tissues. At the same time very minute ulcers are seen here and there, by means of the laryngoscope, which are sufficiently characteristic to determine the diagnosis.

The voice becomes husky, and there is considerable pain in the larynx, even during the act of swallowing. The patient suffers from cough, and the swelling or tumefaction of the tissues goes on to such an extent that breathing becomes impossible, and the operation called in surgery laryngotomy has to be performed to preserve him from death by asphyxia. It is fortunate that this terrible phase of the disease occurs but rarely, it being only in some peculiar dyscrasia that the organs now under discussion are so seriously involved; but when there is any symptom of thus being attacked, every effort must be made to control it.

There is no doubt of the fact that a large number of cases of syphilitic disease of the throat and air passages have been treated for laryngeal phthisis and pulmonary consumption. There is now no excuse on the part of the practitioner for making a false diagnosis. The history of the case, together with the use of the laryngoscope,* will place him at immense advantage in properly estimating the symptoms, and arriving at a definite opinion. Syphilis and cancer may attack the

* As so much mention is made of the laryngoscope, it will be as well to give the reader some short sketch of its history and character. It is not a new instrument to the surgeon, although no extensive use has been made of it until lately. The laryngoscope is older than the opthalmoscope and the stethoscope, but not by any means less valuable. The two former are useful in examining the heart and lungs, but the laryngoscope exposes to view and throws light upon the hidden recesses of the larynx. Some charlatans, with the shameful intention of imposing upon the credulous, affirm with great gravity that by means of this valuable instrument they can see into the lungs, which statement is an unqualified deception. The larynx alone can be viewed by means of the instrument, although it does sometimes occur that the entrance to one of the bronchi at the bifurcation of the larynx may be seen. The lungs are absolutely beyond any instrumental ocular observation, and can only be examined by the ear, aided by the stethoscope. The laryngoscope is at least two centuries old, and has been frequently used by eminent surgeons. It has lately burst upon the profession with great *éclat*, and now ought to be found upon the table of every consulting-room. I have used it for many years, and have found it of equal value with the best aids to diagnosis that mechanical science has furnished. Dr. Benjamin Babington may be said to be the restorer, if not the inventor, of the instrument, having introduced his improved form of it at a meeting of the Sydenham Society in March, 1829. Since then several improvements have been made, until we have at last obtained the present beautiful and perfect instrument.

larynx, but here the laryngeal mirror will settle at once the true character of the abnormity. In syphilis the disease is generally limited to the epiglottis, the arytenoid cartilages, and the vocal cords; whilst in cancer and laryngeal phthisis the parts involved are the cartilages of Wrisberg and Santorini. The following are a few cases which I have selected from a large number which might be given. They are, however, sufficiently illustrative to give a faithful picture of the ravages of the disorder in this portion of the air passages.

CASE XXXIX.—*Syphilitic ulceration of the larynx. Cough and expectoration. Pain and difficulty in swallowing. Inability to lie down in consequence of a feeling of impending suffocation. Cured.*

Mrs. R., from D., who had evidently been a fine, muscular young woman, came to Melbourne to place herself under my care. The following is the history of her malady:—Three years ago some sores appeared on her genitals, which soon healed from application of a lotion, and twelve months subsequently tubercular spots appeared on several parts of the body, which slowly ulcerated and gradually enlarged from the size of a bean to that of a five-shilling piece. Her tongue and throat also became affected with ulcers, and the symptoms continued with more or less intermission to the time when she consulted me, when the symptoms began to assume so grave a character that she became alarmed as to the result. When I saw her first she was thin and very weak, with a frequent cough and copious expectoration. She was compelled to sleep in a semi-recumbent position, as she felt when lying down a dreadful feeling of impending suffocation. There was complete aphonia, or loss of voice. She could not swallow solid food; even fluid nourishment caused her great pain in swallowing.

There were patches of syphilitic ulceration on her arms, chest, abdomen, and thighs, with well-marked nodes on the left shin-bone, which were very tender and painful, becoming worse at night, and her hair had nearly all fallen off. On looking into the mouth the fauces were found to be ulcerated, relaxed, and the membrane thickened. The tonsils bore testimony to previous ulceration. On examination with the laryngoscope I noted the existence of an ulcer on the left vocal cord, and another in the fold of mucous membrane, between the arytenoid cartilages. The epiglottis was also inflamed and ulcerated. She said she had been under medical treatment for a "galloping consumption," and the doctors told her she could not possibly recover. I recognised the disease as one of constitutional syphilis at once, and treated it as such, when the symptoms rapidly gave way. Medicines of a specific character were administered internally, and the throat and chest symptoms were treated by direct applications to the larynx, and by inhalation. The progress this poor woman made was extraordinary. She improved daily, and I was much gratified to find at the end of six months that she was completely cured of what was supposed to be a mortal disease.

CASE XL.—*Syphilitic ulceration of the larynx and pharynx. Cough and expectoration. Loss of voice. Pain in swallowing. Difficulty of breathing. Cured.*

A young married woman, 25 years of age, presented herself at the out-patients' department of the Melbourne Hospital, in 1864, looking very ill, and evidently much emaciated. She had a distressing cough, with much mucous and bloody expectoration, and her voice was gone to a whisper. She said that about 14 months before she came to the hospital

she suffered from brownish-red coloured spots on her back and arms, for which she took a good deal of medicine, especially sarsaparilla and potash. She thought that this improved her symptoms a little for a time, when she began to cough severely, which she thought might be the effect of cold. The cough, however, persisted, together with a copious expectoration, and these symptoms were soon succeeded by difficulty of breathing, and finally complete aphonia, or loss of voice, supervened. At this stage of her disease any attempt to speak caused pain in the throat and tightness in the chest. She said she had lost a great deal of flesh, and the doctors told her she was in a consumption. I, however, examined the lungs very carefully, and could find no organic mischief going on in the lung substance. There was, however, great irritation in the bronchial tubes. Manipulation of the pharynx and larynx gave her pain, and induced cough and nausea. There was ulceration to be seen in the mouth and fauces. There were also some spots of syphilitic psoriasis on the chest and the left thigh. On applying the laryngoscope to the throat, an ulcer could be seen on the anterior half of the right vocal cord, and another on the anterior part of the right glottic regulator. There was a rather deep ulcer on the left wall of the pharynx, which accounted for the pain in swallowing, and the tenderness on pressure. This patient was cured in four months by specific constitutional treatment. The voice was restored and the swallowing made easy by means of the laryngeal spray containing permanganate of potash.

I give the following case from the *Medical Times and Gazette,* as a joint illustration of the disease now under discussion. It was communicated by Dr. Morell Mackenzie, the patient being under the care of Dr. Davies:—

CASE XLI.—*Syphilitic ulceration of the larynx, treated with the aid of the laryngoscope.*

"Emily W., a labourer's wife, aged 30, was admitted into Charlotte Ward on February 25, 1862. She was much emaciated, and altogether in a very feeble condition. The patient denied ever having had syphilis, but on inquiry it appeared that she had had two miscarriages, and that her only child died shortly after birth with a skin eruption. She had lately noticed that her hair came off very much, and she had frequently suffered from severe ulcerated sore-throat. It thus appeared that, though unaware of, or not choosing to admit it, the patient must, at some time or other, have been affected with the venereal disease. She was when admitted in a very prostrate state, and, besides being very weak, she had excruciating pains in the shin-bones, which were especially agonising at night. Nodes could be felt over the right tibia, and the superficial surface of the left bone was highly irregular. She had a frequent cough, and expectorated very abundantly. She was unable to swallow solids, and even fluids could only be taken in small quantities, and frequently gave rise to immediate vomiting. The voice was feeble, and of a decided nasal tone. The tonsils bore the scars of former ulceration, and one of them had to a great extent disappeared. On examining this patient with the laryngoscope, a white-margined oval ulcer, about the size of a pea, was seen in the fold of mucous membrane intervening between the arytenoid cartilages, and another ulcer of similar appearance on the true right vocal cord. A large quantity of secretion was hanging about the larynx, and it was not till after repeated coughing that a proper inspection could be made. The patient was ordered milk diet, strong broth, and a small quantity of brandy copiously diluted.

"February 28.—With Dr. Davies' sanction I touched the ulcers in the larynx with a strong solution of Arg. Nit., and the white eschars left by the application of the caustic were evident to several gentlemen who were present on the occasion.

"March 4.—Condition of patient still very low. A laryngoscopic examination showed that the ulcer in the vocal cord had almost disappeared, but that the other had spread over the mucous membrane, covering the right arytenoid cartilage. Another topical application was made which produced vomiting.

"March 7.—One ulcer (viz., that in the vocal cord) was healed, whilst the other was much smaller, especially at the original seat. On the 27th the ulcers were quite healed up, and a slight depression over the right arytenoid cartilage, with two small whitish radiating lines, was the only evidence of the former ulceration. The ulcer on the vocal cord had healed without leaving any cicatrix. The patient's strength gradually improved; the voice, though not very strong, became quite clear; the laryngeal symptoms entirely disappeared; and the patient was discharged "cured," on April 8.

"Remarks.—The great improvement in therapeutics which this "holding up the mirror" to the larynx had effected, impressed itself on the mind of everybody who had an opportunity of watching this case. In chronic affections of the larynx, with a little practice, particular spots can be touched with facility; and, guided by the laryngeal mirror, it is remarkable how easily we can in our applications "suit the action" to the condition of the larynx. The two points of especial interest in this case are—first, the great tendency to vomiting; and, secondly, the nasal *timbre* of the voice."

CASE XLII.—*Loss of voice from ulceration of the regulators of the glottis and the vocal cords. Cured.*

This patient, a man about 32 years of age, called to consult me on the 20th February, 1869, and on interrogating him I found that he could only articulate in a whisper, and that even this exertion gave him great pain. He had a slight cough, but little or no expectoration. He informed me that his cough had been very severe for some time, but was then much less troublesome, as he had been using opiates to quiet it; also that the reason for his resort to such measures was the impossibility of obtaining sleep because of the increased severity of the cough at night. He was much emaciated, owing to his inability to swallow solids, and the pain that the act of deglutition produced. He had been subjected to very severe caustic applications, which seemed to have produced general irritation of the surrounding tissues, without having in any degree ameliorated the more trying symptoms. I discovered very soon that there was a probability of this being a syphilitic lesion, and sought for the confirmation of this opinion in the patient's history. He informed me that four years ago he had both gonorrhœa and chancre, which were said to be cured by injections and lotions. During the last year he had suffered much from irritation of the skin and lichenous eruptions, of which there were still traces on the legs. He had during that time been especially subject to catarrh and a cough, which he had been given to understand was bronchitis. On examination with the laryngoscope I found the vocal cords ulcerated, and the regulators of the glottis also had several ulcers on them, and a certain amount of œdema was perceptible. The pharynx also was involved in the general ulceration. By specific anti-syphilitic treatment, and the frequent use of laryngeal sprays, the patient was cured in about three months.

CASE XLIII.—*Aphonia for nine months, owing to the existence of ulcerations on both the vocal cords. Ulceration of the pharynx and tongue. Cured.*

G. F. W., aged 26, arrived in Melbourne from the country in June, 1868, having, as he thought, lost his voice from a cold caught while in a low state of health. He had not been well, he said, for nearly a year and a half. He had a tickling, distressing, and painful cough, which was very troublesome at night. His rest being so broken, he had become thin, careworn, and desponding. He could only be heard in a whisper, and the effort to speak was painful. Examination of the thorax by percussion and auscultation gave no apparent indication of abnormity. I at once concluded that the disease was in the larynx itself. On examination by the laryngoscope I discovered extensive syphilitic ulceration of the vocal cords, three on one side and five on the other, the principal one being close to the arytenoid cartilage. The regulators of the glottis were slightly swollen, or œdematous. The pharynx also was ulcerated, the ulcers having precisely the same syphilitic characteristic as those of the vocal cords. On further interrogating the patient, I found that he had contracted syphilis about five years previously, and had chancre, which was speedily healed by local applications. Subsequently he suffered from a skin disease, from which I found here and there small cicatrices. The diagnosis I arrived at was that of syphilis, involving the air passages. The usual specific treatment cured the patient in about two months.

CHAPTER VII.

SYPHILITIC DISEASES OF THE LIVER, STOMACH, INTESTINES, ANUS, AND RECTUM.

THE LIVER is an organ that is often seriously affected by the syphilitic taint, and is probably less suspected than any other, save the lungs, of being the seat of that kind of lesion. Many persons to my knowledge, and to that of other practitioners, are afflicted with severe and chronic liver complaints, which have been long under the ordinary treatment for hepatitis, without avail. Some have come under my care, and I have had occasion to alter the course of treatment to an anti-syphilitic one, with the best results. This viscus when diseased frequently resists every attempt to relieve it that is not anti-venereal. It is, however, to be admitted that the indications of syphilitic disease of the liver are extremely difficult of detection during life, and require more than ordinary experience. In some cases the organ becomes larger than is normal; at others it shrivels and dies from atrophy. Inveterate jaundice is another symptom which is not easily determined upon as to its diagnostic value, unless by careful analysis of the constitution at the time, and the history of the case. Should the jaundice be owing to syphilitic lesion, it will be of vital importance to discover the cause, and

deal with it specifically, or it will almost certainly prove fatal. An instance that I had the opportunity of seeing at a very late stage, which had been under the care of a practitioner in another colony, was exceedingly valuable as an illustrative case; and had I been able to secure an autopsy at the death, it would, I feel certain, have been a useful addition to our pathological records. The patient had not long been jaundiced; he complained of pain in the region of the liver, and stated that at an earlier period there had been a very considerable and sensible fullness there, but that there was not much tenderness on pressure. He said that he seldom or ever got any relief from medicine; his urine was high-coloured; he was always thirsty and nauseated. His general appearance was atrophic, and his skin a dirty yellowish tint, which first led me to suspect the syphilitic complication. I determined to examine him as carefully as possible for further confirmation of my suspicions. He complained when I pressed the anterior ridge of the tibia, about half-way below the knee, and I detected some remains of what I conceived to have been nodules of a syphilitic nature. He also could not bear sternal palpation. There were about his body, particularly on the back and sides, coppery-coloured marks, and he confessed to having had chancre about four years previously. In the hope of giving the unfortunate sufferer some relief, I adopted an anti-syphilitic course according to the circumstances, and was surprised to find the ready response of the system to it. The patient experienced great relief, but was too far emaciated to hold out, and died, in my opinion, a victim to the ravages of an unrecognised syphilitic taint. I feel assured, from observations made after death in the manipulation of the body, that there existed other important lesions of a syphilitic character, which augmented the rapidity of the decline. This case amply indicates the necessity so often expressed of

vigilance in the practitioner wherever unusual obstacles stand in the way of restoration to health under supposed appropriate treatment.

At a very early period of the history of syphilis, or soon after its being recognised as a distinct disease, it was generally believed that the liver was especially the seat of lesion from that poison. Even during the time of Paracelsus there was considerable discussion as to whether that organ was equally liable to invasion with other viscera. During the fifteenth and sixteenth centuries there were many writers of note who maintained that the liver was especially the seat of lesion, and that it exhibited in a marked degree the singular characteristic effects of the venereal poison, in the form of nodes, gummata, and cheesy deposits. The weight of evidence and opinion has always been on the side of those who have considered hepatic syphilis as by no means a rare disease, but on the other hand a more frequent occurrence than is generally believed or suspected. Astruc and Portal, two eminent writers of the seventeenth and eighteenth centuries, did much to establish the opinion, from extensive observations made on the bodies of those who had died of syphilis, that the liver is an organ especially liable to invasion by the syphilitic virus. For a long time the discussion ceased, and the medical world scarcely made any observations on syphilis whatever; hence nothing of consequence was added to our medical literature, or to the data accumulated at an earlier period, until M. Ricord, of France, the greatest syphilographer of the nineteenth century, entered upon the investigation of this special disease, and demonstrated that the liver is particularly disposed to suffer from syphilitic degeneration. He has described the nodules in his celebrated *Clinique Iconograph de l'Hopitaux des Veneriens* as existing in the same condition as in other diseased viscera, and synchronous with their pathological conditions. The ap-

pearance of these nodules has been described also by Dettrich. Virchow and other pathological authorities have recorded the existence of the syphilitic nodule in this organ, so that now the question of hepatic syphilis is finally set at rest. Frerichs, in his very valuable and exhaustive work on diseases of the liver, says:—"In the second form of hepatitis syphilitica (hepatitis gummosa), the tissue of the cicatrices (the elevations remaining after ulceration) is seen to contain whitish or yellowish nodules of a rounded form and dried appearance, which usually vary in size from a linseed to a bean, but may be as large as a walnut.

"The effects upon the system of the simple and the gummy syphilitic hepatitis are in general not very striking. The principal portion of the glandular tissue usually continues quite capable of performing its functions, and occasionally the loss of substance is compensated for by hypertrophy. The cases are rare where the larger branches of the blood-vessels or bile-ducts are obliterated, and where the derangements consequent upon such destruction ensue. In those cases, however, where there is extensive induration or amyloid degeneration of the gland, all the consequences of cirrhosis or of waxy liver are usually developed. The cachexia which not unfrequently accompanies syphilitic hepatitis (inflammation of the liver), is attributable to a disease of the spleen, the lymphatic glands, and particularly of the kidneys, rather than to the cicatrices of the liver. The symptoms which accompany the disease during life are often so insignificant that the development of the cicatrices escapes observation entirely, and they are found quite unexpectedly at the post-mortem examination. Cases, however, occur where the symptoms are sufficiently marked to render a diagnosis possible. Among the most common of these symptoms is pain in the hepatic region, which at one time is limited, and at

another extends over the entire organ. The pain is usually of a dull, tight character, but sometimes is sufficiently acute to be the subject of great complaint.

"Where pain and jaundice are absent, the alteration in the form and volume of the gland may, under certain circumstances, when the organ is appreciable by palpation, apprise us of syphilitic cicatrices of the liver. Frequently this is not the case, many of the cicatrices being completely concealed by the ribs, and elude all means of diagnostic exploration.

"It is also sometimes a difficult matter to avoid confounding the disease with cancer of the liver, inasmuch as the main characters of the latter disease (the painful, nodulated, hard tumours in the liver) may likewise exist in the syphilitic affection of the organ when it is associated with waxy infiltration. In the cases where there is none of this infiltration, the prominences are much softer than those of cancer.

"The existence of constitutional syphilis, the (mostly) temporary pain and tenderness, the enlargement of the spleen, and the frequent coexisting albuminuria, may lead to a correct diagnosis of the syphilitic form of disease."*

I have quoted thus largely from Dr. Frerichs on account of his position as an authority on diseases of the liver, which he, as Professor of Clinical Medicine in the University of Berlin, has made his special range of medical observation. His diagnosis of the disease is conclusive, as establishing the fact of such lesions existing. His position gives him innumerable opportunities of verifying by post-mortem observation the conclusions which he may have drawn from external physical exploration, such as inspection, mensuration, palpation, percussion, &c. My own experience has most fully sustained all that he has stated, both in reference to the phenomena to be observed, and the difficulties that occur

* Frerichs on Diseases of the Liver.

in forming a diagnosis. It is often impossible to determine positively by palpation whether the manifest lesion of the liver is to be attributed to cancer or hypertrophy of the organ, unless we can see other less doubtful diagnostic signs on the rest of the body, or in the history of the patient. The cases which I shall give will fully illustrate all that has been advanced in reference to this especial lesion.

CASE XLIV.—*Cachectic appearance. Great debility. Liver much enlarged, and tender under palpation. Indurated chancre on genitals. Œdema of the feet, with Albuminuria.*

Margaret L., of P., sent for me in May, 1868. I found her in bed, much emaciated, and having a decided cachectic expression. The skin was of a dirty yellow and cadaverous tint, which roused my suspicions at once as to the nature of the disorder from which she was suffering. On examining her I found there was general flabbiness of the flesh, and œdema of the feet. On the right labia there was a distinct induration, which was the sequela of a chancre which she stated she had suffered from about five years previously, when her husband infected her. She had since then had occasional soreness of the throat and tongue, and owing to impaired health had become extremely thin. On palpation of the region of the liver I found considerable tenderness and enlargement. Its margin extended below the border of the ribs, and there I could distinctly feel a nodular tumour, which was slightly tender. In the mammary line the liver measured about seven inches, and considerably more than the normal size in the axillary line. It could be readily felt through the thin attenuated walls of the abdomen, so that here and there other nodules than the one just mentioned, but not so large, could be detected. The spleen also was enlarged, and the urine was charged with albumen. I could at first scarcely

give this patient any hope of recovery. On ascertaining, however, that prior to infection by her husband she had enjoyed robust health, and had never borne children, I judged that if she could bear the treatment she required, and any reactionary force remained, there would be a possibility of restoration. With this opinion I treated her with vapour baths and the bromides, and in three weeks I had the satisfaction of seeing a decided improvement set in. The skin became of a more natural hue, and the size of the liver was manifestly reduced. In about six weeks she was able to go about, and in four months appeared quite well. The albuminuria had disappeared, and I could no longer detect the nodular prominences in the liver. I gave her medicine to be taken for about two months longer, and dismissed her. I have heard that she is still quite well, and has joined her husband in New Zealand, where he follows the avocation of a miner.

I wish here to make some brief observations on a subject which I intend to enlarge more fully upon in reference to the use of mercury in cases of this kind. It has been, and still is, the practice with many surgeons to rely especially upon mercury for all cases of a venereal character, and especially so where the liver may be the supposed seat of lesion. Recent discoveries in pathological, therapeutical, and chemical science, have distinctly proved that mercury is not the valuable specific for biliary derangements which it has so long been deemed—that its indiscriminate use for all liver affections has been an enormous blunder. In syphilis it is thought by many to be a specific *par excellence*. This opinion is one which is every day receiving considerable modifications in the minds of most of our eminent men in Europe who are investigating the therapeutics of syphilis. Mercury in my opinion is not a reliable medicine in most cases, other preparations which have come into use being in-

finitely more efficacious and eradicative. There is one form of mercurial administration which has of late years been very popular, and hence much abused both by empirics and some members of the profession: I mean the mercurial vapour bath. This bath has been supposed to be especially effective in ridding the patient quickly of syphilitic skin diseases, consequently it has been employed especially in those syphilides. It is admitted that it sometimes speedily causes the disappearance of an eruption, but this is no evidence whatever of the curative force of the drug. In most cases the disease breaks out again after a time with redoubled energy, and in some more aggravated form. Many of the worst exhibitions of secondary and tertiary syphilis that I have had to treat have been the constitutional reactions of the disease after the use of the mercurial bath. The absorption of mercury by the skin does not appear to me to be more specifically eradicative than its internal administration alone. There are more lasting results from the internal use in moderate doses, but even that is not sufficient to overcome the venereal virus without the aid of other important and more specific medicines. Those persons who are suffering from the syphilides, or from any of the tertiary lesions, should be careful not to subject themselves to the excessive use of mercury in any shape, and should certainly not rely upon the mercurial bath for permanent cure.

I am aware that this opinion is not in accord with that of Mr. Henry Lee, surgeon to St. George's Hospital, who has had extensive experience in the treatment of syphilitic diseases. He has given some examples in which he used the mercurial vapour bath with apparent good results, but in these cases *other medicines were given internally,* so that the action of the mercury was complicated and uncertain. If calomel is to be of any real service in constitutional syphilis, it must by some means enter the blood current, and exercise

its neutralising power on the virus at every centre of the organism. Mr. Lee himself doubts whether calomel does enter the blood by means of the skin; at any rate, he says—"That calomel, as such, enters the circulation, I do not wish to undertake to prove." He, however, believes that calomel applied by means of the bath is as effectual and safer than administered internally. This is not saying much, for in another place he says—"When the medicine is introduced into the patient's system by inhalation alone, the results prove *very far from satisfactory*. I made some time ago some comparative experiments on this point, and I found that the cases which were treated by the inhalation of calomel vapour alone, from one cause or another, *all proved unsatisfactory*."

There is nothing in these admissions calculated to establish confidence in mercury as a reliable specific agent. If it could be absorbed by the organism with readiness at all, it would be by exposure to the delicate and thin mucous membranes where endosmosis and exosmosis are in extremely rapid operation; but it appears that the results are eminently unsatisfactory in this form of application. Two reasons present themselves as either jointly or singly responsible for the failure of the process; either the calomel was not taken up by the organism, or the drug was not a specific neutraliser of the virus. The first reason is scarcely probable, for we know that mercury is rapidly taken up by the absorbents; hence there is no other conclusion to be arrived at than the one that mercury was not applicable to the necessities of the case, and is not the best remedy we have at our command.

Dr. David W. Yandall, of the United States, has strongly recommended the mercurial baths, and reports having cured many cases with them; but beyond the general statement there is nothing to lead to a confident inference. Dr.

Yandall may have some special mode of administration, in conjunction with auxiliaries, that will meet certain cases; *but I am not prepared to admit that the calomel vapour bath alone is the panacea for the syphilitic cachexia which its advocates profess it to be.*

CASE XLV.—*Enlargement of the liver, with nodular prominences. Syphilitic cicatrices on the forehead and side. Debility. Diarrhœa. Chronic inflammation of the bladder.*

W. R. L., of Melbourne, consulted me in July, 1864, with the following history and symptoms:—He had been under treatment for a year and a half for disease of the liver, which had been supposed to be the seat of a large abscess. Blisters, dry cupping, and caustic irritants had been tried, but with very little benefit. The enlargement remained, and the general health continued to suffer. On examination by palpation and percussion I found the liver much enlarged, and three distinct nodular tumours apparent to the touch beneath the false ribs, and one almost as distinct at the sixth intercostal space. I discovered three manifest cicatrices on the left side, as well as those which were so apparent on the face and forehead. On interrogating the patient minutely as to the history of his disorder, he gave me to understand that he had five years previously contracted syphilis, and had a chancre and bubo; he had also a skin disease, which he said was very severe and sore in the places where I observed and pointed out the cicatrices. His general health had declined considerably during the two years preceding his coming under my care. At that time he had severe chronic cystitis, requiring him to micturate frequently, giving him great pain. There was a large quantity of mucus in the urine, together with some pus, and a trace of albumen. I concluded that in

all probability the hepatic lesion was syphilitic, and that under suitable anti-syphilitic treatment the disease would give way. The use of the bromides followed by iodides soon produced satisfactory changes, and I was able to discharge the patient cured in about five months. In this case I gave no calomel nor blue pill, but relied on medicines of an entirely different character, as he had been several times salivated incautiously, and thereby *much injured*. When I dismissed the case the nodular prominences could not be recognised on palpation.

In the cases which have been just given, we notice in a marked degree what has frequently been mentioned, viz., the syphilitic cachexia (or vitiated habit of body). That the reader may have some tolerable idea of the condition meant by the term, I subjoin Ricord's descriptive sketch of it. He says :—"Any description of syphilitic cachexia must fail to convey a clear notion of it, because its characters are not sufficiently well defined. It might indeed be called an exaggeration and an accumulation of all the forms which we have hitherto studied, combined with loss of flesh, paleness, flabbiness of the textures, sallowed hue of the skin, weakness of the intellectual faculties, scorbutic manifestations, and finally hectic, or continued fever, with exacerbations towards the evening. This fever very often persists when the external cachectic symptoms have entirely disappeared, and it is useful to know that it is sometimes symptomatic of an internal suppuration which escapes our notice. To all those symptoms aphonia (loss of voice) is soon added. Diarrhœa, profuse sweats, and defective nutrition come on, and death at last relieves the wretched being from his sufferings. But this species of cachexia is rare, owing to more attention being paid to treatment; and I may add that it will become still more so, thanks to the progress made in the therapeutics of venereal diseases."

Dr. Wilks also, of whom frequent mention has been made,

stated before the Pathological Society of London that "he himself had no doubt of the effects resulting from syphilis, and that in the cases of fatal cachexia following it, various visceral changes would be found. He had no doubt of syphilitic pulmonary affections, nor of disease of the blood-vessels, but exhibited more especially in those cases of paralysis associated with the tertiary forms of the complaint, and due to a softening of the cerebral structures. With respect to the liver, the disease was manifested by the production of fibroid nodules." Dr. Wilks exhibited several valuable specimens of diseased syphilitic livers. One was that of a man who had been invalided for six years on account of various syphilitic ailments, as nodes on the bone, rheumatic pains, cutaneous eruptions, &c. He died with a waxy spleen and liver, and throughout the latter there were nodules of a fibroid deposit. Another specimen was taken from a child one month old, and weighed 1½ lbs. It was smooth on the surface, and remarkably hard, cutting indeed more like a fibrous tumour than a liver, and none of the ordinary structure being visible to the naked eye.

Mr. Hutchinson, of the Metropolitan Free Hospital, London, gives an excellent illustrative case on disease of the liver in connection with ascites. He introduces it by saying:—"The following case is one of especial interest as regards the visceral lesions which are now well known to be not infrequent in the later stages of constitutional syphilis. The case also shows in a remarkable manner the value of the malformation of the teeth as a sign of inherited taint. The malformation differed from what is usual, in that it was not symmetrical—only one tooth was affected; but it fortunately was quite typical. The condition of this tooth was the single symptom which led to a correct conjecture as to the nature of the disease." He stated that he had other cases equally corroborative, where syphilitic disease existed,

and which yielded to specific treatment; there was also in all the pale, earthy complexion. The case is thus reported :— "Mrs. H., aged 34, was admitted three months ago. She was sent up from Sheerness by her medical attendant on account of ascites (dropsy), which had lasted for three years. She had been tapped thirteen times. Her aspect on admission was pale and sallow, but not jaundiced. Her physiognomy was not peculiar, if we except a somewhat earthy pallor of face. Her left upper central incisor tooth displayed, however, the most characteristic notch; her other teeth were normal in shape. The abdomen was distended to an extreme degree. After she had been in the Hospital about three weeks, Mr. H. drew off two pailsful of yellow fluid. The edge of the liver could then be easily felt; it was rounded, *very firm*, and presented *large nodular irregularities*. The whole organ was much contracted. She recovered under specific treatment, no further operation being needed."

The following are some of the cases which have come under observation in my own practice :—

CASE XLVI.—*Syphilis of the liver. Urethral chancre, followed by organic stricture of the urethra, and constitutional syphilis. Death.*

This patient was admitted into the Melbourne Hospital under my care, suffering from organic stricture of the urethra, together with false passages in the urethral canal, and an abscess in the perineum. He gave the following history of his case :—Five years ago he suffered from urethral discharge, the result of an impure coïtus. He was told it was gonorrhœa, and was treated for such, when the appearance of copper-coloured spots on the forehead at once modified the opinion of his medical adviser. Ever since he has suffered more or less from the eruption, and he has noticed a sensible diminution in the size of the stream of urine. About a month

prior to his admission into the Hospital, he was seized with retention, and applied to a "clever chemist" to have his water drawn off. This functionary, however, failed to do so, after an attempt extending over an hour, but he managed to draw off a large quantity of blood. The next day he said he felt great pain along the course of the urethra and perineum, and he felt in a high state of fever; he could, however, manage to extrude his urine, with considerable difficulty, by drops, in which was a large quantity of blood. I managed to pass a No. 2 catheter into his bladder, but during the passing of the instrument it kept slipping into two false passages. These must have been produced by the clever manipulation of the "clever chemist." I also noticed on the palms of the hands, the forehead, and the shin-bones, evidence of constitutional syphilitic invasion. The abscess in the perineum was poulticed for a couple of days, and then freely opened. He was ordered a liberal diet, with a moderate amount of stimulants. The urine was ammoniacal, loaded with lithates, and deposited a large quantity of mucus, and there were traces of tyrosin and leucin. His skin presented a slightly jaundiced appearance. His liver was tender on pressure, and seemed to be atrophied, from the limited area of dullness on percussion of that organ. The treatment was directed to the relief of the most prominent and distressing symptoms, but from day to day he gradually became weaker, with intolerable thirst. The brain became affected, as was evidenced by a slight incoherency, which ultimately culminated in complete delirium and insomnia. Lastly, he became comatose, and gradually sank. The body was examined twenty-four hours afterwards with the following result:— Body slightly icteric and emaciated, with considerable effusion into the ventricles of the brain. Old adhesions on both sides of the chest, with a cicatrix on the upper lobe of the right lung. No abnormity observed in any other of the thoracic

organs. The liver was small, puckered, with nodular-looking bodies on its surface. On cutting into it, it presented the true characteristics of the syphilitic degenerated liver, and weighed only thirty ounces. The bladder and urethra were carefully examined, the former showing its mucous membrane thickened and roughened, and the latter a double stricture; the one occupying a space about two inches from the meatus, and the other just anteriorly to the prostate gland. There were also two false passages, the one commencing about two inches and a half from the prostate gland; the other had been formed by actually thrusting the catheter into the floor of the urethral passage, and forced into the bladder under and around the prostate gland; in fact I passed an elastic catheter through the false opening in the urethra, and it slipped easily into the torn bladder without going through the prostate.

Although this case is cited especially as an illustration of constitutional syphilis involving the liver, still I cannot but call attention to the fact of the patient's escape from infiltration of urine, and possibly death, after such treatment as he received from his "clever chemist," and the extensive injury done to his urethra. The whole of this poor man's sufferings may be attributed to the false diagnosis made by the surgeon who first attended him, and who mistook what was evidently a urethral chancre for an attack of gonorrhœa. Had he used the valuable instrument known as the urethroscope, he would have at once discovered it.

CASE XLVII.—*Syphilitic disease of the liver, with atrophy of the organ, and dropsy. Syphilitic disease of the skin. Death from cholera.*

A lance-corporal, aged 26 years, belonging to the 3rd Royal Lancashire Regiment, stationed at Gibraltar, was admitted into hospital under my care complaining of

great weakness, pain in the epigastric region, together with a feeling of nausea and loss of appetite, and total inability to attend to his duty. His antecedent history was to the effect that six years ago he contracted a chancre, which his medical adviser termed "Hunterian." He was a long time under treatment, and before the sore had healed, symptoms of a secondary syphilitic character manifested themselves on the skin in the form of vesicular syphilide; and simultaneously there appeared on the tongue, throat, and anus, mucous papules. At the same time his hair fell off, and he became partially bald. He said he was treated for enlargement of the liver eighteen months previously. When seen by me I noted the following symptoms and appearances:—A young and tolerably fleshy man, his abdomen rather large, measuring 41½ inches round, with evident fluctuation, determining the existence of fluid within its cavity. There were a few of the pustular syphilides in the posterior part of his scalp. His bowels were costive, and his urine was rather scanty, exhaling a peculiar fetid odour, and loaded with lithates. He was thirsty, with a furred and dry tongue. His pulse was 90, and weak. On percussing the liver it was found to be small and free from tenderness. The heart, lungs, and air passages appeared to be normal. The diagnosis was, *constitutional syphilis disorganising the liver*.

To relieve the most urgent symptoms, tonics and diuretics, with strong nutritious broths, &c., were prescribed for a short time, and the anti-syphilitic treatment was commenced with very marked improvement; but unfortunately he was attacked by cholera, and died twelve hours afterwards.

The *post mortem* was made by me in the presence of Drs. Firth, Stewart, and Brandt, three hours after death, when the following appearances were observed:—The body externally was tolerably muscular, the cadaver betraying the

fearful results of choleraic malignity. The skin demonstrated from cicatrical lesions the pre-existence of secondary and tertiary syphilitic formations in their various phases. Beyond the usual after-death appearances of malignant cholera, nothing abnormal was observed in the lungs and air-passages. The abdominal regions were also healthy, with the exception of the liver, which was strikingly characteristic of the so-called syphilitic liver. It was abnormally small, presenting on its surface several cicatrices and fibrous nodules, which when sliced displayed masses of straw-coloured fibro-plastic deposit.

In commenting upon this case, the existence of constitutional syphilis, which ultimately destroyed the proper secreting tissue of the liver, and thereby caused the more alarming symptom—dropsy, with its attendant distressing and symptomatic phenomena, cannot be doubted, and I feel confident that the health of the patient would have rapidly improved under the treatment if he had not been so suddenly and unexpectedly cut off by cholera. The *post mortem*, however, is instructive. Many able pathologists now believe that syphilitic disease of the liver presents two distinct epochs during its invasion and progression, viz.—the initial stage, by which the liver is much enlarged ; and the terminal one, in which the organ becomes atrophied and nodular, suggestive of structural lesion of its substance through the invasion of the syphilitic poison.

CASE XLVIII.—*Tertiary syphilis. Syphilitic degeneration of the liver, causing dropsy, and other alarming symptoms. Cured.*

A gentleman from Queensland, aged 30, consulted me in December, 1864, on account of difficulty in breathing, short hacking cough, pain in the region of the liver, and enlargement of the abdomen. He had no appetite, and his sleep

was much disturbed. He had occasional attacks of fainting, and was much exhausted. He said that he had been treated for indigestion by one, for heart disease by another, and consumption by another, and was latterly told that his case was an incurable one. When I stripped him for examination I noticed an ulcer of a copper colour, about the size of an almond, on the sternal end of the right collar-bone. This bone also was much enlarged, and his scrotum was studded with syphilitic tubercles. He had never been told they were venereal, and he could get nothing to heal them. He was much emaciated, and his skin looked yellow. His hair had been falling off for some time. He was much dejected in spirits, and thought he would never get well again. He mentioned to me that he had primary syphilis ten years ago, after which he had swellings on the shin-bone of the left leg, which the doctor called *nodes*, and treated them accordingly. He at length thought he was quite free from venereal disease. The present skin symptoms appeared about two years ago, since which he has been gradually failing in health. Inspection of the abdomen showed it to be large, fluctuating, and measured forty-three inches round. The liver presented symptoms of enlargement anteriorly, and there was a ridge-like protuberance, which extended three inches and three-quarters from the epigastric region towards the false ribs. The heart's action was normal; there was no bruit perceptible. The liver was tender during palpation. He had a cough, with copious expectoration, but there were no symptoms of lung or bronchial disease. The urine contained bile, a considerable quantity of lithates, but there was no albumen. I came to the conclusion that it was a case of constitutional syphilis, in which the liver was chiefly the seat of lesion, and treated it accordingly. By a course of specific treatment the new adventitious material was absorbed, and the patient speedily restored to health.

The cases cited are illustrative of the invasion of the disease in the adult liver, and they are sufficient, with the authorities given, to convince the reader that disease of the liver from syphilitic degeneration is by no means an uncommon occurrence. They also go to prove that, if treated specifically, this serious lesion may be cured. There is little doubt in the minds of those who have paid especial attention to the subject of organic syphilis, that many of the intractable diseases of the liver which are daily met with are not idiopathic, but are lesions consequent on the existence of constitutional syphilis. Not only are adults subject to this hepatic lesion, but infants also are found frequently to suffer from the same by reason of hereditary taint. Professor Thiery recently exhibited to his class specimens of the specific alteration described by others as affecting the liver in hereditary syphilis. In one case the fœtus was born dead at the seventh month, and the liver was in an excessive degree charged with blood (hyperæmic). There were deposits of ovoid, yellowish-white kernels of varying dimensions. In my own practice I have met with children whose livers, from the physical signs and hereditary contamination, I had not the slightest hesitation in pronouncing syphilitic. In the child, especially when it is atrophic, there is little difficulty in detecting the nodular prominences in the liver. The atrophy of children is sometimes the consequence of this hepatic lesion.

Mr. Lee, than whom there are few better authorities or more careful observers, says in reference to syphilis in the liver:—"In considering the syphilitic constitution, the liver must retain its pre-eminence, both as the organ most commonly affected, and the one in which an alteration was first discovered in connection with the disease. It may be remarked, too, that hepatic disturbance and jaundice have been noticed in the course of syphilis by many of the most ancient writers. There are three varieties of the syphilitic liver: the

first, that in which the whole organ has become infiltrated by a new fibre-tissue, producing a uniform and general hardening; the second, in which the presence of the new material in the course of the portal vessels has produced a contraction like that of cirrhosis; and the third and most striking form, where the organ is pervaded by distinct nodules of the new formation. The first variety has mostly been observed in children who have died of hereditary syphilis, the organ being large and intensely hard, all the natural structure having disappeared to the naked eye, and the microscope showing the organ to be pervaded throughout by the adventitious material. The second form is constantly seen in those bodies which are tainted by syphilis, and is often found associated with the lardaceous degeneration. Inasmuch as the patient may have been intemperate in drink, the change may wrongly be attributed to alcohol. In many instances, however, judging from the history of the case and the morbid appearances found elsewhere, I have been pretty confident that syphilis was the origin of the disease. It may go on like alcoholic cirrhosis to produce dropsy, as was lately observed in a patient in the hospital, who required to be tapped several times before his death. The third form shows the most characteristic changes, and those which are generally pointed out as evidence of the presence of syphilis. Here are seen distinct nodules scattered through the substance of the organ, sometimes as small as peas, and at other times as large as walnuts. These after a time become dried up, and then form tolerably circumscribed masses; but the neighbouring tissues are often infiltrated, and then they send out long processes into the neighbouring hepatic tissue. When near the surface they shrink up the tissue, causing deep cicatrices, so that we may constantly meet with a liver much altered in shape, or apparently lobulated, from the effects of syphilis which had occurred many years previously."

STOMACH.—This viscus does not always escape the operations of syphilis, though it is rarely the seat of any very serious lesion on account of it. The fact, however, of its occasional occurrence is the inducement and justification for calling attention to it. Should derangements of the stomach of an obstinate character exist, with epigastric tenderness and vomiting, in those who have reason to believe that they have at any time been infected by the syphilitic taint, they should at once call attention to it, and obtain the best known anti-syphilitic treatment, as ulceration of the stomach is by no means an uncommon disease, and is exceedingly intractable, ending frequently in death.

INTESTINES.—The intestines have been frequently found involved in syphilitic ulceration, the greater portion of the membrane throughout the entire canal being more or less affected. There are few instances mentioned in the records at my disposal—either English or continental—in which the small intestines have been diseased; but there are several in which the ulceration has invaded the large intestines. As a matter of course much care is required in arriving at the conclusion that the ulceration is syphilitic, so closely does it resemble that usually met with in more common diseases of the bowels. It is nevertheless true that the bowels, in common with every other organ of the body, may partake of the constitutional taint. In those instances where I have had occasion to suspect its existence, very obstinate dysentery has been a prevailing symptom.

THE RECTUM is that portion of the lower bowel which is the terminal part or lower third of the descending colon. It is much more frequently subject to syphilitic ulceration than the rest of the canal, and often when not suspected. It has been to me a matter of some surprise how commonly ulceration

of this organ has existed without the slightest supposition of its true nature. Several times have cases of some standing come under my notice which I have found to be unquestionably syphilitic, and which readily gave way to treatment in accordance with that opinion. The use of the speculum is necessary to a correct diagnosis, although it is calculated in some cases, and when not dexterously used, to produce pain of unusual severity. It will, however, often reveal a condition of ulceration that will set at rest the doubts—if there be any—in reference to the syphilitic lesion of the part. In connection with the papulous sore there is commonly to be found a stricture of more or less importance, which during defecation gives intense suffering that is difficult to relieve. It is a more frequent concomitant of syphilis in the rectum than is usually admitted, and when it is found it is associated with fistula, or rhagades. The part affected suppurates freely, and discharges sometimes an ichorous pus, at other times a dense, tenacious kind, which frequently perplexes both patient and medical attendant, nor does it yield promptly to nitrate of silver applications. An anti-syphilitic course of treatment is often followed by the very best results. I ought not to omit mentioning that it is not infrequent for a syphilitic state of the rectum to be pronounced, even by practitioners of respectable standing, as internal piles, and to be treated in unison with that conviction. A case of this kind presented itself not long ago in my consulting-room. The patient arrived in town from Warrnambool to consult me concerning what he confidently pronounced to be internal piles, in obedience to the opinion of a medical gentleman whom he had consulted in the western district. I was able to learn that the best measures had been taken to relieve the patient, had inward hemorrhoids been the real disease. This I noticed from two prescriptions which the patient brought with him, and from his account of the treatment. I therefore resolved on search-

ing for other causes of his sufferings than the hemorrhoids. On examining the rectum by means of the speculum, I at once was convinced that the disease was not hemorrhoidal, nor was the ulceration that existed of an ordinary character. These opinions I did not, however, at once communicate to the patient, but continued the examination of his history, and elicited that, several months before, he had suffered from chancre and bubo, which had been treated in the ordinary way by a druggist. I also had reason to suspect that the case might have arisen *à preposterâ venere*, but could not positively affirm it. A long and tentative examination of the case and its history was entered upon because of its peculiarity, and because of its being a branch of the subject in which I am anxious to make further observations. The treatment, however, was anti-syphilitic, and I am gratified in being able to state that he soon recovered completely. Although it is now two years since I dismissed him, he has no return of any kind of syphilitic ailment, either in the rectum or elsewhere. I give this case as an illustration that syphilis may often be the real evil in apparently intractable diseases of the rectum.

As an excellent illustrative case of this very common disease of the rectum, I give a sketch from a clinical lecture delivered by Mr. Paget, surgeon to St. Bartholomew's Hospital, London. Mr. Paget said that the history of the case was as follows:—"The woman was admitted into the hospital about November, 1864, being at the time 28 years old. She stated that seven years previously she had been affected with syphilitic sores, shortly followed by a scaly cutaneous eruption. About a year subsequently she became subject to an itching about the anus, and a growth of skin appeared, reaching a short distance into the rectum. Two years after this a large ulcer formed in the neighbourhood of the anus, and a growth of skin appeared again, reaching a

short distance into the rectum. The ulcer was destroyed by the application of some corrosive fluid. The growths before mentioned were removed, and rectum bougies were passed for a stricture which was already in process of formation. At the end of a fortnight, being much relieved, and her general health improved, she was made an out-patient, but soon becoming pregnant, she ceased to attend. The child she gave birth to *was born dead.* She was afterwards treated both at St. George's and King's College Hospitals, on account of a relapse into her former state, and was relieved. She again applied at St. George's Hospital in July, 1867. The canal of the rectum was now so much narrowed that only a catheter could be passed through the stricture; her general health was beginning to fail. She was treated and discharged, but was soon taken to St. Bartholomew's Hospital. She was then extremely emaciated, and shortly died with the complication of pulmonary phthisis.

"At the post-mortem examination the chief points of interest were the characters of the disease found in the rectum and colon. Cutaneous growths had existed, but had been cut away. The growths referred to were grouped round the anus, in texture pinkish, soft, fleshy, glistening, moist, and thinly secreting; in shape irregular, flattened as if by mutual pressure, sharpedged, or conical. These growths are very common in association with syphilitic disease of the rectum. The whole mucous membrane of the rectum in this patient was destroyed, except one small patch. The disease commonly extends from the anus, as if by continuity with the excrescence, to about five inches up the rectum, and eventually produces stricture. The seat of the stricture is usually about an inch and a half or two inches above the anus. On the mucous membrane of all parts of the colon (or large bowel), there were ulcers of a truly syphilitic character, many of them having an evident likeness to the annular syphilitic

ulcers of the skin. The ulcers of the colon decreased in size and closeness as they receded from the rectum. They were so different from all forms of catarrhal, follicular, typhoid, dysenteric, and cancerous ulceration of the intestine, that there was no need to compare them. The chief grounds of diagnosis that they were syphilitic and not tuberculous were, that the ulcers were limited to the large intestine, which is never the case where the disease is a tuberculous one, as in phthisis. There was not a trace of tubercle in any tissue of the intestines. The ulcers were unlike in any of their characteristics to those of tuberculosis. They did not bear even a remote resemblance to any other form of intestinal tumour. Hence they were justly regarded as syphilitic by their occurrence in a patient with a complete syphilitic history; by their coincidence and continuity with a disease of the rectum and anus, which is very rarely, if ever, seen except in those who have had secondary syphilis; by their likeness in many features to some of the admitted secondary syphilitic ulcers of the skin, and by their unlikeness to any other intestinal ulcers. Some, indeed, may choose to call them 'lupous,' but to this name it would be necessary to add another to indicate the nature of the constitutional malady with which the 'lupus' is connected, for lupus is not a single local disease depending on only one constitutional defect. It is in some cases strumous; in some, tuberculous; in some, syphilitic; in some it has a relation to cancer. If the ulcers in the colon of this patient are to be called 'lupous,' *they must also be called syphilitic.*"

I have made a rather lengthened abstract of this lecture on syphilitic disease of the rectum and colon, on account of the rank of the lecturer as an eminent surgeon and pathologist, and the singular fitness of the case as a representative one. In every sense of the word it was eminently syphilitic, viewing it in its history and its pathology. It is to be regretted that

more attention has not been paid to this lesion of the rectum and colon, for it is by no means a rare disorder, occurring both during the existence of the syphilides and when the usual tertiary phenomena are present in other tissues. Many patients suffer a great deal of unnecessary inconvenience and torture from the misapprehension of the nature of diseases of the rectum, inasmuch as the treatment usually adopted for diseases of an idiopathic or purely local character, although appropriate under such circumstances, would utterly fail in giving relief when the disease was a mask for the syphilitic dyscrasia. The following cases are selected from my records as illustrations of the serious nature of the lesions in the rectum and bowels, and of the promptitude with which they yield to specific treatment:—

CASE XLIX.—*Syphilitic ulceration of the colon, or large intestine. Dysentery, with great suffering. Cured.*

Mrs. T., aged 32, came under my care in April, 1868, complaining of dysentery of long standing. She said that she suffered from griping pains in the abdomen, and a constant desire to relieve the bowels, accompanied with bearing-down pains. The motions were scanty, very offensive, and found to contain blood, purulent matter, and slime. The urine when passed was hot and high coloured, containing a large quantity of the lithates. The pulse was quick and small, with a dry and hot skin, together with great thirst. She had lost her appetite, and was much emaciated. She said that she had been told by the doctors that she could not recover. On questioning her closely and carefully, I learnt that she had ulceration of the tongue and throat some time before the dysentery set in, and on inspecting the throat I found it still in a state of ulceration which was evidently syphilitic. She also showed me an eruption on her abdomen and thighs, and

she said that she had had sores on her genitals three years ago. It was now conclusive to my mind that I had before me a case of syphilitic ulceration of the colon, which had been unsuspected.

I at once injected nitrate of silver with glycerine into the bowel, and gave morphia with ipecacuanha and hydrarg subchloride every four hours. In a few days the dysenteric symptoms had disappeared, and I then commenced a course of anti-syphilitic treatment, ordering at the same time a generous diet, with bottled beer. This patient made an excellent recovery.

CASE L.—*Syphilitic ulceration of the colon. Dysentery. Recovery.*

F. F. R., aged 24, came under treatment in December, 1868. The following is the history of his case:—"For some time he had suffered from tenderness of the abdomen, itching at the anus, accompanied by more or less looseness of the bowels. About three weeks previously he had on two successive days ten evacuations per diem, attended with griping, bearing-down pains, the evacuations being mixed with blood and mucus. A few days before I saw him he noticed that his motions had changed to something like a mass of glue, streaked with blood. On examining his stools I found them to be very fetid, containing muco-purulent matter. He complained of pain in the lower part of the abdomen, which was increased on pressure, and seemed limited to the lower part of the colon and rectum. (He admitted having previously been under treatment for both primary and secondary syphilis.) He was at once ordered plenty of beef-tea, milk, eggs, arrowroot, &c. An injection of acid, belladonna, and glycerine was given; also pills containing opium, hydrarg subchloride, and ipecacuanha. In a

short time his bowels were quiet, the stools natural, and he was free from pain. I then placed him under the specific course for syphilis, at the same time giving him a generous diet. In a few months he was quite well.

CASE LI.—*Syphilitic ulceration of the anus, with acute suffering. Cured by anti-syphilitic treatment.*

J. W., 27 years of age, consulted me in January, 1869, on account of the following symptoms:—A great dread of going to stool, in consequence of the frightful agony which it produced. He also stated that there was always a bearing-down feeling present, together with a sense of weight and uneasiness in the perineum. These symptoms were aggravated by walking, or riding on horseback, or by sitting on a hard cushion. There was also a constant desire to void urine, with distressing pain. He had lost flesh, his appetite had failed for a considerable time past, and he seemed in a low and desponding condition. His forehead, chest, and arms were studded with syphilitic psoriasis. He had singing in his ears, and he had pain in the joints, especially at night. He acknowledged to having had primary syphilis two and a half years before.

On examining the anus with a speculum, a large ulcer of a syphilitic nature was discovered just within the sphincter muscle, which I freely cauterised, and plugged the rectum with cotton wool, saturated with Price's glycerine. The local treatment afterwards consisted in introducing a rectum bougie smeared with ointment of nitrate of mercury every day. He was at the same time put under a careful course of anti-syphilitic treatment. Vapour baths were had recourse to, and a nutritious diet allowed. The rapid improvement in this case was remarkable. All the local symptoms within the anus disappeared within eighteen days. In three months

the skin was free from eruption, and the patient had gained flesh, the colour of the skin assuming its natural hue. I dismissed him cured in five months.

Case LII.—*Syphilitic disease of the anus eight years after primary inoculation. Cured.*

W. M'F., aged 30, came under my care in April, 1868, complaining of great pain on going to stool, followed by intense suffering for four or five hours afterwards. The motions were always mixed with blood and slime. On examining the anus an excrescence of a pinkish colour, and secreting a thin purulent fluid, was seen at its verge, and just within was found an ulcer about the size of a threepenny piece, and well defined, the mucous membrane only being destroyed. He stated that eight years since he contracted chancre, followed by bubo, and syphilitic disease of the skin. The latter symptom was always present in more or less intensity. About two years prior to my seeing him he began to feel uncomfortable when sitting down; this was gradually succeeded by almost constant pain and very great suffering when evacuating the bowels, the motions being covered with blood and mucous. He said that, when in his normal state of health, his weight was sixteen stone: he was then reduced to eleven and a half. He could not sleep at night without opiates; his spirits were broken, and he expressed a wish that death would soon rid him of his miseries.

After thoroughly emptying the bowels, I proceeded to excise the morbid growth. At the same time I cauterised the raw surface left by its removal, as well as the ulcer, with the acid nit. hydrarg, and plugged the parts with cotton wool, saturated with glycerine. The after-treatment was conducted on strictly anti-syphilitic principles, and in a few months I had the satisfaction of seeing my patient restored (as he

termed it) to his "pristine condition," and weighing fourteen or fifteen stone.

Dr. Moxon, assistant physician to Guy's Hospital, contributed the following very striking case of constitutional syphilis, where not only was the liver the seat of lesion, but the spleen also. It is in many points worthy of notice.

"Case LIII.—*Syphilitic disease of the liver, spleen, and throat. Acute œdema of the glottis. Death. Admitted under Dr. Gull.*

"This patient died on the same evening that she was admitted into the hospital. At the *post-mortem* examination it was found that the liver weighed 48 ozs., and it was healthy as to substance generally. There was in the right lobe a yellow nodule of the size of a horse-bean, and also a depressed patch one inch long, which was fibrous on its outer part, with an opaque yellow patch in it. This patch could be seen to contain wasting tissue, charged with some fibre-growth. The *spleen* showed a condition pronounced by me 'phthisis of the spleen,' but with some misgivings. The sulphur-like yellow masses, of the size of peas, softened at their centres, were utterly unlike anything I have ever seen in the spleen in the cases of phthisis or tuberculosis; these were pretty uniform in size, and scattered plentifully through the organ. On seeing the syphilitic patch in the liver, *I had no doubt of their true character as syphilitic deposits in the spleen.*

"Syphilitic gumma of the spleen is not common. The formations present in the spleen in this case were markedly different from any other products that we are familiar with. They were almost deep-seated, and differed thus from the 'embolic' masses which we find in endocarditis. . . . . The lungs were free from tubercles. I have never seen anything approaching such an appearance in any of the tubercu-

lous cases that I have examined. I have no doubt that this is an example of syphilitic gumma of the spleen.

"There was extreme œdema of the arytena of the larynx; lower down the mucous and submucous tissues were swollen and hard; and on the left side, above the vocal cord, was the opening of an abscess, whose contents were semi-consistent, and were graduated into the thickened tissue around."

The next case was given by the same observer, in which diarrhœa was the principal symptom, arising from severe lesion of the stomach and intestines.

"Case LIV.—*Waxy stomach and intestines, &c. Constitutional syphilis. Death.*

"J. B., aged 24, formerly a soldier, was admitted into Stephen Ward, on July 7th, under Dr. Habershon.

"He had syphilitic buboes six years ago, but had no chancre or discharge. He was received into Job Ward, under Mr. Poland, for fistula in ano, and sores on the scrotum. He has had diarrhœa and vomiting since admission, and has passed blood to the amount of half a pint in his stools for two or three days; blood comes also from the mucous membrane of his mouth, and when he is asleep it collects in considerable quantity, and coagulates. He has had pain in the long bones since admission, and also soreness of the tongue.

"*Present condition.*—He has a large number of copper-coloured spots on forehead and cheeks, scaly circular spots of copper and rose colour on the back, and very slightly on the arms; and on the legs he had several larger sores, which have just ceased to discharge. He still vomits much of what he takes, though less than he did; there is no bile in the vomit. The tongue is furred and sore. Heart and lung sounds normal. Pulse 84. Urine pale, straw colour, albuminous; sp. gravity, 1023.

"During his stay in the hospital he suffered much from uncontrollable diarrhœa and vomiting, and grew very much emaciated before his death.

"The *post-mortem* examination was made by Dr. Fagge. The *membranes* of the brain were opaque, and the *brain* itself anœmic. . . . The mucous membrane of the stomach was pale, and markedly lardaceous. The *intestines* were lardaceous in a most marked degree. The *liver* was lardaceous, and apparently also fatty. The *spleen* was lardaceous. The kidneys were atrophied, weighing only 7½ oz. together, &c."—*Guy's Hospital Reports*, Vol. XIII., 1868, p. 329.

The following case was under the care of Mr. Cooper Forster in the same hospital:—

"Case LV.—*Syphilitic deposits in the liver, spleen, and testes. Death.*

"The patient had had syphilis, and was in a most wretched condition, wasted and sallow. His shin-bones were very much enlarged, and he had not been able to work for two or three years. The patient died two days after admission, (March 31).

"*Autopsy.*—The following is Dr. Wilks' account of the autopsy:—There were no sores on the body. The shin-bones were very much hypertrophied. . . . . The liver was large, and of a pale yellow colour, very firm and granular. It was cirrhosed, as seen by the nodulation. There also appeared much fibrous tissue in it, and apparently some amorphous, albuminous, or lardaceous matter. The spleen was very large, and weighed 2¾ pounds. It was very firm, and contained large masses of albuminous or lardaceous matter of a tough character and yellowish colour. There was a large mass of this, and several diffused nodules likewise. The kidneys were healthy. The testes were large, and very hard;

one was nearly destroyed by fibrous exudation in the structure, as well as in the form of nodules, &c."

The following case under Dr. Wilks in the same hospital presents several points of great importance as to the virulence of the syphilitic poison.

"CASE LVI.—*Lardaceous disease of the liver and spleen. Disease of the bones of the nose. Ulceration of the throat. Death.*

"F. P., aged 21, was admitted into Guy's Hospital, Oct. 31, 1861, for sore throat and discharge from the nose. There was no opportunity of getting any very early history of his case. His mother was a most disreputable woman, but there was not obtained any actual evidence of syphilis. He said that he was first ill two years and a half ago, and then suffered from sore throat, when he was under the care of Dr. Addison for many weeks. He recovered and kept well for a short time. Since, however, his throat became affected, and a piece of bone came away from each nostril. His nose was flattened, and the septum appeared destroyed. There was a hole in the palate, the uvula was gone, and the palate seemed fastened to the posterior wall of the pharynx. He was thin, pale, and his skin was dirty-looking. His teeth were irregularly placed, but not malformed. His legs were œdematous, and the urine contained albumen. The liver and spleen were enlarged. He died on Dec. 26.

"*Autopsy.*—The body was wretchedly emaciated . . . The *liver* was closely adherent to the diaphragm and to the stomach below. The *spleen* was also adherent to the surrounding parts. The liver was very heavy, and lardaceous throughout. The spleen was about four times its usual size, and firm. The kidneys were much enlarged, pale, and firm."—*Medical Times and Gazette.*

I have introduced these cases in order to point out more distinctly what I stated at the opening of this work, that these very serious diseases arising from syphilis are no longer left, as they were during the last century, to quacks and charlatans; but that they are receiving the gravest consideration and attention from the profession at large. I wish to show with what untiring devotion to the wants of suffering humanity the leaders of the profession are pursuing the investigation of this long-neglected but most momentous class of diseases. There is not any branch of medical science and practice which is of such deep interest to the community at large, and to the profession; hence it is a blessing that there is no longer that reticence and timidity in approaching the subject which so long stood in the way of any real and earnest investigation. Immense strides have been taken in acquiring an accurate knowledge of the phenomena of syphilis, and the deep-seated and destructive operations of the virus upon the several viscera. Now that a greater intimacy with syphilitic pathological phenomena has been attained, this terrible disease has been discovered to have invaded every tissue and locality of the body, corroding the seats of life, and often baffling every effort of science to arrest it.

The cases just cited prove incontestibly how serious these lesions are, and how fatal unless they are treated early and specifically, before they have so far disorganised the viscera and tissues as to arrest their functional operations.

The existence of an able phalanx of careful and industrious observers who are now earnestly pushing on their researches in the pathology of syphilis throughout the medical schools of Europe and America is an encouraging fact, and will rapidly hasten a much better acquaintance with the phenomena and treatment of syphilæmia. This increased knowledge, which is already distinctly apparent everywhere, will

open up a wide field of observation, and bring to light much that is yet unknown in the pathology and treatment of the disease.

The momentous period of syphilis commenced so late as 1856. Among the distinguished men in the profession who are now the recognised authorities on these questions, and have lately thrown much light on them, may be mentioned Ricord and Lancereaux; the surgeons of Lyons, Rollet, Diday, and Viennois; Hubbenet, of the Syphilitic Clinique at Leipsic; Sigmund, of Vienna; Von Bärensprung, of Berlin; Mr. Henry Lee, of the Lock Hospital; Mr. Henry Thompson, of University College Hospital; Acton, Hutchinson, Parker, and Wilks, of England; Bumstead and Yandall, of America.

CHAPTER VIII.

THE HEART AND BLOOD VESSELS.

THE HEART.—In entering upon a notice of the syphilitic lesions of this important viscus, I cannot do better than direct the attention of the reader to the plate which represents the characteristic deposits in the organ. It is identical with the one given by M. Ricord in his now celebrated work *Iconographique,* and exhibits very clearly the dangerous deposits which sometimes take place, and unfortunately in many instances without recognition. In describing it he says—"The walls of the ventricles presented in many places a tuberculous-looking yellow matter, creaking when divided, without vascularity, of a scirrhous (or cancer-like) consistence in some points, and in others analogous in appearance to tuberculous matter undergoing softening. In a word, we find all the characteristics of the nodules or tubercles of tertiary syphilis which we often observe in the subcutaneous and submucous cellular tissue." Other eminent observers and syphilographers have given drawings of similar tuberculous and syphilitic formations in the heart, and I have little doubt but that many of the extremely frequent cardiac diseases derive their origin from constitu-

tional syphilis. In the Museum of the Army Medical Department at Netley there are two preparations which show gummata, or cheesy substances in the heart. One occurred in the case of a soldier, twenty-four years of age, under treatment for venereal ulcers of nine months' duration in several parts of the body. He had lost his palate, and eventually sank from exhaustion, with symptoms of phthisis. Sections of the muscular substance of the heart showed several isolated deposits in its substance and beneath its serous covering, and isolated portions of the lung were converted into a substance of the consistence of cheese. (Aitken.)

I have many times been led to the conclusion that this state of things existed in my patients, from the fact that on instituting the anti-syphilitic treatment I have seen results follow it which would not and could not have followed any other based upon a different diagnosis. Diseases of the heart, with considerable hypertrophy, and some with distinct valvular insufficiency, have on more than one occasion given way to a purely anti-syphilitic course of medication, when they effectually resisted every other mode of administration. It is true that in most of the cases to which I refer there have been other tangible and external phenomena, as well as historical data on which to found a decided diagnosis, but there have been other cases in which the collateral evidences have been less manifest. Even in the latter cases there were the happiest results from the treatment I adopted on the supposition of syphilis complicating the disorder.

Case LVII.—*Syphilitic disease of the heart, with hypertrophy of the left ventricle, and dilatation of the aorta, together with syphilitic deposit in the muscular substance of the heart.*

A private soldier of the 48th Regiment, stationed at Gibraltar, was admitted into the garrison hospital there in 1855, under my care, when he presented the following

symptoms, namely:—Great difficulty in breathing, with a troublesome cough. His face was livid, his respiration was hurried, and his sleep was much disturbed. He complained of pain across the chest. He had no appetite, and he vomited occasionally. The lower extremities were swollen as high up as the knees, and pitted on pressure. The pulse was 78, and jerky. Percussion indicated an enlarged state of the heart, and a loud bellows murmur accompanying the second sound, heard loudest at its base. He was much reduced in weight, had suffered from secondary syphilis, and at the time of his admission into the hospital he was suffering from ulcers on the tongue. He was nearly bald, and there were nodes of a syphilitic character on the shin-bones. I concluded that the whole of this man's symptoms depended upon a venereal taint in the system, and should have at once commenced with anti-syphilitic treatment, if the chest symptoms had not been so urgent. I therefore administered such remedies as would relieve the most prominent and dangerous symptoms, and he seemed to improve considerably, until he was suddenly seized with an attack of syncope, which terminated fatally in a few minutes.

The examination after death showed the heart to be much enlarged, its weight being one pound six ounces, and measuring five inches and a quarter in its transverse diameter; there was also considerable dilatation of the left ventricle, in the walls of which were found well-marked deposits of syphilitic degeneration. The ascending portion of the aortic arch was also dilated, and its lining membrane seemed to be undergoing the process of syphilitic ulceration.

This is only one of the many cases in which the heart has betrayed the syphilitic lesion. I have seen several of the same kind in the army, in venereal hospitals at home, and on the continent. I may also mention that I opened the body of a man who had died from syphilitic disease of the bones

of the skull in the Melbourne Hospital, and found the air passages, velum-palati, liver, and heart, bearing testimony to the fearful ravages of syphilis.

CASE LVIII.—*Syphilitic disease of the heart. Incompetency of the mitral valve, with hypertrophy of the left ventricle, and dilatation of the arch of the aorta.*

A gentleman from Bombay consulted me two years ago on account of palpitation of the heart, and shortness of breath, from which he says he has suffered for twelve months. He said that four years previously he contracted both chancre and bubo, for which he was treated in India, and he thought he was cured, until three years later, when secondary syphilis appeared on the body, and his hair fell off. For these symptoms he was treated with the mercurial vapor bath, and the spots disappeared; but from that time he has felt his health and strength fast failing. When seen by me, I noticed that, although his breathing was much embarrassed, the stethoscope disclosed no disease of the lungs or air passages, and I looked, therefore, for the cause in the organs of circulation. The percussion note, which was dull, measured three inches transversely, and auscultation discovered over the region of the heart a murmur, like the sound of a bellows, synchronous with the first sound at the apex, decreasing as the stethoscope was moved towards the base. The second sound of the heart was normal. Under the clavicle slight pulsations could be felt, and the pulse at the wrist was 108, full and jerking. There was no cough nor expectoration. The patient suffered from slight deafness, pain in the head and limbs, and dimness of vision. He had palmar syphilis in both hands, and a syphilitic ulcer just within the anus, also one between the toes. He was placed under a careful and prolonged course of specific treatment, allowed

a generous diet, tepid baths, with friction to the skin, and I was gratified at finding the difficulty of breathing, the pains about the body, together with the eruption on the skin and the palpitation of the heart, disappear. Although there was a slight dilatation of the aorta recognisable, the patient returned to India in an otherwise perfect state of health.

It is universally admitted that the muscular system is extremely liable to inflammation, and serious alteration through the syphilitic virus, as was seen in the last chapter; hence, as the heart is eminently a muscular viscus, there can be no reason for inferring, as some do, that it should not also be the seat of syphilitic lesion. I am inclined to think that, as in rheumatism, the heart is the first organ to suffer, in some degree or other, from the syphilitic taint, when it becomes constitutional. In this and the neighbouring colonies, but especially in Victoria, where diseases of the heart are so unusually frequent, I am surprised to find so little attention paid to that source of cardiac disturbance. I am fully persuaded that were more attention given to it by the profession generally, and accurate records kept, we should soon have sufficient cases to establish beyond question the influence of syphilis in disturbed function and cardiac disorganisation.

It would be well if more *post-mortem* examinations of that organ could be made, and those made more carefully where opportunity offers, in order to search for the gummata which are known frequently to exist both in the auricles and the ventricles. I have seen them several times in autopsies which have been made for other purposes, and where their existence had nothing apparently to do with the cause of death; hence I conclude that they might be more frequently recorded as existing in the heart, if they were looked for and recognised. Those which I have seen have generally had the nodules in the

substance of the auricles and ventricles, and I had the opportunity some time ago of examining others presenting every characteristic of those given by Ricord in his large work on Syphilis. Virchow and Lancereaux are the two observers who have recorded the greatest number of organic lesions of this character, but many others are now prosecuting their researches in the same direction. In my next work, which will be written for the profession, I shall furnish some cases of value in a diagnostic and pathological point of view. Sufficient has been said in a treatise of this kind to apprise the general reader that, even in reference to this important organ, the heart, there is by no means an immunity from the inroads of syphilis.

Virchow describes these syphilitic growths, and refers to cases of a similar kind recorded by Ricord and Lebert. Ricord in his atlas gives illustrations of them, and calls them "syphilitic muscular nodes in the substance of the heart." *(Clinique Iconographique.)* Firm, yellow, cheese-like masses were found in the substance of the ventricles: there was with them a history of old chancres and ulcerated tubercles of the skin.

In Lebert's case these gummata were seen at a comparatively early stage of development, and were found in the wall of the right ventricle. There were tubercles of the skin, of the subcutaneous tissue, genital organs, and bones of the skull. (Aitken.)

BLOOD VESSELS.—As would almost naturally follow, the blood vessels would more or less be implicated in the misfortunes to which the heart itself was subject. The large arteries and veins near it are prone to be affected also, and to suffer sometimes severe degeneration, as was seen in the case from India, where the aorta was diseased. Much, however, is not known concerning this form of lesion, save that it is

found usually to select the large arteries as its seat of operation. The internal carotid artery is the one which most observers have discovered to be involved. The blood itself undergoes a most important change wherever there is a decided syphilitic diathesis: viz., a diminution of the number of the red globules, and in some cases to such an extent as to simulate the worst conditions of anæmia. This degeneration of the blood current I have frequently witnessed in microscopical examination of that fluid taken from syphilitic patients. Dr. M'Carthy, of Paris, states, in support of this fact, that the same sounds which are heard in the carotid arteries of those suffering from anæmia (defective blood), are heard in the heart of the syphilitic patient.

Mr. Acton states that "anæmia is the result, partially, of syphilis, where it has been credited to the treatment by mercury," and most authorities allow that the blood does undergo a material change towards degeneration; hence there can be little wonder that the heart and the great vessels should be to some extent influenced thereby. Sometimes that condition of things is seen which was so manifest during the terrible venereal epidemic of the fifteenth century. Livid patches appear, and the ulcers have that peculiar bloody character which indicates that the blood is liquified, and has altered in its proportion of red corpuscles. As the last-mentioned writer, in his exhaustive work on the generative organs, observes:—"Although it appears that the blood must be in some way affected, it is at first only the skin and mucous membranes, and the superficial organs, which participate in the disease. Why this should be the case, is among the many questions which the pathologist may ask, and seek an answer in vain. But if the disease is allowed to go on, *deeper tissues will successively be attacked,*

until tertiary symptoms appear." The appearance of the syphilitic patient will frequently indicate distinctly this deterioration of the blood, and auscultation will, if carefully conducted, almost as often find associated with this degeneration of that fluid, certain abnormal conditions in the functional operations of the heart itself.

CHAPTER IX.

SYPHILITIC DISEASE OF THE KIDNEYS AND BLADDER.

SYPHILITIC DISEASE OF THE KIDNEYS.—These are the most important excretory organs of the body, and are not exempt from the destructive influence of the syphilitic virus, sometimes becoming involved to a serious extent by the formation of those characteristic gummy deposits which have been so often mentioned as occurring in almost every situation of the body. The importance of the kidneys as emunctories, and the danger when they are invaded by so destructive a force as that of syphilis, may be seen when we consider the nature of the functions that they have to perform. The ordinary quantity of urine that has to be secreted daily by them from the blood current in an adult is about thirty-five ounces; and the constituents of this fluid are the waste and dead materials of the body, which have served their purpose, and which must be got rid of to preserve health and life. The kidneys are the most important depurators of the body, ready to excrete in any quantity that which the body requires to be eliminated. Thus, if but a small quantity of fluid be taken into the system, or the fluids pass off freely by the bowels or skin, the kidneys secrete

less: should more fluid than usual be drunk, and not induce increased action of the skin and bowels, then the kidneys take the entire burden of excessive excretion upon themselves. The fluid ingested may sometimes be very abundant, and the surplus quantity of water that has to pass off by the kidneys will be proportionate. The amount sometimes may increase during twenty-four hours to as much as forty-five or forty-six ounces, the solid matters remaining about the same. Anything that could interfere with the functional integrity of the kidneys would, as a matter of course, be of serious import to the whole system, and a retention of the usually excreted matter would inevitably produce speedy death. When the quantity and specific gravity of the urine are increased or diminished at the same time, or when one is diminished while the other remains stationary, either circumstance would show an actual change in the total amount of solid ingredients, and would indicate an unhealthy and diseased condition of the organs. This takes place in many forms of disease, and in a marked degree in syphilis.

The largest and most injurious constituent, if retained, is urea, next to which are the phosphates of soda, potass, magnesia, and lime. Any excess of these last in the organism must be got rid of by the kidneys, as well as certain chlorides and other materials that are in a state of degeneration. Any serious lesion of an organ having to perform such valuable functions for the body as have just been alluded to, must at once be seen to be a subject for grave consideration. The kidneys are liable to a variety of disorders more or less serious, which interfere, in a greater or less degree, with the amount and character of the urine secreted. The syphilitic lesion of the organs, often marked by other diseases, makes considerable and threatening changes in their functional action. The kidneys are subject to atrophy, hypertrophy, cancer, fatty degeneration, gangrene, tubercular disease, and to

syphilitic gummatous deposits. Syphilis acts in a twofold form upon the kidney, as it does upon the liver; first producing hypertrophy, or enlargement, and subsequently inducing atrophy of the organ.

Syphilitic disease of the kidneys is more difficult of diagnosis than any other disorder to which they are subject, but it is usually accompanied by some other palpable evidence of constitutional infection. The most common renal symptom in connection with the syphilitic dyscrasia is albuminuria, or albumen in the urine. This I have found to be present in almost all cases where the kidneys have been involved in the general taint, and in some instances the amount of albumen has been considerable, resembling in this respect what is called by the profession "Bright's disease of the kidney," its main characteristic being the presence in the urine of the abnormal constituent, dissolved albumen. The quantity I have found to vary from four to two hundred grains in the twenty-four hours, and to be extremely variable in quality. Another symptom that is often referred to by my patients, as distressing to them, is the frequent desire to micturate during the night, when in a horizontal position, which symptom is one of the first to subside during specific treatment. There are also filmy, fibrous materials in the urine, and granular or fatty casts of the tubes, with epithelium. This lesion of the kidneys is especially observable where the constitutional syphilitic dyscrasia is in any degree attributable to hereditary taint.

Albuminuria is one of the most serious diseases that can possibly befall a patient. Cases have occurred where after many other resources have been tried in vain to control it, it has yielded promptly to an anti-syphilitic and specific course of treatment. A case was recorded by Mr. H. Lee, surgeon to St. George's Hospital, London, in which a person with constitutional syphilis had albuminuria, with

nodes on the upper part of the forearm, and caries of one of the ribs, with a considerable discharge from both these situations. He had also great prostration, nausea, and loss of flesh. This patient was completely cured by anti-syphilitic treatment. In those cases which have come under my own observation I have always found an abnormal quantity of albumen in the urine. It is often surprising what a change a specific course of treatment produces in albuminuria, even when there must have been considerable lesion of the kidneys. *Post-mortem* examinations have led to the discovery that the syphilitic kidney is subject to considerable alteration and degeneration. The usual nodular, cheesy substance is seen on the surface, and occupying the body of the organ, with fissures here and there, and alterations of different characters throughout the viscus. These lesions have been observed by Virchow, Lancereaux, Klobb, and others, and are known to yield with more or less readiness and permanency to a cautious course of mercurials, or other remedies of a *specific* character.

CASE LIX.—*Albuminuria. Dropsy of the abdomen. Enlargement of the liver and spleen. Constitutional syphilis. Recovery.*

H. M., aged 26, sent for me in March, 1863, stating that he was suffering from dropsy. He said that the swelling in his abdomen and feet commenced about eight weeks prior to my visit, and had gradually been getting worse. On entering his chamber I at once noticed on his forehead copper-coloured spots; the palms of his hands presented the same appearance. He also told me that he had painful lumps on his shin-bones, which on examination I found to be "nodes." On examining his abdomen it was fluctuating, evidently containing water, and measured in circumference twenty-nine inches below the

navel. When placing him on his left side his liver was found also much enlarged. His feet and ankles were doughy, and his face was swollen; his tongue was coated with a brownish fur, was dry; and he had great thirst; his appetite had fallen off, and his bowels were irregular. He complained of cough, and difficulty of breathing, with frothy expectoration. Prolonged expiration and harsh inspiration were heard on the anterior part of the chest, and, posteriorly, crepitating sibilant râles were distinctly audible. The heart's sounds were faint, but there was no morbid sound. The pulse was 74; the skin dry and rough. The urine was scanty, its specific gravity being 1020, and contained albumen on boiling and applying nitric acid. My diagnosis in this case was *syphilitic degeneration of the kidneys, depending upon the presence of the syphilitic virus in the system.* My treatment being in accordance with this opinion, followed by rapid improvement in the patient's health, and his ultimate recovery, verified the opinion I had formed of his case on my first visit.

CASE LX.—*Syphilitic disease of the kidneys. Albuminuria. Dropsy. Constitutional syphilis. Cured.*

H. G., aged 39, came under my treatment in February, 1868, and stated that three years previously he had Hunterian chancre. He was a long time in getting better, but did not take much medicine. Soon after the chancre had healed, his throat and tongue became sore, and copper-coloured spots appeared on his face and legs. He had been taking medicines from quacks ever since, but had not derived any benefit therefrom. Latterly his hair and eyebrows had fallen off, and his skin assumed a sickly and yellowish appearance. His appetite was bad. He informed me that he did not become alarmed until his legs were swollen, and his hands became puffy; when this occurred he thought he ought

to apply, as he termed it, to a "regular doctor"—hence he consulted me.

When first I saw him his legs were swollen, and pitted on pressure, and he complained of pain in the region of the kidneys, together with a great desire to void his urine. There were syphilitic tubercles on the side of the tongue, in the throat, and at the verge of the anus. On several parts of the body there were well-developed "*acne syphilitica.*" He suffered from headache, and during his sleep he was much disturbed by startings and frightful dreams. He had intolerable thirst, no appetite, and his bowels were confined. Although he had slight difficulty in breathing, I could not discover any disease in the heart or lungs. His urine was most carefully examined, and found to have a specific gravity of 1015. It contained albumen, which coagulated on applying the ordinary tests. The treatment of this case consisted, first, in the administration of aperients, diuretics, highly-nutritious broths, beef tea, &c., and the regular use of hot-air baths, to relieve urgent symptoms; secondly, a course of anti-syphilitic medicines; and finally, getting up his strength by means of iodized cod-liver oil.

The following interesting case was communicated to me by a medical friend connected with one of the New York hospitals:

CASE LXI.—*Constitutional syphilis. Syphilitic disease of the kidneys, lungs, liver, and spleen. Death.*

W. M. B., aged 31, was received into the hospital with the following symptoms:—Difficulty of breathing, distressing cough and expectoration, with profuse night-sweats. On examining his chest, there was considerable flattening beneath the clavicles, with dullness on percussion below the left one. Moist râles were audible, with increased vocal resonance of a

somewhat metallic character. At the base of the lung there was harsh respiration, but no other morbid sound. On the right side the breathing was harsh, with prolonged expectoration, and there was increased vocal resonance. He expectorated copiously a muco-purulent matter, mixed with streaks of blood. He was very much reduced, occasionally vomited, and felt much exhausted. On his body was a crop of syphilitic rupia in every stage of development. His pulse was 85, and weak. His urine was highly albuminous; its specific gravity 1013, of a dark amber colour. Although this patient was treated with anti-syphilitic remedies, together with a highly-nutritious diet, and cod-liver oil, all his symptoms became aggravated; rapid emaciation set in, which ended in fatal exhaustion. At the *post-mortem* examination of this man's body, syphilitic deposits—some suppurating—were found in the *kidneys*, lungs, liver, and spleen.

CHAPTER X.

SYPHILITIC DISEASE OF THE WOMB, &c.

WOMB.—It is not to be wondered at that an organ of such high functional importance in the animal economy should be in some degree subject to the severe and injurious influence of the syphilitic virus. The reader will have seen in earlier chapters how materially its functions have been interfered with, and the life of the fœtus destroyed within it. The discussion on syphilitic contamination has shown that the mother may be tainted through that organ from the fœtus, and the fœtus tainted by the mother; also it has been contended that the womb itself may be directly infected by the semen of the father. The light which modern investigation has thrown upon the great question of constitutional syphilis, has led to the discovery of many lesions and functional disturbances which never had been supposed to exist, and none of more importance than those connected with the womb and its functions. It is to be admitted that the influence of syphilis on this organ is not fully understood—nay, that we are but just groping our way in reference to it; but the stage at which we have arrived renders it probable that before long we shall be in possession of data, and precise information as

the result of observation, which will set at rest many doubts and difficulties that now environ the question of uterine contamination.

The uterus is an organ that, from its structure, has considerable power of resistance to the introduction of the virus, through the protection which its mucous and submucous structures present, although it is notoriously the seat of many idiopathic diseases, from which women are continually suffering. The probable reason of its contamination by the syphilitic virus is, in my opinion, to be found in the breach of continuity which an ulcerated os uteri presents for the ready reception of the poison in infected semen, or in a poisonous exudation from a syphilitic sore on the male organ of generation. My own observations have led me to conclude that many women are infected through having already ulceration of the mouth of the womb, who might otherwise have entirely escaped the infection of that organ by coïtus, although their husbands had primary ulcerations on the penis. Without this unfortunately ready and common channel of absorption, I believe that disease of the uterus itself would be much rarer than it is.

The question, however, is now placed beyond doubt as to the fact of the womb being implicated in the constitutional taint, for it has been positively ascertained that affections ot the uterus, analogous to the syphilitic phenomena on the skin, have existed synchronously with the latter. The evidence was clear as to syphilis being the active principle in both seats of lesion. The venereal ulcerations to which it is subject appear not only at and around its mouth, but are found to exist inside and at the posterior part of the organ. There is generally a glairy fluid running from the womb, which with other kindred phenomena is sufficiently characteristic. It is true, as I before remarked, that the uterus is the seat of a good deal of derangement from a variety of

causes, few women escaping without some functional or organic irregularity; but my experience has convinced me that there is very much more uterine disease directly attributable to syphilis than is usually admitted. Several times have I, on the first examination, by the speculum, of patients who had been treated for ordinary ulceration of the mouth and neck of the womb, discovered without the slightest difficulty or doubt, distinct syphilitic ulceration, which, as a matter of course, had defied every effort of the gentlemen who had previously treated them in harmony with a different diagnosis. As a rule, if careful inquiry and search be made, there will be some historical, or physical circumstance that will confirm any suspicion of syphilitic dyscrasia; there will be either an existing syphildæmia syphilide, or some cicatrices and discolorations therefrom, which will materially aid the diagnosis; these have therefore to be looked for. It is sometimes difficult to determine satisfactorily without such collateral evidence, the true character of the ulcers, although they will now and then sufficiently attest their origin without other aid. On examining the womb per vaginam, the nodular induration is seen; and even where there is no consciousness of syphilitic contamination on the part of the patient, this phenomenon has sometimes been found.

I am fully aware that few authorities have yet admitted that the uterus is subject to infection, most of the writers on the subject considering that this organ enjoys a special immunity from syphilitic invasion. Mr. Acton, among the number, entertains the opinion that it is not affected in a greater proportion than one per cent. amongst patients suffering from uterine lesion. He states that few prostitutes, comparatively, are found to suffer from syphilis of the uterus, and he distinctly contradicts those authors who assert that many of the disorganisations of the os uteri are syphilitic. With reference to women of the town, I am free to admit that syphilitic

ulceration of any portion of the uterus is much less frequent than might be expected. Amongst married women, however, I have found that it is more common than in the proportion given by Mr. Acton. Mr. Whitehead, of Liverpool, held a contrary opinion to Mr. Acton, believing, as I do, that the uterus does receive the infection whenever the virus is presented to an abraded, or ulcerated surface on the os or neck. I am confirmed in my opinion by the circumstance that the diseased uterus has been effectually restored to a sound condition by specific treatment, when local applications of various kinds had been long used in vain. When treating on this branch of the subject in the next volume, I shall enter more at large into the pathology and general character of the lesions observed. Mr. Acton described their appearance with much distinctness when stating that the ulcers "differ from all others; they are small, covered with chamois leather secretion, which it is difficult to remove; their edges are distinct; they look as if a portion of mucous membrane had been punched out of the os uteri, and inoculation has shown that they are true chancres." Under these phases, with the addition of the intense induration of the organ, I pronounce them to be syphilitic disease of the uterus.

PLACENTA.—This organ is more directly subject to disorganisation from the syphilitic taint than the uterus itself, exhibiting distinct and characteristic phenomena, such as nodules, and the usual yellowish cheesy deposits embedded in its processes. Somtimes the masses of abnormal deposit are reddish and contained in a capsule, which separates them from the rest of the tissues. In some of my own cases which are given in the chapter on hereditary and communicated syphilis, it will be seen that the placenta is sometimes so disorganised and changed into the cheesy and greasy matter as to break up in the hand by pressure of the fingers. This is

distinct from that condition known as fatty degeneration, which is occasionally observed. The nodules in the syphilitic placenta are found distributed over the parental or upper side of it, and are sometimes very large and deeply imbedded, and there are occasional cells running at the same time into the fatty degeneration before mentioned. As a matter of course when the syphilitic virus has made its inroad upon this medium of nutrition to fœtal life, altering its structure, and impairing its functional operations, the chances of the continued growth of the child are materially reduced, and generally annihilated. This state of things will at once account for premature delivery, and for the death of the fœtus, it being impossible for it to obtain its nutriment through so diseased a placenta, or from any other source. This condition of the organ is not so rare as is supposed, for I know of cases where, in miscarriages, the placenta was put away, and I have shortly after caused it to be brought to me for examination, I have found the characteristic syphilitic deposits. In all these cases there was collateral evidence of the constitutional taint. It is not improbable that our pathological knowledge of this organ, in reference to its invasion by syphilis, will soon be much enriched by researches in Europe as well as here. Several of my medical confrères in these colonies are pushing their inquiries in this direction; I therefore look forward to valuable contributions to this branch of our medical literature. I have recorded several of the most marked examples of placental lesion, some of which I shall furnish here as illustrations. Dr. Wilks, of Guy's Hospital, speaks of this lesion as having been long noticed, and refers to the late Mr. Wilkinson King, who collected several cases of abortion connected with a change in the placenta, and which he believed to be due to syphilis.

Professor Virchow has recorded cases in which the mucous membrane of the uterus has been manifestly involved in the

general lesion of the organ, it having become loose, and that part which covered the fundus was wanting. The change was especially striking at the posterior and anterior part of the inner surface of the membrane, where it was very thick, and was covered with large polypoid growths, part of which were half an inch long, a quarter of an inch and even more broad, and three-quarters of an inch high. These tuberosities were similar to papulæ and tubercles, and had a smooth and dense surface of a red colour. The patient in whom this condition of things existed suffered from syphilis in the throat, &c., and M. Virchow believed the disease of the mucous membrane (decidua vera) to be syphilitic, which is probable, as the same pathologist found in the mucous membrane of other syphilitic women distinct papulous swellings of a venereal character.

Dr. L. A. Becquerel, physician to the Hospital of La Pitié, and Dr. Bernutz, who have devoted much time and labour to the investigation of uterine diseases, both announce that the mouth, neck, and interior of the uterus are subject to syphilitic lesion.

Dr. Becquerel affirms that "it is at once evident that the virus of syphilis, applied to the neck of the uterus by impure coïtus, or by artificial inoculation, developes on the surface of the neck primitive conditions of various form and character." More than this, he states that "these primitive phenomena, once developed, are perfectly capable of infecting the entire organism, and of producing the syphilitic diathesis." He also met with many patients who exhibited distinctly characterised syphilides on the neck, as well as chronic inflammation, with or without granulations. These he cured by specific anti-syphilitic treatment. Other cases he refers to, where ulcerations of the neck of the womb resisted every effort to cure them which was not anti-syphilitic. The appearances on the uterus not being well-marked syphilides,

and no primary or secondary phenomena existing anywhere else, the ulcers on the neck of the womb were treated in the usual way, by cauterisation, &c., but without the least improvement. These cases, however, proved to be complicated with the syphilitic diathesis, and immediately gave way to specific treatment. He is of opinion that if in a very large number of cases syphilis does not itself directly create the chronic inflammations, granulations, and ulcerations, it exercises a powerful influence upon them, and causes them to resist all the ordinary methods of cure, unless aided by anti-syphilitic treatment.

Recent investigations have gone to show conclusively that both secondary and tertiary phenomena may appear on the uterus, both at its entrances and on its sides. Dr. Becquerel thus sums up the results of modern inquiries on this very important subject, in which he shows the stages of syphilitic lesion to be found on the uterus :—

"*Primary Phenomena.*—Chancres.
"*Secondary Phenomena.*—Syphilitic plaques muqueuses, vegetations, erosions, and syphilides.
"*Tertiary Phenomena.*—Tubercles, gummata."*

It is a matter of surprise to the physician and surgeon to find how much women suffer from disease of the womb. It is by far one of the most frequent disorders to which they are liable, and one which involves an amount of inconvenience and pain, that seldom result from other ailments. It acts sympathetically upon the whole organism, often deranging every function, and rendering life miserable. This physical suffering is so great that it forces the patient to overcome the natural scruples of her sex, and seek at the hands of the surgeon relief in any form from the wearying

* *Traité Clinique des Maladies de L'Uterus et de ses annexes.*

torture she endures. How necessary, therefore, that all the light science can throw upon this distressing class of diseases should be made available for their relief, yet it is to be regretted that in the treatment of them there is still so rigid an adherence to old and stereotyped methods. Thousands of women continue to suffer, month after month, year after year, from disease of the womb, notwithstanding that they have from time to time to submit to the most trying ordeals at the hands of some rude so-called specialists, who blunder on without sufficient knowledge or skill, having no higher impulse than the sordid greed for mammon. These sufferers in most cases no doubt owe their continued defective health to some constitutional complication such as Dr. Becquerel and others have pointed out as so frequently existing.

CASE LXII.—*Chancres on the mouth and neck of the womb. Syphilitic cachexia. Constant headache. Cured.*

Mrs. F. H., aged 34. This lady consulted me in the month of January of the present year (1869), under the following circumstances:—She appeared as though she had been suffering for a long time from general constitutional debility. She was anæmic, nervous, and despondent. On interrogating her, I found that for "six years she had been subject to a good deal of pain in the bowels,"—as she thought—with more or less disturbance of her general health. About two years and a half ago she had become so unwell, and suffered so much, that by the advice of friends she consulted a specialist of this city, who examined her, and informed her that she had disease of the womb. He proceeded to "burn" it, and treat it with injections, and she continued under his care from that time to this, with occasional intermissions, but was at the end in a far worse state than when she first consulted him. Such was her relation of the history

of the case. I then by interrogatories obtained from her the following information, believing that from her appearance she was the subject of the syphilitic dyscrasia:—She stated, that about seven years ago she had reason to believe that her husband infected her, as she became very sore on the genitals, and lost her health, which prior to that had been very good. Ever since then she has been particularly liable to sore throat and tongue, as well as to tetters on the mouth (herpes syphilitica), and to an almost constant headache, with loss of hair. She remembered that about five years ago she was much troubled with a rash, that from her description must have been lichenous, which lasted a long time, and gave her a great deal of trouble; she took pills and draughts for it, which were given to her by an apothecary whom she consulted. After this the pains in her bowels continued to increase, and her general health did not improve. I proposed an examination of the uterus per vaginam, to which she consented. On exposure of the mouth and neck of the womb to the light of the speculum, I found that there was much induration and contraction of the neck, from the frequent cauterisation it had been subjected to. There was also extensive lesion of a distinctly syphilitic nature, having the peculiar lardaceous covering characteristic of venereal sore. The ulceration appeared to be phagedenic, and was evidently extending. The edges were yellowish, and chronic inflammation existed over the whole of the neck of the womb. I placed the patient under a course of specific treatment, as practised by modern syphilographers, and a marked change for the better immediately set in. No further examination per vaginam was made until about three months after, when all ulceration had disappeared; the patient was at that time rapidly progressing to her standard health, and said that she was quite free from pain or inconvenience in the organs of generation.

CASE LXIII.—*Chancre of the uterus. Ulceration of genitals. Sore throat, &c. Cured.*

Mrs. F., aged 27, called upon me, stating that she suffered almost constant and distressing pain in the bowels, and had been informed that it might be something the matter with her womb. She said that she had a great deal of pain in the back and thighs. Her husband had for some time been unwell, and had infected her, as she supposed. On making examination at her request, I found on the vulvæ ulcers of various sizes, several of which were quite recent. On carefully introducing the speculum, which gave considerable pain, I found three distinct Hunterian chancres near the mouth of the womb, and a larger one on the left side of the neck of that organ. There was also a glairy, dirty yellowish discharge oozing from the womb; and the whole of the membrane covering the mouth and the neck was the seat of considerable inflammation. The patient at the same time had sore throat. Her health was not good. She complained of sleeplessness and nocturnal headache. I placed her under anti-syphilitic treatment, and in about nine weeks she appeared to be fully restored to health.

CHAPTER XI.

SYPHILITIC DISEASES OF THE BRAIN AND SPINAL CORD; INSANITY, EPILEPSY, &c.

This branch of the subject is one of especial interest, involving as it does the cerebral centres, and bringing into peril the source of all mental and physical integrity of function. So long as the brain remains undisturbed, the unfortunate sufferer from organic syphilis may be able to struggle with proportioned hope against the disease which has assailed him; he will be able to sustain himself under the affliction, and seek the best means at his disposal to aid him in the effort to remove it. But when the seat of power and intelligence is invaded, when the very citadel of life has been broken in upon, the struggle then becomes unequal, and the unfortunate victim sinks into drivelling idiotcy or an unconscious death. It is well that other portions of the body are more frequently attacked than the substance of the brain and nervous centres—that the nerve tissue is generally one of the last to be reached. When this lesion has taken place, it is usually as the sequela of extensive invasion of the arterial system by the venereal poison, and indicates serious organic alteration somewhere in the organs of circulation. These concurrent lesions I have myself seen and recorded, and I

was gratified to find that other explorers in the pathological field of syphilis had also noticed the same indications.

"In the **BRAIN** gummatous tumours have been especially described by Bonet, Ricord, Cullerier, and Lallemand. Ricord describes them under the name of syphilitic tubercle of the brain. Dr. Steenberg (physician for the insane at Schleswig) believes that a great portion of the syphilitic affections of the brain are subsequent to lesions of the arteries. The organs of circulation generally he observes to be the frequent seat of syphilitic localizations. Hence softening of the cerebral substance, and various lesions of the nervous system, are *by no means rare* in cases of prolonged syphilis; and Virchow has frequently noticed morbid conditions of the great vessels in those who die of syphilis with lesions in the brain."*

Another eminent syphilographer,† who has contributed largely of late years to this branch of medical literature, states that the phenomena to be observed where the brain has long suffered from syphilitic invasion are, "a quantity of tough, yellow, fibrous tissue unites the surface of the brain with the adjacent membrane, and this again is adherent to the bone. The cortical substance of the brain at the affected spot is often *partly destroyed*, and the adventitious material occupies its place. The question has still to be solved as to what structure is primarily affected. Many have given the authority of their names to the opinion that the disease first commences in the bone, but simply for the reason that the osseous system is that which has so long been recognized as liable to be affected. But since we now know that other structures may be similarly attacked, we are prepared to look for its commencement in other parts, and even in the brain structure itself."

* Aitken. † Dr. Wilks.

Dr. Aitken describes a case which he saw in the Middlesex Hospital, of nodules in the great nervous centres. "There had been in the man's life a syphilitic history, and some of his children had died of inherited secondary syphilitic lesions. A gummatous tumour (syphilitic) occupied the left *optic thalamus.*" These observations point out how profoundly the body suffers from this penetrating and corroding virus, and how necessary it is to be on guard against it in all its earlier and less destructive features. When the disease has so far advanced as to give expression to symptoms of cerebral disturbance, the phenomena are frequently obscure; but there are some which may be taken as indices, such as the disposition to make grimaces, to stare, and be extremely restless: in others there is the sardonic countenance, with its usual extravagances. Some are violent, and especially so at night; and there is unusual wakefulness, sleep being impossible without the aid of powerful narcotics.

It is observable that, long before there is any decided lesion of the brain, that the usual prodromata, or premonitory indications, appear, in the character of depression of spirits, inaptitude for any mental or physical effort, severe headache, loss of memory, lassitude, and perpetual fatigue, with disgust of life, and troublesome variability in temper. These phenomena I have frequently observed as existing during the secondary and tertiary stages of syphilis, and have been convinced that in some cases the reason of the alteration in the mental state was owing not only to a moral influence, but to actual irritation of the nervous centres and brain tissue, by the virus which was causing concurrent disorganization and alteration of function in other parts of the body. Dr. Gairdner, Professor of Medicine in the University of Glasgow, gives in his *Clinical Medicine* a case where the nervous system was considerably involved. "There was amaurosis, or

loss of vision; the patient was paraplegic, *i.e.*, paralyzed in the lower half of the body, thus showing both spinal and cerebral complication." In some of the cases given in this chapter, several similar disturbances of the cerebro-spinal axis will be noticed; and it would have been possible for me, had I space, to introduce many more illustrations of the kind.

Divergie, and other French writers, lay great stress on the moral influence which the secondary and tertiary forms of syphilis exert over the patient, and represent it as of a peculiar and specific character. The reserve and stolid indifference which so often accompanies this disease, may in some instances arise from moral causes, or from the patient's disgust at being thus afflicted; but I am fully convinced that there is something more than a psychological cause for the mental phenomena observed in many patients, and that it has to be sought for in the alteration of function, if not of substance, in the nervous centres. My own observations have led me to suspect that the brain is more frequently involved than most practitioners allow; and I have also seen that when the patient was put under specific treatment for syphilitic lesions in other organs, the cerebral phenomena have soon given way, although there could be no doubt of their serious nature.

More syphilographers than one have ventured to suggest that syphilis may be charged with providing inmates for our lunatic asylums, and although I have not any extended opportunities for such pathological investigations as would confirm my own opinion, I am still inclined to believe, from circumstances which have come under my observation, that the subject is worth serious attention, and that the opinion hazarded may be found to be true. The phenomena which have manifested themselves most frequently amongst my syphilitic patients have been precisely such as have been described by Winslow as premonitory of cerebral mischief. He says—"If

a person previously in a state of bodily and mental health is conscious that abnormal changes are taking place in his mind; that trifles worry and irritate him; that he feels his brain unfit for work; that his spirits flag; that he tends to magnify all the evils of life; if, moreover, he is observed to be fanciful; if he imagines things to exist which have no existence apart from himself; if he believes that kind friends ill-use him and slight him; if, besides, symptoms like these, or analogous to these, are associated with headache, derangement of the digestive organs, want of sleep—the friends of such a sufferer may rest assured, and the patient may perhaps be convinced, that the state of his brain is abnormal, and he may be induced to commit his case to the careful consideration of a physician."

In some patients whom I have had to treat for secondary and tertiary disorders—especially in the latter class—I have found almost precisely that catalogue of prodromata, and felt assured that if the progress of the tertiary lesions was not checked, the patient would sooner or later drift into temporary if not permanent insanity. In one patient, who committed suicide immediately after coming under my care, and who when I first saw him was evidently suffering from disordered mental functions, I had not the slightest doubt whatever that his act of self-destruction was the consequence of organic lesion as well as moral perversion. This subject of insanity, on which I have thought proper to touch as one not yet sufficiently investigated, is replete with interest, and demands, as I doubt not it will soon obtain, exhaustive investigation. It is eminently important that syphilis as a cause of insanity, both in a moral and organic sense, should receive general attention, as there is, perhaps, no lesion more readily and surely remedied if early and judiciously treated. It has been a circumstance of some astonishment to me on several occasions to witness the rapid effect of specific treatment on

the mind and the nervous centres. I am here reminded that amongst the recoveries which have taken place in Hanwell and other English asylums, many have followed the use of medicines which are specific against certain forms of syphilis, without its being suspected that the happy results arose from the perverted function having a venereal origin. This circumstance I shall consider more at large elsewhere, when in another volume I come to treat especially on the therapeutics of syphilis in connection with the brain and spinal cord. I have glanced at the subject here, that the general intelligence of the people may be directed to search in this new direction for the causes of mental aberration which is so much on the increase amongst us.

It is competent for any one to search for the historical data necessary as elements of investigation in these serious cases; hence I deem it right to point out to those who may discover mental derangement approaching in their friends or acquaintances, to judiciously seek for evidence—if it can be obtained—that shall determine whether the syphilitic taint may be present as a cause, or complicating element. By doing this, the medical adviser will be materially relieved from the difficulties of diagnosis. Nor should there be any longer that diffidence about syphilis which has hitherto prevailed, as it is one of the most common diseases to which society is subject, and one to which the attention of the profession everywhere is especially directed. As it is both hereditary and of long duration, it should be dealt with without reserve or hesitation, that the taint may not be communicated to others, and especially not to the offspring. Its terribly destructive powers, and tendency to invade every organ and tissue in the body, the brain not excepted, should be a sufficiently powerful reason against allowing any feelings of prejudice or diffidence to stand in the way of full inquiry in reference to this fell disease.

"Much confusion has arisen from not distinguishing between nervous disorders arising from ordinary causes in syphilitic persons, and those produced by the action of the virus itself. Syphilis may impede or destroy the function of a nerve in three ways—the first two of which are well recognized; the last is ill explained. They are: first, the nerve-tissue is unaltered, but is pressed upon by growths of neighbouring parts; second, the nerve tissue itself is the seat of disease; third, a syphilitic patient may suffer from a nervous disorder of which no traces remain in the nerves *post mortem*, but evidence of syphilitic disease is found in other tissues. In such cases the nervous symptoms are, doubtless, sometimes not attributable to syphilis; but it is not requisite in all cases for syphilis to produce appreciable change in the structure of the brain and nerves, when influencing their functions. Hildebrand thinks the nervous phenomena due to the chlorotic condition of the blood in syphilis. Virchow, when referring to them, observes that as we do not know how far morbid processes in the brain may be arrested and cured, it would be rash to infer, when nothing is found, that nothing has ever gone wrong in the structure of the nerves or brain during life."*

The same writer confirms my opinion as to the early appearance of cerebral disorder, even during the outbreak of some of the numerous skin diseases which have been described, and gives us the following instance:—"A man aged twenty, soon after the outbreak of a papular eruption, was suddenly attacked by paraplegia; the sphincters were relaxed, and much pain was felt in the lower part of the back. In a few weeks, while he took iodide of mercury, the symptoms left the patient."† Again, "a patient was inoculated in June or July; on October the 8th an eruption appeared on the body; on the 19th of October paralysis came on, which lasted till

* Hill. † Zeissl.

the 16th of November, by which time the patient was under the influence of mercury," &c.* The sudden onset of the palsy distinguishes these affections from the paralysis accompanying the late sequelæ, which are also preceded by other symptoms of nervous disorder.

The observation of Dr. Winslow, as given in the following extract, exhibits distinctly the need that there is for more care in the treatment of the insane, and the sad consequence to thousands of those unfortunates by the neglect of early treatment and correct diagnosis. He says—"The existence of so vast an amount of incurable insanity within the wards of our national and private asylums, is a fact pregnant with important truths. In the history of these unhappy persons—these lost and ruined minds—we read recorded the sad, melancholy, and lamentable results of either a total neglect of all efficient curative treatment at a period when it might have arrested the onward advance of the cerebral lesion, and maintained reason upon her seat; or of the use of unjustifiable and injudicious measures of treatment, under mistaken notions of the nature and pathology of the disease. . . . Experience leads us irresistibly to the conclusion that we have often in our power the means of curing insanity, even after it has been of some years' duration, if we obtain a thorough appreciation of the physical and mental aspects of the case, and perseveringly and continuously apply remedial measures for its removal."

In reference to syphilitic patients this passage is especially applicable, and the more the influence of the syphilitic virus upon the cerebral structures is made the subject of observation, the more will it be seen to occupy an important place amongst the causes which tend to the production of insanity. It has several times appeared to me highly probable that a

* *Bulletin de Therapeutique.*

patient suffering from tertiary or organic syphilis would drift into the ranks of the insane through lesion of some portion of the cerebro-spinal system. I have observed phenomena which indicated a prognosis of that character, but which have subsided at once under the specific treatment applicable to the syphilitic diathesis. The premonitory symptoms to which I refer have closely foreshadowed the accession of hallucination, neuralgia, hypochondriasis, epilepsy, paralysis, and dementia. In one instance I found early in the treatment that vomiting set in, with disturbance of the motor nerves of the eyes, distinctly altering the co-ordination of the muscles controlling the visual function. At the same time there was a degree of despondency almost amounting to dementia. The patient recovered completely under anti-syphilitic treatment, hence there was no opportunity of verifying the diagnosis by pathological observation of the brain; still his speedy restoration was sufficiently conclusive, in my opinion, of its correctness, and of the progress that the virus was making in the cerebral tissues. Here was an instance which would undoubtedly have eventuated in that mental condition which would have classed the unfortunate sufferer with the insane; and the lesion, not being arrested by specific treatment, would probably so disorganise the structure it invaded, as to destroy for ever the hope of return to its normal condition. The discovery of prominent evidences of syphilis in the body was the proximate means of saving this patient from the direst calamity that could befall humanity. Had he not received a specific treatment, nothing could have saved him from such a serious *denouement*. Hence the saying of Dr. Winslow, "that experience irresistibly leads to the conclusion that we have often in our power the *means of curing insanity*," is, in reference to syphilis, perfectly true. Within the range of my own experience I have seen sufficient to force me to the conclusion that syphilis is by no means

a rare source of cerebral disorganisation, and ultimate insanity.

In the *British and Foreign Medico-Chirurgical Review,* Dr. Chapu gives a number of cases of mental disease arising from syphilitic infection, and he argues that "*the defective nutrition of the brain, from the syphilitic diathesis, produces insanity.*" In the same journal Dr. Gjor has contributed thirty cases of paralysis which came on while manifest signs of syphilis were present. In the several chapters of this work it has been shown that the common tendency of syphilis is to induce an atrophic condition of the body, reducing the functional activity of the vegetative processes. As we know that defective nutrition is a prominent cause of mental aberration, exhibited in delirium, dementia, and epilepsy, there can be little doubt that many cases of cerebral disease may have a syphilitic origin.

I have been informed by one of the medical staff of the Melbourne Hospital that among the deaths in that institution from syphilis, there have been several from disease of the brain substance itself; others from syphilis of the liver and kidneys, and lesions of the nervous system, inducing paralysis, &c.; and Dr. Maunsel, who made many of the post-mortems, informed me that frequently syphilitic tubercles were found in the lungs. I subjoin one of the cases:—

Case LXIV.—*Syphilitic disease of the brain. Osseous deposits pressing on the brain. Chancres of the brain. Ulcers on the tongue and throat. Death.*

This patient was admitted into the Melbourne Hospital suffering from pain in the head, loss of sleep, and exhibiting remarkable eccentricity of manner. It was noticed on his admission that he had marks of secondary syphilis on his body, together with ulceration of the tongue and throat, and syphilitic ulceration of the anus. It was there-

fore apparent that the whole of this man's symptoms were due to the presence of syphilis, and he was treated accordingly. After a time the patient manifested all the symptoms of deep-seated disease in the brain substance; these ultimately culminated in complete incoherency, paralysis of the limbs, coma, and death. When the body was examined, and the skull cap removed, osseous deposits were found pressing on the brain: at the posterior part of the right hemisphere, three small bodies like soft chancres were visible on its external aspect. On cutting through these it was found that they were underlaid by tuberculous deposits; and a little deeper still an abscess, the size of a pullet's egg, was discovered; syphilitic tubercles were also found in the lungs.

IMBECILITY.—This condition is one to which I have alluded before, when speaking of insanity as a consequence of syphilitic invasion of the brain; but I refer to it again especially in order to introduce a case or two quoted by Mr. Berkeley Hill, which are telling illustrations of this phenomenon. It is shown to exist in connection with a *general wasting paralysis*, where "the memory, senses of taste, sight, hearing, and the control of the muscles all suffer; gummy tumours were found in the meninges of the brain, with atrophy and softening of the grey substance over a large portion of the brain's surface." One case is that given by Westphal, as follows:—"A man having had syphilis was for some time subject to fits, to persistent headache, and other symptoms. After suffering thus for some time, his memory grew weak; his utterance became hesitating, for want of the right word to express his meaning; his gait tottering, and he lost control of the sphincters. This case terminated in utter imbecility and death. *Post mortem* examination showed that the skull was thickened internally by

exostoses; the dura mater was beset with nodules growing from it into the sylvian fissure; the pons varolii was softened and congested; and the right second and third nerves were infiltrated with gummy nodules (syphilitic)." The following is also another very distinct instance:—"A man, aged 55, previously under Ricord's care for constitutional syphilis, after a fatiguing journey in September, 1845, was seized with cerebral excitement. This was soon followed by general paralysis. The muscles of the face were relaxed; utterance was inarticulate, and deglutition difficult; saliva dribbled from the mouth; the lower limbs tottered, and the upper ones shook. By bleeding and purging, his condition was much improved, though his utterance still remained slow and drawling. In February, 1846, he had a second attack, with full pulse, coma, and stertor. By mercurial inunction and iodide of potash he was sufficiently restored to be able to follow his occupation of a painter for some months. In 1847 he was again seized with paralysis, diarrhœa, and exhaustion. This time specifics were not borne, and he died. At the *post mortem* there were found thickening of the pia mater and arachnoid, general softening of the grey substance, and calcification of the anterior two-thirds of the falx cerebri; but careful examination discovered no further lesion of the brain."

When the tumour is in the substance of the brain and not on its surface, the headache is constant, but varies in intensity; shortly after the headache becomes settled, giddiness, or confusion of the memory, and loss of ideas, are added; next to these come drowsine ss, that passes now and then into coma. Convulsions and maniacal excitement, which often accompany these symptoms, denote *peripheral* disease of the brain, in addition to the internal tumour.

Dr. J. Russell Reynolds, Professor of the Principles and Practice of Medicine in University College, London, states,

in his compendious *System of Medicine*, that "a diffuse albumino-fibroid exudation of low form, gluing the membranes to the surface of the brain, has been declared by some to be *characteristic of syphilitic insanity*. Instead of being diffused, the *gum*-like exudation, or *syphiloma*, as it has been called, may be circumscribed so as to form a tumour, and press into the substance of the brain, causing softening immediately around it; or again, it may be met with as a diffuse infiltration or a tumour within the brain, the membranes being unaffected."

The authorities whom I have quoted render the question of cerebral lesion due to syphilis a recognised fact in the domain of organic diseases. For a long time this portion of the system was not suspected to be liable to invasion from the venereal virus, and when the liability was first asserted it was received with considerable incredulity; it is, however, now placed beyond the region of conjecture by the results of extended observations made by the ablest pathologists of Europe. It is to establish this fact, and direct attention more decidedly to the large class of nervous diseases influenced, if not directly produced, by syphilitic deposit, that I have so fully recorded the opinions and teachings of our modern syphilographers.

EPILEPSY.—This distressing affliction, which is so intractable, and resists so effectually the many remedies that medical science has suggested, is to be ranked, after much exhaustive research and observation, as one of the most alarming phenomena directly resulting from syphilitic contamination. When this direful catastrophe befalls a sufferer from syphilis, the virus has reached the centres of life, and is exhausting the fountain whence spring the entire concourse of vital phenomena. Language can scarcely portray the miseries that surround the unfortunate victim of this grave

infliction. It has, however, been graphically delineated by several writers, amongst whom is Dr. Watson, the celebrated author of a *Practice of Physic*, which commands the esteem of the entire profession. He writes that "it is scarcely less terrible to witness, when it occurs in its severer forms, than tetanus or hydrophobia; but it is not attended with the same urgent and immediate peril to life. Yet it is, upon the whole, productive of even more distress and misery, and is liable to terminate in even worse than death: a disease not painful probably in itself, seldom immediately fatal, often recovered from altogether, yet apt in many cases to end in fatuity or insanity, and carrying perpetual anxiety and dismay into those families which it has once visited." (Lect. XXXV.)

The phenomena of this nervous disorder are known to most people, and will not be forgotten by those who have once witnessed them. There is complete loss of consciousness, with convulsions, sometimes long-continued, at other times clonic or alternating. The respiratory process is also impeded, so that the sufferer appears to be gasping for breath. The attack lasts from two to twenty minutes, and generally ends in sleep. Sometimes it occurs without much severity, and is indicated by a tottering step and a fixed gaze. It often occurs without any previous warning, and Georget estimates that in 95 cases out of 100 there are no premonitory symptoms. (Aitken.) The warnings are known by the name of "auræ," and comprise all the multitudinous and singular phenomena that sometimes precede the fits. Many patients on the approach of a fit have vertigo or headache; some, swelling of the veins, or throbbings of the arteries of the head; while others again have ocular spectra, or affections of the other senses. In most cases the fit is preceded by a headache.

In the adult, whether the warning symptoms be present or

not, the attack usually commences by the patient uttering a cry, losing on the instant all consciousness, and falling down in convulsions, his mouth being covered with foam. The attacks are sometimes of the most trifling character, being scarcely recognised. At other times there are the most frightful, terrific, and long-continued struggles. In severe forms of epilepsy the convulsions are sometimes very formidable. The hair stands on end, the forehead is wrinkled, the brow is knit. If the eyelid be opened, the eye is seen to be injected, sometimes convulsively agitated; at other times in a state of strabismus (squinting), and sometimes fixed. More commonly the eyelid is quivering and half-open, so as to show the lower portion of the conjunctivæ. The face is red, or livid and swollen, the teeth generally clenched, and the lips covered with foam. Sometimes, however, the mouth is open, and the tongue thrust forward; and should the masseter muscles now act spasmodically, it may be bitten through, or otherwise much injured, and the foam consequently mixed with blood. The force with which the jaw closes is so great that teeth have been known to be broken, and the jaw luxated. The limbs also are violently convulsed, thrown about in every direction, and with such power that it often requires three or four persons to prevent the patient seriously hurting himself. In these convulsions also the hands are strongly clenched, and the body is often arched backwards, when, on the muscles relaxing, the patient may fall to the ground with great force. While the limbs and trunk are thus powerfully agitated, the muscles of the chest are often spasmodically fixed, so as hardly to permit the act of respiration. (Aitken.)

The functions of organic life are also implicated in this scene of tumult. The pulse is generally frequent, and at other times scarcely perceptible, although the heart's beats are strong and tumultuous. The respiration is stertorous,

the stomach and bowels troubled with borborygmi, the skin bathed in sweat, while the urine, semen, or fœces are occasionally emitted. Blood sometimes flows from the eyes, ears, or nose, frightfully expressive of the violence of the attack.

In the child this fit is very common, and is induced by a variety of causes. Frequently it is hereditary, and when not so it is induced by dental irritation. There is, however, generally some hereditary taint which induces susceptibility in the child to disturbance of the nervous centres, and none so frequent as the syphilitic taint, and this in the present chapter I shall be able to establish. The symptoms as they appear in the child are—the clenched fingers, and bent toes, the thumbs flexed on the palms of the hands; the eye staring, fixed, and convulsed; the face and extremities pale, and livid; the body rigid; and the head and trunk curved backwards. The fits vary very much in frequency, sometimes occurring three or four times a day, in other cases only appearing once or twice in the year. They also vary considerably in their severity.

It is but little known to how great an extent all these painful and alarming phenomena owe their existence to the presence of that syphilitic dyscrasia of which I am especially treating. The virus, having disturbed the integrity of the cerebral structures, gives rise to those nervous perturbations which are so graphically described above as occurring in a paroxysm of epilepsy. Attention has of late been drawn to this phase of syphilitic contamination, and amongst the observers are Drs. Brown-Séquard, and Ramskill, of the National Hospital for the Epileptic and Paralysed, who have recorded cases of this nerve lesion that have been associated with constitutional syphilis. The following are cases which they have furnished :—

"CASE LXV.—*Epileptiform convulsions, chiefly affecting one side. History of syphilis. Syphilitic lepra. Great improvement under the use of the iodides.*

"Richard P., aged 44, a painter, was admitted into the hospital, under the care of Dr. Ramskill, on April 23, 1861, for paralysis of the right side, and epilepsy of two years' standing. His mother was paralysed, but the rest of his family, so far as he knew, had not suffered from any disease of the nervous system. He had led an unsteady life, and five years ago had syphilis. Up to the night of his attack he was quite well, but before going to bed he fell down on his right side. He became insensible, and remained unconscious half an hour. After the fit he considered himself well again. Since then he has had a fit once a month. He was always convulsed more on the right side than on the left. Scattered over his body were large patches of lepra, unmistakeably syphilitic in character. Specific treatment was adopted, and when he was dismissed cured he had not had a fit for two months."

The following case was under the celebrated Dr. Brown-Séquard, at the same hospital :—

"CASE LXVI.—*Epilepsy, and failure of mental powers. Amaurosis. Optic nerve entrance white and anæmic. Syphilitic history.*

"This patient when 18 years of age had a chancre, for which he was salivated. He said that he had not had any secondary symptoms for ten years; he might have had another chancre The secondary symptom was sore throat. He subsequently had a node on the shin, for which he was severely salivated. About 10 years ago he had a constant watery discharge from the nose, and for the last year he had a discharge from the

nostrils of a different character, consisting of crusts of mucus, &c. The loss of smell was due to disease of the mucous membrane of the nose. This patient was first attacked by epilepsy in June, 1860, and suffered much from mental depression and loss of mental power. These last symptoms began about three or four years ago, and continued more or less up to the time of his admission in March, 1861. The first epileptic seizure occurred suddenly while he was writing at his desk; when he became insensible, was convulsed, and bit his tongue. In June of the same year his sight began to fail, and in a fortnight he was unable to see for any useful purpose. The operation of dividing the ciliary muscle produced no improvement. In September he was ill for about a month, with symptoms, according to his wife's description, somewhat like those of delirium tremens. He had delusions, was extremely restless, and for several weeks did not recognise his nearest friends. He had at that time a great deal of pain at the top of his head, but neither fits nor paralysis. He complained during the whole time of a very offensive smell in his nose. The whole of these symptoms, with many others, Dr. Brown-Séquard had no doubt were due to syphilis."

In the tenth volume of the *Transactions of the Pathological Society* Dr. Bristowe relates the following case, which well illustrates this syphilitic nerve-lesion and its phenomena. Dr. Bristowe remarks in reference to this case :—" The kind of deposit supposed to result from the syphilitic poison was recognised both in the *liver* and *brain*, and was associated with what were doubtless venereal buboes in both groins."

"Case LXVII.—*Epileptoid attacks. Paralysis in the left side. Impaired vision. Fatuity. Death.*

"G. H., aged 34.—Some years since he was seized whilst at work with a fit, from which he speedily recovered. Eighteen

months before admission to St. Thomas' Hospital he had a second fit, which lasted two hours. He was then insensible, but did not bite his tongue; when conscious there was no impairment of speech. He became subject to attacks of vertigo and headache. Eleven days before admission he had a third fit, which was followed by paralysis of the left side, with indistinctness of speech. He was somewhat fatuous, and this condition increased. His sight became impaired, that of the left eye especially, and he ultimately died comatose.

"*Autopsy*.—The dura mater was found thickened and roughened over the left cerebral hemisphere; the bone also in this position was rough, congested, and slightly softer than natural. The surface of the brain was firmly adherent to this part over a surface of eight square inches by fibroid tissue, in which and in the adjoining brain-substance were two or three fibrinous masses (syphilitic). In the liver were found similar deposits. In the left corpus striatum was found a cyst (apoplectic), and the right (explanatory of the paralysis) was congested and much softened. The left internal carotid artery and its branches were plugged." Dr. Bristowe believed that this case was syphilitic.

Dr. Wilks, in his work on Pathological Anatomy, writes:—"As regards *nerves*, it has been clearly made out in many cases that tumours or neuromata have been due to syphilis. The arteries, too, in all probability are susceptible of the same influence; that is, a deposit, atheromatous, or of an analogous kind, forms within the coats, leading to various consequences; and thus, in some cases of aneurism and softening of the brain from diseased vessels, *syphilis has been the probable cause*."

The same gentleman also reports a case which was under his care at Guy's Hospital:—

"CASE LXVIII.—*Syphilitic epilepsy. Extreme cachexia. Cured.*

"Robert C., aged 36.—He was a carpenter, but formerly had been a soldier in India; was invalided owing to rheumatism or pain in the limbs. Two months before admission he had a fit while walking in the street, and on recovery he felt his left arm and leg numb and weak. He has had about a dozen fits since, and in some he has not lost his consciousness, but he foamed at the mouth and bit his tongue. Two days before admission he had a fit, followed by a great loss of power of the left arm and leg. On admission he was exceedingly ill, complained of great headache, and had partial paralysis of the left side, the arm being almost powerless, but the leg he could move a little. He soon after had three fits, in which he was convulsed all over, and screamed out. . . . . In the intervals he complained of pain in the right side of the head and neck. He was totally paralysed on the left side. His wife was sent for, as it appeared scarcely possible that he could survive long. As the patient had never been in a condition to give a good history of his case, the wife was questioned, and she said that he had a fall two or three years before, also that he had long suffered from pains in the limbs, and that *she had had several miscarriages and dead-born children.* The patient was again examined, and it was found that one clavicle was enlarged. All these circumstances suggested syphilis, therefore specific treatment was adopted. He began to improve in a most remarkable manner, only one or two more fits occurred, the paralysed limbs got stronger, and consciousness returned. At the expiration of three weeks he was able to leave his bed and walk about. At the termination of a month after the commencement of the medicine he left the hospital quite convalescent. This case afforded the most remarkable

recovery we have ever witnessed from a disease of this severe nature."

This case is a very remarkable one, and is in an eminent degree consoling to the physician who may find himself called upon to treat the unfortunate victims of cerebral lesion. Here was undoubtedly extensive syphilitic deposit in this man's brain, in the corpora striata and other vital centres. The apparently complete overthrow of the man's reasoning powers, and the prostration of his physical capabilities, demonstrate how deeply the syphilitic taint must have penetrated and infected the cerebro-spinal system. The case shows to what an extent the disease may have produced some structural intercranial change, and yet yield promptly and fully to specific anti-syphilitic treatment. There is now no doubt whatever that a great many nervous disorders owe their existence to lesion of some portion of the encephalon, and that we may suspect, as we often find, the formation of the same kind of gummata and fibrinous deposits in the brain itself which are so frequently seen and known to exist in other parts of the organism. Neuromata, or morbid enlargements of nerves by reason of syphilitic deposit, are evidently frequent causes of depraved function, and of interference with the organs of special sense. The cranial and cerebral lesions are of the same character, but the resulting phenomena differ materially, the latter being by far the most dangerous and varied. Paralysis, loss of vision, and of memory, incoherency and fatuity, are then some of the results to be dreaded. My own experience has convinced me that these lesions are the frequent sources of many of the most intractable and otherwise occult diseases of the cerebro-spinal system that come within the scope of the physician's operations. As an illustration of this statement, I give two or three cases from my record, which will go to show how serious the consequences may be where syphilis is allowed to proceed

under the mask of other nomenclature, and thus to pervert the diagnosis. The first is that of a young man who never had fits until tainted by impure coïtus, and in whose family no trace of the epileptoid dyscrasia could be found.

CASE LXIX.—*Acquired syphilis. Epilepsy, and failure of mental power. Impaired vision. Loss of memory. Cutaneous syphilide. Cured.*

G. R. Y., aged 27.—I was sent for to see this young man in the month of October, 1868, and found him exhibiting the following symptoms, and the subject of the accompanying history:—He was originally robust and healthy, until about five years prior to my seeing him, when he suffered from Hunterian chancre, induced by impure coïtus. This was healed by the ordinary remedies, and in two years afterwards he was treated for a syphilide, which, according to his description of it, I judged to have been vesiculo-tuberculous. There were cicatrices on his back, thighs, genitals, and face. He also had at the same time ulceration of the throat and tongue. On his coming under my care I learned that soon after the disappearance of the syphilide he had a fit, which was pronounced epileptic, and this was followed by others, until they occurred once or twice a week. He gradually lost the power of mental concentration, and his memory so failed him that he was compelled to abandon his situation. During the fits he was unconscious, bit his tongue, foamed at the mouth, and was convulsed. He had nodes on the tibia, and forehead, and he complained of great pain in his head, especially on the vertex and behind, and the exacerbations were so severe at night that he seldom was able to sleep. He was suffering from impaired vision, and on examining his eyes by means of the ophthalmoscope, I observed that the vitreous humour was clouded, with whitish films floating about

in it. The vessels of the retinæ were congested, and the optic entrance was almost occluded. There was also choroiditis, but not of a very severe character. This disorder of the eyes had been in existence for about twelve months, not to the same extent as now, but gradually increasing from a slight amaurosis. He had at the time of my visit a sore throat, to which he was especially subject. The ulceration was syphilitic. I judged that his epilepsy arose from cerebral lesion as the result of constitutional syphilis, and treated him specifically in accordance with that opinion. His recovery commenced immediately: the frequency of the fits diminished; his sight gradually returned; his memory recovered; and in five months he was able to take a situation. He is now well, and has had no return of the fits.

CASE LXX.—*Epilepsy with amaurosis. Paralysis of the optic nerve. Syphilitic cachexia. Cured.*

Mrs. S., aged 32.—This patient came under my treatment in July, 1864, under the following circumstances:—She had been married eight years, and a year after her marriage her husband infected her with syphilis. She shortly after had ulceration of the genitals, sore throat, and growths about the verge of the anus. Some year and a half afterwards she had palmar syphilis, with vesicular eruptions on the thighs, and back. She had cicatrices on her forehead, from what must have been a tubercular form of syphilide. Soon after the outbreak of the eruption her eyes began to fail, and on consulting her medical attendant she was told that she had amaurosis. This symptom continued to increase, so that when I saw her the sight was almost gone. On examining her eyes with the ophthalmoscope, the appearances at the base of the eye indicated paralysis of the optic nerve, and there was partial occlusion of the optic entrance. The vitreous humour was

clouded, and there were old adhesions of a former iritis. About the time of the disappearance of the syphilide she was suddenly seized with epileptiform convulsions, and lost consciousness. Her memory began to fail, and her mental faculties to be impaired. The fits were gradually becoming more frequent, occurring at this date as often as twice a week. She was much emaciated, with a dirty yellowish hue of the skin, that indicated a deep constitutional taint. Her skin was dry, and her bowels confined. She had borne three children, all of whom died in their first year. I scarcely expected to restore this patient, but was nevertheless determined to test the efficacy of a specific anti-syphilitic treatment on her, as I believed that her epileptic fits arose out of some cerebral lesion. Nothing could be more surprising than the rapid change which took place. The recovery was gradual and gratifying, and I had the satisfaction of seeing her cured in about five months. Her husband also was treated successfully for tertiaries.

CASE LXXI.—*Epileptic fits. Tertiary constitutional syphilis. Paralysis of the right side. Recovery.*

H. S., aged 28, came to my house, into which he was assisted by a friend, in December, 1866. He complained of a feeling of numbness, and partial loss of the power of motion in the right side, together with enlargement of the left testicle. Two years ago he contracted syphilis, followed by secondary symptoms, for which he was treated by internal medicines and the mercurial vapour-bath. By these means his skin became cleared, and he thought he was rid of the enemy. Soon after, however, he began to feel pains in the head, joints, and shin-bones. He had ulceration of the tongue, loss of hair (S. Alopecia), also enlargement and induration of the testicle. Latterly he had suffered from giddiness,

loss of the sense of smell, and impairment of sight, followed by partial paralysis of the right side of the body, the arm being most affected. When seen by me, I noticed during my interrogation of him that his speech was thick, and he answered slowly. There was partial loss of voluntary motion on the right side, and he could not see distinctly with his left eye. There was considerable sensibility of the skin. These symptoms, together with the condition of the tongue, testicles, and shin-bones, all clearly demonstrated the existence of severe constitutional syphilis; whilst the paralysis, loss of sight, and sense of smell, led to the supposition that the brain and nervous system were also invaded by the syphilitic poison, and I at once determined on attacking it by anti-syphilitic remedies.

The next day I was hastily summoned to his bedside, as he was in a fit. On my arrival I found him unconscious, his face pale, and his mouth twisted. He was foaming at the mouth, and he had bitten his tongue. In a few minutes he became sensible. I then cupped him at the back of the neck, applied ice to his head, and purged him briskly. In a few days he was much better, and he resumed the anti-syphilitic course. In three months all his former symptoms had disappeared. I, however, kept him under my supervision three months longer, and after that dismissed him cured.

With regard to the prognosis of this class of diseases; although the symptoms are sufficiently alarming, and to the unskilled observer seem too serious for human ability to overcome, still there is ground for much hopefulness on the part of the physician or surgeon when called upon to treat. Thanks to the advance made in the knowledge of the disease, and to the rapid strides made of late in the science of therapeutics, we are able to bring the most effective specific treatment to bear upon such cases, and we need seldom despair of cure. Dr. Russell Reynolds, in

his valuable "*System of Medicine*," thus expresses himself on this point:—"In syphilitic diseases of the brain and its meninges there is much room for hope, and it seems to be of little moment that the symptoms are varied and severe. Those which are least amenable to treatment are the losses of sight and hearing, which not unfrequently exist. Paralysis and spasmodic affections are often removed with considerable rapidity. The length of time during which the symptoms have lasted is a further guide in the prognosis, the hope of restoration being in inverse proportion to the duration of the morbid state. Still, unless the general condition be one of highly-marked cachexia, amendment may be confidently expected. The presence of disease in the kidneys may be of unfavourable omen, but even it often disappears under an anti-syphilitic treatment. There are no cases which *appear so bad, and which recover so well*, as some examples of intercranial syphilis. Until the diagnosis of the constitutional state is established, the case may appear absolutely hopeless; sometimes the only missing link in the history may be unattainable, because the patient is insensible, or in such a state of mental incapacity that no reliance can be placed on his assertions; but yet from such conditions he may completely recover.

"*Meningitis* occurs also in individuals suffering from tertiary syphilis, for just in the same way as nodes and gummy tumours form under the periosteum in different parts accessible to view, similar deposits are found in the dura mater. In some cases the membrane is not inflamed in the vicinity of these growths, but in others the dura mater is thickened and adherent to the brain, which also participates in its superficial layer in the chronic inflammation.

"The symptoms indicating the presence of such deposits are intense and constant cephalalgia, with nocturnal exacerbations; in some cases with convulsions, obtuseness of the

intellectual faculties, and sometimes paralysis. The previous history of the patient, the peculiar sallowness of the complexion, and the presence in many cases of periosteal nodes, either in the head itself, or on the bones of the leg, sufficiently attest the nature of the case."*

The syphilitic virus is now known to affect the nervous element injuriously, and of late an extreme form of dementia has been ascribed to a syphilitic exudation, circumscribed, or diffused on the surface, or within the substance of the brain.

PARALYSIS.—This is another disorder which in some instances is induced by the presence of the syphilitic alterations in the tissues of the encephalon—and is that form which is commonly known as the paralytic stroke. As will be seen in the cases cited as illustrations of epileptoid disorder, there was generally what in medical nomenclature is called hemiplegia—*i.e.*, paralysis affecting one lateral half of the body, and which may occur to either half, while the parts which are actually involved are the upper and lower extremities, the muscles of mastication, and the muscles of the tongue on one side. Palsy of the face often occurs, and is seen as a lesion of the fifth nerve; there is hanging of the cheek downwards, and the angle of the mouth on the paralysed side is lower than the other. I have, however, found in syphilitic paralysis the facial nerve, or *portio dura*, affected, producing alteration in the operation of the muscles round the eye, as well as other superficial muscles of the face. This facial palsy is often very peculiar and painful in its phenomenal expression. There is the motionless brow, the eye red and staring, and the mouth drawn, and hanging.

"There are several forms of paralysis of common occurrence, due—1. To disease of the brain or spinal cord, in which

* Dr. Reynolds' *System of Medicine.*

form the muscles must be rigid or relaxed, the disease of the brain being the result of apoplexy; softening; renal disease; induration, *the result of syphilitic poison;* the epileptic, or choreic state. 2. To pressure upon or injury to a nerve, by syphilitic neuromata. 3. To hysteria. 4. To the influence of poisons, such as lead, arsenic, mercury, &c." (Aitken).

As will have been noticed in some of the cases cited, the serious phenomena of palsy arose from a syphilitic tumour pressing upon that part of the brain called the "*corpora striata,*" which is one of the important centres of volition. Paralysis will not occur unless pressure on this part takes place, or on some of the neighbouring fibres with which it is connected. Syphilitic deposits have been found occupying this situation, where *post-mortem* examinations have followed death from constitutional syphilis, especially in those cases where paralysis was a prominent feature. It is true, also, that other seats of volition and sources of functional operation are seriously influenced by the venereal poison; but in a work of this nature, destined as it is for general readers, it would be superfluous and tedious to enter into a discussion of the various anatomical seats of lesion in the brain, and the special nervous phenomena arising therefrom. It is sufficient to point out in as popular terms as possible the actuality of syphilitic invasion of the brain, with all the consequent distressing phenomena. All pathologists now agree that these morbid syphilitic growths tend by pressure to destroy the fibres of deep-seated parts in the encephalon, and especially in the cerebellum and neighbouring localities, and thus cause paralysis. I shall give a few cases from the records of other observers, as well as from my own, which will portray the effects of the lesions referred to. They are instances of paralysis consequent on some local disease produced by syphilis. The following is a case which was under

the care of Dr. H. Jackson, of the Metropolitan Free Hospital, London :—

"Case LXXII.—*Partial paralysis of the arm. Syphilitic iritis.*

"Jeremiah S., aged 35, was admitted on July 9, 1861, for partial paralysis of the right arm. He could move it, but in the effort to grasp he could do little more than close his hand. In this limb he had also pain, which he said ran down into the fingers. He also said that he had some pain in the head, with tenderness on pressure, but more in the neck, from which point he described the pain in the arm as originating. In both eyes were the remains of iritis, the pupils being irregular, and the sight impaired. The iritis—both eyes being affected at the same time—followed an attack of syphilis three or four years before. He had had syphilis several times. For six months after the syphilis he had rheumatism, which by his description appears to have been ordinary acute rheumatism. Dr. Jackson placed him under specific treatment, and one week after he was remarkably improved. In a fortnight he was quite well; the paralysis and other symptoms having disappeared."

The next case is reported by Drs. Hutchinson and Jackson, of the same hospital, as having been under the care of Dr. Brown-Séquard :—

"Case LXXIII.—*Paralysis of the seventh and fifth nerves. Recovery under the use of anti-syphilitic remedies.*

"Launcelot R., aged 43: for paralysis of sensation and motion in the left side of the face, which had come on recently. He had brain fever when ten years old, after which he squinted, the eye being turned in. He was operated on at the age of 19. Ten years ago he had rheumatic fever, and then lost the sight of the left eye. About that time he

also had syphilis; but there is no history of any subsequent recognised symptoms, except those about to be related. When admitted he had partial paralysis of the *portio dura* on the left side, the mouth being drawn to the opposite side, and the eye of the affected side open, from paralysis of the orbicularis muscle. Being unable to keep the dust out of the eye from want of muscular action, he had it covered up by a piece of rag. The whole of the left side of the face, and the whole tract supplied by the sensitive branches of the fifth nerve, were quite numb. He said that in these parts he had no feeling at all. Dr. Brown-Séquard considered the case as one of syphilis, and prescribed accordingly. The rapidity with which the man's symptoms abated confirmed, *so far as recovery under anti-syphilitic remedies can do*, the diagnosis of the case."

There is another remarkable case recorded by Dr. John W. Ogle, in the *Transactions of the Medico-Chirurgical Society*, in which *the whole body was paralysed*. Drs. Jackson and Hutchinson say that there can be little doubt but that *syphilis was the cause of the paralysis*. Dr. Ogle, in reference to his case, writes:—"The adventitious material (syphilitic) attached to, and in many cases surrounding firmly, and as it were incorporated with the roots of the nerves, was manifestly the remains of some exudative process, which at some time or another had during life affected the spinal membranes. Whatever may have been the precise nature of this process—whether, that is to say, it was of a purely local nature, and of a kind usually designated inflammation of the spinal membranes (the masses of the deposits about the nerves being, in fact, only part of some exudation—the rest, chiefly fluid, having been absorbed); or whether it was of a more unlimited nature, an expression or manifestation of some general cachectic state, such as will induce, as we know, fibrous effusions simultaneously into various organs, and

upon various free surfaces—it was equally interesting and important to find that the chief results of the exudative process (syphilitic) *had been aggregated around the roots of the nerves.*"

In connection with the syphilitic history of the following case there were remains of iritis and keratitis. There was also malformation of the teeth. The history of this patient's mother's pregnancies—eleven children, and six deaths soon after birth—is also suspicious.

CASE LXXIV.—*Paralysis of the four limbs. Notched teeth, and remains of kerato-iritis.*

"W. A., aged 18, a shop-boy, was admitted into St. Thomas's Hospital under the care of Dr. Barker, on Oct. 3, 1860. He was an intelligent, sharp-looking boy. His history was that one month ago he first found numbness in the tips of the fingers; this gradually went up the arms; about the same time he had numbness in the toes of both feet; this extended up the legs, and he could not feel with his hands nor his feet. For a week or ten days before the numbness he had severe headache, 'which kept him awake at night.' He had been deaf some years. Both pupils were irregular. His teeth presented in a very characteristic form the appearances produced by hereditary syphilitic taint. He could not stand, sit up, or move the arms and fingers. No sensation in the arms and fingers, nor in the forearms. Sensation was slight in the lower extremities. The intercostal muscles would not act. He had no power over the bowels or bladder. After a short course of anti-syphilitic treatment he was discharged much improved, being able to use his arms, hands, and fingers."

The following case is one, which is very interesting as a crucial test of specific treatment over what must have

been a serious lesion of the cerebral structures, and especially those of general volition.

CASE LXXV.—*Paralysis of the whole body. Constitutional syphilis. Syphilis of the vitreous humour. Mental imbecility. Cured.*

L. P., a man of 32 years of age, sent for me, when I found him exhibiting the following symptoms:—He was paralysed in all his limbs, but not so much as absolutely to prevent his moving from one room to another. His arms, hands, and fingers were useless. The face was drawn, and had an expression of feebleness. His memory, and mental powers generally were much impaired. His utterance was muffled and indistinct; his tongue suffered from the general disturbance of the nervous centres. His history was as follows:—Ten years previously he had suffered from chancre, given to him by an infected woman. Some time after this, four years as he thought, he had an eruption, which from his description must have been a vesicular syphilide. It appeared on all parts of the body, from the scalp to the feet. During its existence he had ulcerated throat and mouth, with growths on the anus. The eruption did not leave him completely for upwards of two years, remaining at the back of his knees and thighs. About this time his memory failed him, and his power of mental application also. Gradually his sight became defective, and he was very much troubled with *muscæ volitantes*, or black spots and films, floating before his eyes, so much so as sometimes to prevent his reading. During the last three years he has had frequent attacks of weakness, with the sensation of "pins and needles" in his arms and legs. About a year ago he felt himself threatened with twitchings, and paralysis, which gradually increased, until he reached the serious condition in which I found him.

I felt no doubt about syphilis being the cause of the symptoms described, and at once administered anti-syphilitic medicines, which restored the patient to health in about five months, when I dismissed him cured.

AMAUROSIS.—This is a disorder which is now for the first time attracting some attention, with reference to its being classified amongst the phenomena of syphilis. That the eye is one of the first organs to suffer under the influence of the so-called secondaries, is now settled beyond all dispute by the investigations of a large number of able observers, who have been working of late years with great assiduity in the field of constitutional syphilis. The ophthalmoscope has furnished a medium of investigation of inestimable value in diseases of the eye; and, in addition to its being a direct guide to the exploration of the vitreous humour, and the vessels of the retinæ, the condition of the optic entrance and the integrity of the optic nerve are ascertained. It is in the examination of the latter, that so much light has been thrown upon the local causes of amaurosis, and especially upon those changes which the nerve undergoes when entering the eye.

"In reporting on affections of special sense, we are often at a loss to know whether the defect of vision is due to syphilitic disease of the brain, or to lesion of the apparatus of the senses. For instance, in a case of amaurosis, when the cornea is clear and the iris bright, we are not sure whether it is due to apoplexy of the fundus, local inflammation of the choroid, or whether the slighter defects of sight which might be called incipient amaurosis are not due to some dioptric defect, which the patient, being ill, is unable to overcome as he could when in health. This of course can by the proper means be ascertained, and by the ophthalmoscope most of the difficulties can be cleared away. In a very great majority of cases of amaurosis, something visibly wrong in the fundus is

found by the ophthalmoscope. In the cases due to syphilis there is that condition of the optic disc—white and anæmic—which is now recognised as common. Before the introduction of the ophthalmoscope it was a frequent practice to subject amaurotic patients to a course of mercury, and in many instances with success. The reasons stated for giving mercury in such cases were, that there was thickening of some of the membranes of the brain, or effusion pressing on the optic nerves. Very likely in many of them there was syphilitic choroiditis, so that the amaurosis got better, because the syphilis was cured. But in cases depending upon atrophy of the optic nerves, which condition—before the introduction of the ophthalmoscope—it would have been next to impossible to diagnose, it is more likely that, as a rule, a course of mercury would have done harm. Yet, as the following cases will show, this form of amaurosis does sometimes occur in connection with syphilis, that being the indirect cause of the blindness, producing it by setting up eccentric irritation from some organ not connected with the optic tract."*

The following is a case which occurred in the Metropolitan Free Hospital:—

"Case LXXVI.—*Atrophy of the optic nerve. Acquired syphilis. Necrosis of the frontal bone.*

"Sarah B., aged 26, was admitted under the care of Mr. Lane for necrosis of the frontal bone, and complete blindness. The history of the patient is briefly this:—She said that the man with whom she had been living for seven years 'gave her the disease' during her first pregnancy. She had had secondary symptoms, and on her body were the scars of old serpiginous ulceration. For twelve months she had had necrosis of the left side of the frontal bone, and little

* Report by Drs. Hutchinson and Jackson.

above and implicating the frontal laminæ, a piece of dead bone about the size of half-a-crown being exposed. Blindness came on suddenly about five weeks after her last confinement. She soon became quite blind, and asserted that she could not even see the light. She said that her sight before had been very strong, and that she never had inflamed eyes. The pupils at the time of her admission were much dilated, and not affected at all by the light of the ophthalmoscope. There was no corneal opacity, and no traces of adhesion of the iris. The optic discs were quite white, and the vessels were small. The rest of the fundus looked as red as natural."

Whether the irritation proceeded from the disease of the cranial bone, or from some disease within the cranium, is perhaps doubtful. *Whatever it may have been, it was, no doubt, the result of syphilis.* It could not have been a tumour.

The following case is so apposite that I select it from my records for this place, as an accompanying illustration, the symptoms in the main being almost precisely what those of the last one were:—

CASE LXXVII.—*Amaurosis, with complete blindness. Ulceration of the throat. Condylomata. Cured.*

This patient, aged 38, sent for me in the month of May, 1867, to consult me about her sight, which she said was completely gone. On investigating her case I obtained the following history:—She had been married sixteen years. Her husband was a sea captain, and had infected her about ten years previously. She remembered having had ulcers on the organs of generation; and a very bad throat, which lasted for a long time. About five years after those symptoms had left her, she had an eruption on her face and body, which I considered from her description to have been a vesicular syphilide. It was accompanied by what she

called piles, but which were doubtless condylomata, from the description she gave of them. At the same time she had ulceration of the throat and tongue. These symptoms remained for about two years, and were treated with mercurials. Her sight began to fail her soon after this. When I took her under my care I found that the pupils were considerably dilated, and afforded a complete exploration of the interior of the eye by means of the ophthalmoscope. On applying the instrument to the eyes its light made little or no impression on the motions of the iris. The optic discs were white, and the vessels less distinct than in the normal state. The optic entrance appeared partially occluded, as though slightly compressed. My diagnosis was that there was neuroma (syphilitic) of the optic nerves in some portion of their course, which by pressure produced paralysis and amaurosis. I also considered that there was no other lesion than the syphilitic one present to account for the phenomena before me. The patient was much attenuated, and complained a good deal of headache. Her nights were also restless and unrefreshing. I determined unhesitatingly upon putting her under a course of specific treatment, and was gratified on seeing that improvement set in immediately. On examining the eye occasionally, I discerned the gradual change for the better in the retinal vessels, and in the optic discs. In about three months the patient's sight was restored, and her general health established.

Amaurosis is a common disease, and is in many cases the consequence of the syphilitic taint. There are several modes in which the lesion may exist in the optic tract, sufficient to produce partial or complete obliteration of the sight. It may be pressure of a tumour on the base of the brain; there may be a deposit within the orbit; or the nerve itself may be injured in some part of its course. Any one of these causes will suffice to produce the phenomena involved in amaurosis,

but they will all yield readily to specific treatment. It is remarkable that the specificity of anti-syphilitic remedies—as they are now known to the profession—should be so marked, while we are met with almost insurmountable difficulties in treating the same disease when idiopathic, and not complicated with syphilis. Before the advent of the ophthalmoscope, we were not aware of the extent and character of the lesions affecting the eye, but since then we have become conversant with many interior developments which had not been suspected. This fact has led to a more complete control over some of the worst diseases of the eye.

The symptoms of the disease are generally slow in their development, and usually commence with mistiness in the vision; bright lines, and large spots are also frequent premonitions. The pupil soon becomes distended and fixed, and an apparent vacancy covers the countenance. There are generally with amaurosis other manifest phenomena of syphilis to guide to its diagnosis. Zambuco, Graefe, Galezowski, Hutchinson, Jackson, Hill, and others, have conducted exhaustive investigations on the syphilitic lesion of the nervous system, with remarkable success, so that its existence is placed beyond doubt, and demands the notice of the whole profession.

CHAPTER XII.

COMMUNICATED AND HEREDITARY SYPHILIS.

SYPHILIS COMMUNICATED BY VACCINATION.—I now approach a question which will, I am aware, meet with considerable criticism, and one that has already been the cause of earnest and prolonged discussion; and I at once announce at the onset my firm belief that syphilis is in very many instances communicated by means of "child's vaccine lymph." This opinion I have deliberately formed, and as firmly defend. The evidences of such being the case have, in my practice, been numerous and well pronounced; so distinct indeed that no doubt whatever could exist as to the nature of the eruptions, and the certainty of transmission. Many of my medical confrères in Melbourne hold an opposite opinion, but notwithstanding the respect in which I hold most of them, I am compelled in the interest of truth, science, and the common weal, to differ *in toto* from the commonly received opinion; and alone, if necessary, I am prepared to stand out in defence of the statement as to the possibility of transmitting syphilis by means of vaccination.

It is a subject which hitherto has been treated with unpardonable levity and recklessness, and the very fact of

the disbelief in syphilitic contamination by vaccine, has led to the utter ignoring of the dangerous concomitant that may lurk unseen in the otherwise useful lymph. It is suggestive of the most painful considerations to witness the mode in which the public vaccination of the people has been conducted since the advent of the notorious *Avonvale* to our shores. I have nothing to do with the follies that allowed the small-pox to be introduced from that vessel, but I reserve to myself the right to express my opinion freely on the method of re-vaccination, which has been so generally and emphatically enforced by authority. That indiscriminate re-vaccination is irrational and mischievous, as now conducted, I have no hesitation in asserting, notwithstanding the high authorities which may be quoted against me by the advocates of whole-sale and universal vaccination from "child's lymph!" I admit that re-vaccination may be called for, but wherever it is, some attention should be paid to the source of the lymph, including the history of the constitution supplying it.

It is said by some that they never see syphilis com-municated by vaccination; my answer to such observers is, that they do not know syphilis when they see it; for many of the so-called bad arms after vaccination, which have not been suspected by the vaccinator or by the parents, have in my opinion been positively syphilitic. Nor is it to be wondered at by those who are capable of discerning, that syphilis is transmitted so frequently by vaccination, when we consider the extreme carelessness with which lymph is frequently collected by those whose duty it is to conduct public vaccination. Children are brought in-discriminately into the government office, and are at once hurriedly vaccinated from the arms of others, of whose history nothing whatever is known, nor even any inquiry made. Because a child is found to be plump, and in fair average health, lymph from it is supposed of necessity to be suitable,

and no other precaution is taken. The history is not for a moment brought under observation, although were the truth always known, the plump and desirable child which may be specially selected in the office as the fountain of lymph for others, may have had a syphilitic father or mother. That this is not an imaginary case, any vaccinator who will take the trouble to pursue the subject, in a spirit of candid observation and inquiry, will frequently find; and, unless he belong to that section of the profession—which I regret to say is still large—that will not believe in syphilitic transmission by vaccination, he will hesitate before venturing upon so hazardous an experiment as selecting the little plump progeny, without careful examination of both it and its parents.

There is, to my mind, the wildest temerity in a person belonging to a learned profession, who is supposed to be conversant, as far as science has led us, with the laws of life, and to have learned enough to teach him caution in pronouncing a limit to vital operations, to deny the possibility or probability of this or that process in physical transmission. In these days, when forces of nature formerly unknown or occult are being daily discovered and understood, and when we admit that the processes of vital change are directed by imponderable agencies, it is eminently unscientific to question the possibility of a syphilitic parent transmitting the taint to the child, and through the child to others. I am at a loss to know by what parity of reasoning the non-communication of syphilis can be maintained, in the face not only of the vaccine transmission itself, but in defiance of the actual phenomena in syphilitic form that are so often to be met with in combination. Why should vaccinia be possible by transmission, and not syphilis, or any any other virus or ferment? It may be, and is doubtless the fact, that the mere active force of the vaccine over-

comes a feeble syphilitic taint, and may keep it in a latent condition, thus exhibiting a pure phenomenal vesicle without any foreign admixture. This is the case in thousands of instances; but this depends upon the balance of force between the syphilitic constitution, and the activity of the vaccine lymph.

Many circumstances must necessarily operate to determine the nature of the results that may follow vaccination; for we see that the same surgeon will vaccinate a considerable number with equal care from the same vesicle, yet have by no means similar phenomena. In some of his cases there may be no reaction whatever, the slight abrasion or scratch healing up at once, and no change on the arm occurring. In others he will have the vesicle well defined, with no very extensive efflorescence or redness, and not very much constitutional disturbance. In many other cases, however, he will be called upon to observe very serious alteration in the general health of the patient, considerable fever, and alarming tumefaction of the vaccinated arm, with great pain and sleeplessness. So far indeed are the phenomena sometimes from the discreet form of vaccinia, as to create considerable anxiety touching the course that the eruption will pursue. Amidst all this variety of phenomena, who can tell what are the causes which direct the vaccine virus in its influence on the constitution? Who can predict what will be the result of any individual puncture into which lymph may be introduced? Where then is the reasonableness of asserting that lymph passing through a constitution that has its tissues tainted by the venereal virus, does not and cannot carry with it to its embouchure in the arm some of the diseased element? To argue against the probability of such contamination of the lymph, is unreasonable enough; but to deny or question its possibility, is in the highest degree unscientific.

We have also to bear in mind that impure lymph may

produce in a child a very fine and well-developed vesicle, having no feature beyond that expected as pure, and characteristic of vaccinia; but this may occur because the constitution of the child or adult is not readily susceptible to the operation of syphilis. It is very well known that constitutions vary in susceptibility with reference to syphilis, some persons being able to venture, even knowingly, upon an impure coït without fearing or contracting disease; others are acutely sensitive to its influence, and will be tainted by contact in almost any form. An infant may therefore escape with perfect freedom from impure lymph, without any external phenomena; but, what is equally true, and perhaps paradoxical, it shall transmit the syphilitic taint from its own apparently pure vesicle to another child, who shall exhibit undoubted indications of syphilitic inoculation, and primary or secondary symptoms shall appear in the arm and other parts of the body.

By way of sustaining the position I have taken, being one that I have held for many years, I shall give the following extracts from the *Lancet,* which fully bear me out. In the number of November 24, 1866, the following occurs:—"Two medical practitioners having drawn the attention of the Academy of Medicine (Paris) to a reported outbreak of vaccinal syphilis in the department of Morbehan, MM. Depaul and Roger were despatched on the part of this body to investigate the matter on the spot. From their report it seems that a midwife, residing at Grandchamps, received on the 20th of May some vaccine lymph in glasses from the prefecture, and next day vaccinated with it two infants, by name Mahé and Noroy, both apparently in excellent health. A week afterwards she vaccinated from Noroy's arm a strong healthy child, three months old. As it was intended to vaccinate several from this last, six punctures were made in each arm, all of which were followed by pustules. On the

3rd, 4th, and 5th of June the midwife took this child to various communes, and practised numerous vaccinations from its arms—more than eighty as she averred. On the 12th of June further vaccinations were made from two children of the first series, and by the 9th of July the two practitioners who drew the attention of the Academy to the circumstance had *met with thirty infants, from amongst those of both series, who manifested well-marked signs of primary and secondary syphilis. They also believe that the lymph supplied by the prefecture was the origin of all the mischief.*"

Here it will be seen that the midwife had taken her lymph on her vaccinating tour from the arm of the *second* course; that neither the two first children who were vaccinated from the lymph of the Prefecture, nor the very fine child chosen as the special fountain of lymph which followed them, gave the slightest phenomenal indications of syphilitic disturbance. But how remarkable that there should have been so large a number as thirty infected by the syphilitic taint from this very healthy child of the *second* course! The medical commission, after making due inquiries, found that the taint was in the lymph of the prefecture, not in the parents of the children vaccinated by it. The investigation was naturally exhaustive in its character, and the conclusion must have been forced upon the commission, both by the entire history of all the individuals concerned, and by the physical indications presented in the eruptions themselves. Nothing could be more conclusive than this report; and it sustains in every point the argument that I have advanced in defence of the position I have assumed. The official report handed in by MM. Roger and Depaul, the two commissioners, was couched in the following terms:—"1. Several of the children whom we have examined were undoubtedly suffering from secondary syphilis. 2. We see no way of explaining this contamination but *by vaccination*. 3. As to

the origin of the virus, it is very probable that the poison is traceable to the lymph, preserved between two pieces of glass, supplied by the authorities. As primary symptoms were also observed amongst the children, M. Ricord begged the commissioners to insert that fact in their report, which these gentlemen agreed to do."

As there is so much scepticism on this subject, I must bring to my support the assistance of other authorities having equal claims to our attention with those just named. M. Divergie related, at a late meeting of the Academy of Medicine at Paris, the following case :—" A boy, aged 15, was admitted into the St. Louis Hospital on the 11th of March last, under Mons. Divergie. The lad had seven months before been a patient at the Children's Hospital of St. Eugenie for a slight pleurisy. About ten days after he was received into the latter hospital the boy was vaccinated from a child at the breast, with two punctures on the right arm. A certain number of other children were vaccinated on the same day, with lymph from the same child. The lancet was quite clean, and habitually used for this purpose. Three days after the operation a small brownish crust formed on each punctured spot, and the resident medical officer declared that the lymph had not taken. The crust, however, grew larger, the skin turned red, but the boy never complained, and his arm was not examined on leaving the hospital, although the redness had not only persisted, but taken a larger diameter without any uneasiness being experienced. Five or six weeks afterwards the patient perceived an eruption on his arms and thighs, and a thickening of the skin around the red patch of the arm. Toward the third month another eruption occurred ; the boy became hoarse, and complained of pains in his bones. When admitted at the St. Louis Hospital on the 11th of March the patient presented papules, and tubercles all over the body, with eliptic impetigo

of the upper lip, three hard and rather recent tubercles on the prepuce, and enlarged glands in the left groin. In the neighbourhood of the vaccine punctures a round patch was perceived, where the skin was hard, thick, uneven, and of a dark red; in the right arm-pit there were large and very hard glands, the left axilla being quite sound. Arms quite healthy. Anti-syphilitic treatment was had recourse to, and in six weeks the impetigo was gone, the tubercles being reduced to a dark stain; the skin around the vaccinated stain had become soft, very slightly discoloured, and had resumed the normal thickness. Every symptom points to transmission of syphilis by vaccination."

In this case we see the illustration of the doctrine laid down above in reference to the comparative force of the two abnormal elements, syphilis and vaccine. In this boy's case it is manifest that both must have been in existence in the lymph that was used. The active principle of the syphilis was clearly more intense in molecular activity, and was consequently responded to by the boy's constitution, while the weaker virus remained inoperative. The reverse of this might have been the case, as it undoubtedly is in the majority of cases. Then, again, there is the degree of receptivity of constitution to be taken into the account, as was before stated; thus it was quite possible for the infant to be unscathed, as in the instances of the children first vaccinated by the above-mentioned midwife at Morbehan, in France, and yet for those subsequently vaccinated to yield to the influence of the lurking virus, and to exhibit both primary, and secondary syphilis.

It is to be lamented, for the sake of science and for sanatory reasons, that there is still such obdurate scepticism on this vital and momentous question. Too much importance cannot possibly be attached to it, for it affects the health of the whole community. In this colony

especially, where—considering the number of our population—syphilis prevails in a palpable form to a greater extent than anywhere else in the British dominions, there ought to be the greatest vigilance and the most ample precautions taken; yet there is, I am sorry to confess, the most stoical indifference to the question of vaccinal syphilis.

As a writer in the *Lancet* very pertinently remarks, "the fact is, that we cannot at present set any precise limit to the action of the syphilitic virus;" hence it is folly in any legislature to authorise a course of procedure which permits its possible distribution, without the most rigid regulations to prevent it. In my experience I have gathered overwhelming evidence to render it perfectly conclusive to my mind that, as vaccination is now regulated in this colony, we are in danger of sowing syphilis broadcast, and producing frequently, but unnecessarily, the most serious consequences. The recent enthusiasm in reference to re-vaccination which followed the invasion of small-pox into the colony, has been fruitful in illustrations of my arguments touching this question. Several adults from the country, and amongst them some well-known squatters, have visited me for advice touching unexpected and severe eruptions of various kinds that have immediately succeeded their re-vaccination. In all these cases I have been able to discern distinctly primary or secondary syphilis. In some there was the actual Hunterian chancre on the arm, instead of the pure vaccine vesicle. In one or two of the cases there could not be the least doubt of its being transmitted by means of re-vaccination, the parties themselves never having had any taint of the kind before, nor to their knowledge had they ever had impure coïtus. Children have been frequently brought to my surgery with primary and secondary syphilis, generally the latter, whose mothers affirmed that up to the time of their being vaccinated there was no eruption what-

ever on the children. In the case of some there has been the hard, indurated, and indolent tubercle, with a lardaceous secretion, that left no doubt whatever of the real mischief occasioned.

Dr. Buchanan, physician to the Dispensary for Skin Diseases, Royal Infirmary, Glasgow, in a paper read before the Glasgow Medical Society, 20th December, 1864, gave cases illustrating—1st, the extreme contagiousness of infantile syphilis; 2nd, the difficulty of making an accurate diagnosis when syphilis happens to be complicated with scabies; and 3rd, the difficulty of determining, in many cases, whether infantile syphilis has been communicated by vaccination or otherwise. A case especially apposite to our present discussion is the following:—

CASE LXXVIII.—*Infantile syphilis communicated by vaccination. Syphilitic cachexia. Death.*

"R. M., aged nine months, I first saw on the 13th of October, 1863.—The nates and scrotum were then covered with erythema syphiliticum; while erythematous patches, acuminated papules, and flattened papules were circinate in form (as in mild cases of psoriasis circinata), especially on the flanks of the body and external aspects of the thighs. The coppery colour of the *whole eruption was eminently characteristic of a syphilide.* The lymphatic glands were everywhere engorged; and the child had suffered from coryza, with snuffling, since the commencement of the cutaneous symptoms. The eruption was unattended with scratches, or other signs of uneasiness that would indicate itching.

"It seems that the child was quite healthy till between three and four months of age, when it was vaccinated. The

operation was performed by a neighbouring woman with a needle. A series of punctures were made in two places, in the first of which the inoculation succeeded, the sore afterwards healing naturally, and leaving a characteristic cicatrix. A fresh and larger supply of matter, taken with the same needle from the same child, was used for the second inoculation, and here the vaccine pustule was long of healing. It did not heal for five months, and the sore was indurated. One month after vaccination spots appeared on the child's body, beginning at the anus; a chronic snuffling in the nose commenced, and a fissure broke out on the lips, where it remained for about a month. Shortly after this had healed the mother noticed a sore on her nipple, which developed into an obvious chancre. She had also other syphilitic symptoms. The child waned under syphilitic cachexia—such as I have described elsewhere—and died.

"The child from whom the vaccine lymph was procured was a strong healthy infant. The father was healthy and untainted apparently. The mother was a strong woman, was without any existing symptom of syphilis, but she had given birth to three dead children—a very suspicious circumstance, as she confessed that when a girl she had 'a dose of something.'" Dr. Buchanan hesitates slightly in pronouncing on this case, but taken in conjunction with others there can be little doubt that the syphilis was transmitted, being called into activity from its latent state by inoculation into a susceptible subject.

Dr. Parola has mentioned in his work *On Doctrines connected with Vaccination*, a case reported by Tassani, of Milan, in which a boy—whose father had suffered from secondary sores on the scrotum—was vaccinated from a healthy child. From the vesicle of this boy *fifty-six* children were vaccinated; out of whom *thirty-five* were in a few months syphilitic, and had diseased their mothers. On the other hand, it should be

noted that lymph from eight of these thirty-five syphilitic children was used to vaccinate a second series of thirty-four, and none of the latter showed any syphilitic symptoms. Another case (which was brought before courts of justice, and appeared in the *Medinische Zeitung* of Berlin) runs thus: —"In 1846 many re-vaccinations took place in the town of K——, where a surgeon re-vaccinated about ten families on account of an epidemic of small-pox, and the punctures, in three or four weeks, degenerated into syphilitic ulcers, followed soon after by secondary eruptions. The vaccinator, a veterinary surgeon, was sentenced to two years' imprisonment, and a fine of fifty thalers. Experiments have been undertaken by Pillon, Boucher, Ceccaldi, and Lecoq, which prove the transmission of syphilis by vaccination."

In the *Australian Medical Journal* of May, 1869, the following appeared which bears upon the question with considerable force:—"It was lately mentioned by a Castlemaine journal that 'several persons in the township were suffering from the effects of re-vaccination, although it was some time since the operation was undergone, and the pustules on the arms healed up. Eruptions had appeared on other parts of the body, and in one case the re-appearance of pustules had been on the throat and palms of the hands, attended with considerable pain.'" On inquiry, I came to the conclusion, from the induration and special characteristics, that it was a case of transmitted syphilis. It is to be regretted that there was no official report on the matter.*

* ALLEGED DEATH THROUGH VACCINATION.—On July 19, Dr. Lankester held an important inquiry at the "Brookfield Arms," Highgate New Town, relative to the death of William, infant son of Mr. Emery, ham and tongue dealer, of Great Portland-street, Marylebone, who, having been vaccinated in accordance with the law, was alleged to have died through the introduction of deteriorated or impure matter into the system in the operation. The inquiry resulted from one held a few days prior by Mr. Bedford, the coroner for Westminster, in which the same allegation was made, both children having been vaccinated at Dr. Allen's surgery, 11 Soho-square. The verdict of the jury in the latter case was one of natural causes, Dr. Clark stating that the death was due to erysipelas consequent on vaccina-

I am prepared to meet with adverse criticism on this portion of my work, and to encounter no very measured condemnation from those who do not agree with me, for the propagation of so unpopular an opinion; but feeling as I do that the facts of daily experience sustain me, and compel me to acknowledge that syphilis is transmitted by vaccination, I unhesitatingly aver my adhesion to the theory, and shall not shrink from the consequences of my enunciation. I have the satisfaction of knowing that nearly all modern physiologists have now clearly demonstrated that tuberculous diseases, such as consumption, &c., can be communicated by vaccination, and that by a parity of reasoning syphilis also can be transmitted in the same manner; it therefore remains for those who hold the opposite doctrine to show by what

tion. Mr. Emery was present at that inquest, and, having lost his child from the same cause, pressed for an inquiry; and in conformity with his wishes, the body was exhumed. The coroner said the inquiry related not merely to a single death; it was really an inquiry into a system, namely the Compulsory Vaccination Act. He remarked that during the last century forty-five millions of persons died from small-pox; but in the present century, through the introduction of vaccination, the number of deaths was exceedingly small, showing that vaccination was beneficial in saving life in the community. The evidence went to show that the deceased had been a fine healthy child, *and that death resulted from erysipelas caused by vaccination.* The jury returned a verdict accordingly. In remarking upon the vexed question of vaccination, a contemporary says:—"There are thousands of families in which the belief is entertained that vaccination injures a child's constitution, is ineffectual against an attack of small-pox, and introduces a disease where none existed before. *For each of these opinions there are to be found numerous corroborative facts.* The careless way in which vaccination is too often conducted, especially upon the children of the poor, must necessarily render it useless as a prophylactic; but, worse than all, *it does actually impart disease from an unhealthy child to a healthy one.* If all parochial medical officers, or 'cheap' doctors, took the trouble to use pure vaccine, and *to ascertain well the state of health of children before vaccinating from one to another*, there would be less actual basis for the increasing unpopularity of Jenner's system than now exists. But when all this is said, the fact remains that since Jenner's discovery small-pox has ceased to be the frightful scourge in England which our forefathers found it; and that in nine cases out of ten, or more, it does really act as a safeguard against the disease. This view of the question ought to be made familiar to the general public. *At the same time the Government might do great good by taking some steps to ensure the proper discharge of the important duty undertaken by vaccination officers.* To pass a law compelling parents to submit their children to the operation is well enough so far as it goes, *but there ought to be some security that vaccination is not made a vehicle for transmitting disease.*"—*European Mail*, August 13th, 1869.

law of special selection syphilis should not be capable of hereditary or direct transmission by means of secretions from contaminated bodies, and if by any secretions, why not by all.

In the *Australian Medical Gazette* I observe a brief notice of a paper read before the French Academy of Medicine, "ON THE PROPAGATION OF CONSUMPTION BY INOCULATION WITH THE EXPECTORATION OF CONSUMPTIVE PATIENTS."

"M. Villenieu has laid the results of some experiments on the inoculation of animals with the expectoration of tubercular patients before the Academy of Medicine.

"1st. The expectoration, diluted with water, was injected under the skin of four rabbits, and in three of them tubercular disease was excited.

"2nd. A piece of ligature silk, saturated with tuberculous expectoration, was passed through the flesh of five rabbits, and three became affected with tubercular disease.

"3. The expectoration slowly dried, and then introduced under the skin, produced no effect; but when rapidly dried, disease was produced in three rabbits inoculated with it. The application of the expectoration, dried in the last manner, to the skin, caused death in one animal; and blown into the trachea through a small opening, two animals out of four became diseased.

"Feeding rabbits and fowls on tuberculous matter produced the disease in several."

Dr. Aitken gives the following as "vehicles of contagion":—"1. The ulceration of the female nipple inoculating the mouth of the healthy infant born of healthy parents. 2. The *blood* of those suffering from acute secondary syphilis inoculates. 3. A female otherwise free of syphilis may become contaminated during the gestation of a fœtus begotten of a male who, at the time of the fruitful connection, was himself alone suffering from contamination

of the system by syphilis in some form of active secondary phenomena."

If then it be true that the virus of syphilis is capable of being transmitted by the sputa and by the blood, as many have asserted after rigorous experiment, I see no reason why it should not be passed from one body to another in the lymph of a child. Believing, as I do, that syphilis is very freely transmitted by vaccination in this colony, I hold it to be my duty as a surgeon to enter my protest against the present system of public vaccination. It is reckless and dangerous, and ought by all means to be changed. Some may say that, admitting the theory of transmitting this taint, very few are infected; but it is idle, on such ground as that, to pooh-pooh the necessity for more caution. The statement that very few cases of syphilitic transmission take place, is not in accordance with the facts of the case. The truth is nearer at hand in saying that few men are sufficiently expert to discern it when present in the vaccinated arm. Then, again, few men have extensive opportunities of observation, having few to vaccinate, and not being able at all times to follow up the cases in hand. It is only where large practice furnishes abundant examples, that reliable data can be obtained, and only then when the surgeon possesses patience, and the power of observing accurately. In the public vaccination office there is generally too much haste and indiscriminate selection; hence any records from such sources are intrinsically valueless. There are, however, resources within the power of the profession and the legislature, which would obviate much of the present mischief, and save the public health from the risks which are now run wherever vaccination is performed. A commission of medical gentlemen holding the doctrine of syphilitic transmission by vaccination, would readily furnish directions for more scientific regulations by the legislature respecting vaccination.

As an illustration of the dangers of public vaccination from "child's lymph," I cannot avoid transcribing from the *Medical Times and Gazette* the following report of Dr. Haydon, of Bovey Tracey, Cornwall. He says:—"I was called in the summer of 1843—as the medical officer having charge of the sick poor of the parish and borough of Bodmin, Cornwall—to attend two young children of different families, and living about a quarter of a mile distant from each other. The children were each of them from nine to ten months old. The history of their illness being precisely similar, one description will apply to both. On the first introduction of the compulsory vaccination system, the guardians of the Bodmin Union entered into a contract with one medical man to perform the vaccinations for the whole Union. This gentleman, in the discharge of the duty of public vaccinator, attended at the appointed room in Bodmin, and on that particular day vaccinated these two children, taking lymph from the arm of a child he had vaccinated the preceding week. He appeared (from the most careful personal investigation which I made of this matter at the time) to have vaccinated no other than those two children on the day in question, and to have taken lymph from no other child but the particular one alluded to. Between the second and third week after the vaccination had been performed, I first saw the children. They were literally covered with large phlyzacious* pustules; the irritation was most intense, and between rubbing and scratching, the head and nates were raw and ulcerated. No treatment had any avail, and both these poor children died a few days after I first saw them. Being at once impressed that the disease of these children was syphilitic, I made the most careful investigation I could

* NOTE.—*Phlyzacious.* Pustular; having the eruption raised on a hard circular base of a vivid red colour, and succeeded by thick, hard, dark-coloured scabs.

into the whole matter. In both families there were other older children perfectly healthy. The parents in both cases were labourers, of most healthy appearance and of good character; were then and ever had been free from syphilitic taint. The respective mothers of both children carried their infants themselves to be vaccinated; they saw the operation performed, and they saw the child from whom the lymph was taken; they told me the name of the child, and where it lived. As medical officer of the Borough of Bodmin, this child and its mother were both known to me. The mother had been, and in fact then was, on the town, and I had attended her for syphilis. At that very time she was diseased. I examined her child; it had, as far as I could see, no primary syphilitic sores, but it had numerous syphilitic eruptions about its body, pustules about its nates and trunk, and copper-coloured leprous spots. The child was between two and three years old, and under specific treatment it recovered. The public vaccinator lived at a distance from Bodmin, and could not have known the character of the parties from whom he took the lymph."

I may remark here that it was a source of astonishment to me, during my connection with the Melbourne Hospital, to witness the number of persons amongst the out-patients of that institution who had been tainted by vaccination, and exhibited distinct primary and secondary syphilis. Although I have furnished considerable evidence of vaccinal syphilis existing, I shall supply the following extracts from an able work on syphilis.* They corroborate conclusively the opinion which I venture to hold in reference to the communication of syphilis by vaccination. The writer says:—"Henry Lee, in his work on the inoculation of syphilis, and in the *Lancet* for 1863, has related some observations collected by Viennois in support of the doctrine. Since then Lancereaux has collected

* Berkeley Hill.

nineteen observations of syphilis propagated by vaccination. They include 351 individuals vaccinated from syphilitic children; 258 of them were inoculated with syphilis —the rest escaped." The most remarkable outbreak of syphilis by vaccination, of late years, is that which occurred at Rivalta, near Aqui, in Piedmont, in 1861. Dr. Pacchiotti, of Turin, who was employed by the Italian Government to report on the attack, has published an account of it. The facts are shortly these:—"In May, 1861, an apparently healthy child named Chialrera was vaccinated at Rivalta, with lymph sent from Aqui for the purpose. Ten days after this vaccination (June 7th), 46 healthy children were vaccinated at one sitting from this child. Again on the 12th of June 17 other healthy children were vaccinated from one of the 46. *Thirty-nine* (39) *of the* 46 *received syphilis* with the vaccine disease, and seven of the second series of 17, *making a total of* 46 *out of* 63 *children in a mountain village simultaneously inoculated with syphilis.* Some months elapsed before the vaccination was suspected to be the cause of the children's bad health. By the 7th of October, when attention was drawn to this spreading disease, six of the 46 syphilised children had died, without receiving any treatment; fourteen were recovering; and three were in a precarious condition. Twenty-three were dispersed through the country, and their condition was unknown until further researches traced them out. In addition to the children, 20 women suckling them were inoculated with syphilis from the children. Through the mothers the disease had reached some of the husbands, and even the elder children of the different families."

"Another authentic instance is that where a German doctor (Hübner) was tried and punished for having in 1852 inoculated 13 children with vaccine lymph from a syphilitic child. Of these, five escaped entirely; in the rest the points of inoculation became slow-spreading ulcers, and

three months afterwards general eruptions appeared over the body." *

Every unprejudiced mind, after perusing the above undoubted citations, will at once see the propriety and absolute necessity for great care and discretion in conducting vaccination. These cases are manifestly crucial, and leave nothing to be said in opposition to the enunciation that syphilis is communicated by vaccination. I advise every mother who presents her child for vaccination to make inquiries in reference to the purity of the lymph used for her child, and to take every precaution in her power under the present bungling system, to secure her infant against contamination. The same admonition is given with equal emphasis to all persons who wish to be re-vaccinated, that they should urge their medical attendant, or whoever may be employed to perform the operation, to see that the lymph be judiciously and carefully selected. In the meantime this is all that can be done by way of security. As affairs now are, certainty of purity in the lymph is scarcely possible, but every precaution should be taken to neutralize the blundering of the present system.

During the writing of this work I was glad to find, amongst the medical annotations of the *Australian Medical Gazette* for the month of May, that the question of animal vaccination had been discussed, and the mode adopted on the continent of Europe described. Amongst the advantages set forth as following this plan are, "that in the event of any sudden demand arising for vaccine lymph, animal vaccination ensures a more plentiful supply; that the lymph obtained by animal vaccination is more energetic, as evidenced by its making a greater impression locally, as well as on the system at large; and that vaccination from the heifer ensures freedom from contamination with any extraneous virus, *such as syphilis, struma,*

* *Lancet.*

and consumption." The procedure of Mons. Chambon is given as follows :—" Arrangements are made by which a succession of heifers or calves about the age of five months is provided for. They are carefully stabled, and fed upon the diet to which they have been acccustomed. The animal to be vaccinated is placed on its left side, and fastened down upon a table of convenient construction, and the operator proceeds to shave with a dry razor the right side of the abdomen, commencing from the udder, and over a space of about ten inches long by six or eight broad. The calf which is the vaccinifer is laid also upon its left side, and fastened down, and the fluid is obtained from a pock by forcible compression of its base by a pair of spring forceps, and the result is the rupture of the pock, and the abundant flow from it of a quantity of thickish, sulphur-coloured fluid, which is taken upon the lancet, or into capillary tubes for the purpose of preservation. The animal on the table is vaccinated upon the shaven surface by puncture in sixty or eighty places, and means are adopted to prevent subsequent injury by biting or licking. Pocks, which finally attain the size of large human vaccine pocks, speedily begin to rise, and are used for the vaccination of children from the fourth to the sixth day. Subsequently to this the vaccine they contain is found to be less active, but still sufficiently so for the vaccination of another calf, for which the pocks left unopened are therefore used on the seventh or eighth day. The grounds upon which the practice of animal vaccination has been advocated are mainly three, viz.—the quantity of the virus which may, so to speak, be manufactured; its energetic quality; and its purity."

The experiments and observations of Mons. Chambon are such as ought to be taken into consideration, as they open up the question of reform in our mode of conducting vaccination. His plan is in a great measure in unison with one

I have long thought desirable, and which I intend to suggest in the proper quarter. The talented editor of the *Australian Medical Gazette*, from which I have taken this extract, does not fully accord, I think, with the principle involved, nor the practice recommended; but I hope that further consideration will lead him to modify his opinions in the direction that M. Chambon has pointed out.

So fully has the necessity for avoiding the possibility of communicating syphilis by means of vaccine lymph impressed itself upon the profession and the authorities on the continent of Europe, that in Belgium, Italy, and France "animal vaccination" has been established by law. A reference to this was made in the *Lancet* of the 26th October, 1867, where it describes the municipal council of Naples as having signed a contract with Dr. Negri, that he should "furnish sufficient lymph, transmitted from one heifer to another, to supply the wants of public vaccination in Naples; *no other lymph is to be used.*" Last year the same system received the sanction of the Belgian Government, and an animal vaccine establishment founded. It would be well for Victoria if the same rational and improved method were instituted here by law, and all "child's lymph" vaccination prohibited.

HEREDITARY SYPHILIS.—It is now necessary to enter upon a very wide and important division of this chapter, viz., the very serious influence which the syphilitic taint has when communicated to the mother, and through her to the uterine life of the child. All writers on syphilis are unanimous in the opinion that communicated syphilis is one of the frequent causes of abortion. This circumstance in connection with syphilitic contamination ought particularly to be considered by parents who have by any means received the virus into their systems, as well as by those who purpose entering into the marriage state, and who have been at some time the

victims of chancre or any of the syphilides. This chapter should be perused with grave consideration, involving as it does the great question of marital and parental relationships, with their momentous duties, responsibilities, and issues, so far as the health of the body is concerned. In the consideration of this question are to be learned those terrible lessons of retributive justice which fall to the lot of so many in human society, who have been so unfortunate as to acquire the syphilitic taint, and by the force of circumstances, whether ignorance or otherwise, to transmit it to their partners in life, and thus, by natural union, to their offspring.

This evil is now of vast dimensions, having permeated every section of society, and tainted thousands and tens of thousands of homes. There is also this remarkable character about it, viz., that when once it has invaded the constitution, there is no possibility of predicting whether it will finally disappear, or when it is driven out. Its order of development is unlike any other disease, and it is so erratic and unexpected in its several advents, that it defies calculation as to the period for which it may remain latent. A few months in the one case may suffice to give it activity, and cause it to assume one of its stages, or all of them; and in other instances years may elapse before it bursts into activity, the patient all this time being in profound ignorance of its existence.

There can be no greater injustice committed than for a man who has contracted syphilis at any time to run the risk, by marriage, of causing his offspring to be brought into the world prematurely dead. In the range of my own observations I know several married couples who cannot rear a family from this very unfortunate cause. In some the births are so early as to constitute abortions; those children which do reach the full time being so weakly as to die during the early months of their miserable existence. The

poison so acts upon the blood-current passing between the mother and child, and so seriously affects the placenta, that continued gestation to the full period is almost impossible, and especially so in some constitutions. This subject has for some time forced itself upon the leading syphilographers, and it is now a matter of surprise that this prolific source of abortions has not been more frequently detected. Dr. Campbell, a writer in the *Northern Journal of Scotland*, believes "that when women miscarry at or about the seventh month, and the child is putrid, *we must look to syphilis as the cause*, and that a cure would be effected by giving mercury (judiciously) to both parents." His reason for this belief is, that he has witnessed the occurrence very frequently; and he gives the two following cases in illustration:—"A physician contracted what he believed to be a chancre. Six months afterwards he married. Three children were successively prematurely born: the first lived only a few hours; the second was born between the sixth and seventh month, and lived eight hours; the third labour came on in the seventh month—the fœtus dead and decomposed. No trace of syphilis was observed in either parent. The father and mother were treated specifically, and the next child was born vigorous, and free from any syphilitic taint."

The other case was as follows:—"Seventeen years previous to marriage, a gentleman suffered from syphilis, *which he was assured was cured*, although an impression remained on his part that the complaint had not been completely removed. Both parents were apparently in perfect health. The first child was born in the early part of the eighth month of gestation, was delicate, and lived eleven days. The second birth happened in the seventh month, the infant surviving only an hour and a half. The third delivery occurred in the sixth month, when a fœtus much decomposed was produced. The husband and wife were treated specifically,

and a living healthy child was born at the close of the eighth month."

These cases are forcible illustrations, the first especially, which appears to be as distinct in its history as need be. The latter, however, is not so clearly removed from the possibility of other causes having had something to do with the abnormal parturitions; it does nevertheless harmonise in all respects with cases which I have had under my own notice, and with others that have been communicated to me. Mr. Acton, whose opinion is much respected, does not agree with many other writers as to the extent to which syphilis is responsible for abortion, but he believes it to be by no means inert in reference to gestation. He says—"I believe that syphilis, like many other diseases, *may blight the ovum*, and then it will be thrown off like any diseased structure." There are, as I before remarked, instances where syphilitic parents have had children born at the full period, and in apparently good health. This occurs frequently, but it is equally certain that most of these children exhibit signs of the taint sooner or later. It is also equally true that abortion is in a great many cases the result of the poisonous action of syphilis upon the placenta of the mother, as well as the effect of its continued influence which the semen of the male communicates to the germ at the initial stage. During my connection with the army, I was struck with the number of children brought forth perfectly rotten by soldiers' wives, which could not be attributed to any cause save that of communicated syphilis received from the husbands, amongst whom the disease was exceedingly common at that time.

As in the question of transmitted syphilis by vaccination, so in this one authorities are divided as to the communicability of syphilis by inoculation, and many deny that secondaries can be communicated, except hereditarily. It is said

that the father cannot affect the fœtus through the membranes, although he may, and undoubtedly does, infect the germ at the time of impregnation. That the act of impregnation is the most potent and certain means of inducing hereditary syphilis is now almost universally received without question, and many are the instances that could be put forward as illustrations of this law. The infant at birth may not exhibit the phenomena of infection, but in a short time its skin, and mucous membranes exhibit the characteristic expressions of the virus in activity.

So long ago as the year 1824 the late Dr. Beatty stated his opinion that "married females had frequent miscarriages and dead children, occasioned by a venereal taint, although *no symptom existed to indicate the nature of the cause.* Observation and inquiry ended in the establishment of the fact beyond doubt or contradiction; and it is now very generally understood, and acknowledged by the profession, that the fœtus in utero may be poisoned by the disease existing in the father and mother, although not a suspicious symptom can be discovered in either. Thus this poison, that may be so entirely suspended in its effects, and circulate so harmlessly as not to give any indication of its presence, nevertheless preserves its mischievous qualities in such perfection as not only to be capable of communicating the disease, but of conveying it in its most complete and concentrated form, and endowed with all the virulence it can be supposed to possess; for in all children is the character of the disease the same—in all is the contamination *thoroughly and entirely finished.* In this does infantile syphilis differ from that of the adult, that it has no stages to pass through, no successive organs or tissues, or orders of parts to attack, but has already infected every spot susceptible of its influence, and contaminated and spoiled the whole body. Many young and respectable females suffer repeated mis-

carriages at different periods of gestation, and often bring forth the fœtus in a decayed and putrid state, without ever entertaining the slightest suspicion of the cause. Sometimes they go the full time, or nearly, but the child ceases to move three weeks or a month before the expected time of parturition, and comes into the world *not only dead, but decomposed, the cuticle peeled away, and the skin red and moist and flabby, as if it had been for some time undergoing the process of maceration.* Again, a woman may go her full time, and be delivered of a fine and seemingly healthy child, but in the course of three or four days, or somewhat later, the little creature refuses the breast, screams continually in a weak and rancous voice; the angles of its lips crack; the mouth is surrounded by a coppery-coloured eruption, sometimes fissured, sometimes branny; the insides of the mouth and fauces are white and dirty; a copper-stained blotch appears over the nates and privities, which soon become excoriated and exude a fetid sanies; the child's features become contracted, and assume the appearance and expression of premature old age, and it pines and dies rapidly. When a case of this description occurs, it is perfectly clear that the child has some confirmed constitutional disease which it brought into the world along with it, and therefore inherited in some manner or other from its parents. . . . . Further, it is now familiarly known, and has been repeatedly proved by experience, that during all this time the father and mother may not have exhibited a single tangible symptom, not the smallest speck or sore that could furnish a solitary drop of purulent matter; therefore we are forced to the conclusion that the infecting principle may exist for *months or years within an individual without his cognizance of it.*"

The graphic character of the above sketch is my reason for transcribing it, so fully does it portray the perils that surround what I have frequently referred to as latent syphilis.

It often remains for years after the primary indications have completely passed away, and the patient has forgotten their existence, resting in the delusive persuasion that with its external manifestations it had altogether left the body. Here lies the great danger in reference to treatment. Non-specific or superficial treatment tends to the most disastrous of consequences, in blinding the patient to the actual existence of the virus in his constitution, and in causing him to ignore the inevitable visitation in a few years, or it may be months, of the same foe in a more alarming garb. Non-scientific and injudicious treatment, as practised by the ordinary charlatans and quacks, leaves the unhappy victim of syphilis utterly at the mercy of the virus, and permits him unconsciously to enter into the marriage contract, profoundly ignorant of the misfortunes that await him.

It is thought by some to be doubtful whether the fœtus can be infected by the mother or by the semen of the father. The preponderance of evidence, however, goes to show that the father is usually the chief source of infection, although the mother also may, and frequently does, infect her offspring. The seminal fluid of the diseased male is undoubtedly a vehicle of syphilitic transmission, and it manifestly poisons and devitalizes the ova by the virus which it contains. M. Ricord, of Paris, the leading authority on all matters of this kind, from his long and patient investigation of every phase of venereal manifestation, is quoted in the following passage, in which he distinctly enunciates his views:—"Supposing a female to be impregnated by an infected agency, how will she be infected by carrying a poisoned fœtus? According to several well-observed facts, we may infer that the mother can receive the germs of the disease from the child; so that, in such a case, she suffers from the syphilitic infection by the instrumentality of the fœtus in utero. It had hitherto been believed that the mother

received the infection directly from the father, and that she transmitted to her offspring the diathesis with which she became imbued; but this never happens unless the mother has been subjected to the contagion of primary sores, and she herself has had an indurated chancre, as well as secondary syphilitic symptoms consequent upon such chancre. I am ready to acknowledge that a woman may give birth to an infected child without experiencing any inconvenience herself; the father in such a case transmits the poison in the seminal fluid by reason of the secondary symptoms that may be upon him at the time. If he had primary symptoms, he would have diseased the mother directly, and the effect might have reached the child through her. A man who has constitutional syphilis upon him, of however long standing it may be, *should not marry,* for his progeny runs great risks. His wife, however, is not always in such danger, for the embryo may or may not contaminate her. I well remember a case of this description, where a gentleman with certain secondary manifestations was advised by his medical attendant to postpone engaging in wedlock. He disregarded the advice, married, and nine months afterwards he had the mortification of seeing a well-defined eruption upon the child."

The case set forth in the preceding paragraph conclusively affirms the fact of syphilitic communication to the germ by the father, during the functional act of impregnation. In my own experience as a surgeon I have met with many cases confirmatory of the dictum of M. Ricord. One instance presents itself to my memory with more than usual vividness, where a gentleman had married several years after he had ceased to see any indication of syphilis existing in his system. So long an immunity, indeed, had he from its phenomenal development, that he never for a moment gave it any consideration, and consequently entered into marriage relationship with confidence. Nothing could exceed his sur-

prise when he discovered, through medical information, that his first child exhibited unmistakeable indications of the dreaded taint. When born, the child was perfectly developed, and as well apparently as nature would have it. It never occurred to him to suspect or look for evidences of syphilis. All went on well for a few weeks, when suddenly the nurse thought it necessary to consult the medical attendant about an eruption on the skin and palms of the hands, and some ulcerations in the mouth and the anus. I was able at once to pronounce the disorder a pure syphilide, and to conclude that the disease had been communicated by the semen of the father at the time of impregnation; thus proving that, although the father had not had any outbreak of syphilis for several years, still, as it was latent in his constitution, it was communicated by the semen, and became active in the offspring.

The controversy in reference to the power of the male with secondaries to infect is still waging with some acrimony; but, although the few who defend the negative side are still unwilling to yield to the pressure of evidence to the contrary, the majority of modern syphilographers announce their entire belief in the communicability of the secondary form, and furnish many instances of its occurrence. M. Ricord has given in his adhesion to the doctrine, and Erasmus Wilson also maintains it. For my own part, after many opportunities of special observation, and careful criticism of all the circumstances surrounding the cases under view, I am of opinion that secondary syphilis is undoubtedly communicable, and that experience and continued observation will eventually put the matter at rest in the affirmative. There are, doubtless, many diseases which in some degree simulate syphilis, and are frequently mistaken for it; but this is a slender basis on which to deny the fact of syphilitic infection from the secondary stage. There are sufficient

data already collected to render it puerile to ignore them as evidence.

CASE LXXIX.—*Syphilitic contamination of the fœtus through the mother. Death and abortion of fœtus. The mother suffering from secondary syphilis.*

On the 18th of March, 1867, at 11 P.M., I was hastily summoned to Carlton, near Melbourne, to see a woman in labour with her third child. She said that she was in her sixth or seventh month, but had not felt the child for several days. I noticed that she had a well-marked syphilide on her forehead, and, although she was but twenty years of age, she had lost nearly all her hair. As the labour pains were very severe, I did not leave her until the fœtus was expelled, which took place two hours after, with the placenta. The fœtus was covered with a vesicular syphilide, most of the spots having a gangrenous character. She stated that she had noticed the eruption on herself a few weeks after one of a similar kind had broken out on her husband soon after they were married. He had been treated for primary sores about a year before marriage, and thought that he was cured.

It is not stated that secondary syphilis in every form must necessarily be communicated, and infect the body brought into immediate contact with it. The affirmation is that, as a rule, secondary syphilis is communicated. It is conceded that there are cases in which the mother and the children escape where the father suffers from a syphilide, but these are not numerous. Mr. Acton gives cases in support of this opinion, which completely demonstrate the possibility of children of a syphilitic father possessing an entire immunity from the disease with which he was afflicted. This has taken place even where the father had during several years suffered from outbreaks of the syphilides. The cause of this

immunity on the part of the female is to be found in her having a constitution lacking the usual receptivity for animal poisons.

The weight of evidence, however, preponderates greatly in favour of the father stamping on his offspring the like misfortune with which he is himself afflicted, and offers material for grave reflection on the part of those persons who either are in wedlock or purpose to enter it. No person who has had primary or secondary syphilis should think for a moment of forming engagements with a view to marriage *without placing himself under the guidance of an experienced surgeon, who would, by eradicative treatment if necessary, prepare his system for the momentous step.* The responsibilities are great on the shoulders of that man who can disregard the common principles of prudence, and rush into the connubial association with a taint in his constitution that is capable of transmission; and the responsibility is scarcely less on the medical adviser who will sanction an alliance with the opposite sex of any one whose system has been the depositary of primary chancre or secondary eruption. Multitudes of men enter the marriage state in a condition not only unfit, but absolutely unwarrantable, in a physical sense. It is true that men marry in most cases without the knowledge that they are capable of transmitting syphilis to their children, believing that as they have at the time of their marriage no external evidences of disease, they are therefore not liable to infect the wife, or the offspring which may be the result of their union. I am anxious to lessen the frequency of this error as much as possible, knowing as I do by painful experience how many men regret that they did not know the dangers which they incurred, and the serious consequences which would follow in reference to their children. It has been my duty on several occasions to warn men against immediate marriage, although they

fully contemplated doing so, and had made the preliminary arrangements. Sometimes this advice has been followed, but in others it has been neglected, and in most of the latter cases the neglect has been followed by permanent and poignant regret. Much depends upon the nature of the treatment the patient has undergone, for although the syphilitic symptoms may be removed, still the excessive administration of mercury, and nostrums that are highly prejudicial to the constitution, may so far injure him as to create syphilitic complications that will baffle the skill of the ablest surgeons and physicians.

In relation to hereditary syphilis, and the characteristic impress it often makes on its victims, Mr. Jonathan Hutchinson, surgeon to the Metropolitan Free Hospital, read a very interesting paper before the British Medical Association, from which I shall take some extracts as worthy of being generally read. His aim is to arrive at a method of diagnosis of syphilis that shall be exact, and release the medical man as much as possible from the dependence which usually has to be placed on the patient in examining the history of the case. This is a great desideratum, and could it be achieved it would materially lessen the difficulties of the controversy in this the most important of all medical questions. As a matter of course, Mr. Hutchinson's opportunities for observation in a free hospital of such a city as London would be great, and the class of persons would be equally peculiar. He says:—"First amongst the peculiarities by which these patients may be identified is the *tout ensemble* of the physiognomy. A bad, pale, earthy complexion, a thick and pitted skin, a sunk and flattened nose, and scars of old fissures about the angles of the mouth, often give the countenance so much of peculiarity that the condition may be recognised at a glance. The opinion is usually borne out by observing further, that the subject is of

short stature, has a large protuberant forehead and a heavy aspect. I may remark that it resembles very closely that which many would consider as typical of struma (or scrofula). Often has it been replied to me by the sceptical, 'What you call the physiognomy of syphilis, I should have said was the very ideal of struma.' It is, however, only the leucophlegmatic, dark form of so-called struma, which these cases simulate. With fair "struma," as marked by the transparent skin, clean teeth, long and silky eyelashes, the syphilitic facies has nothing in common. . . . And here let it be observed that inherited disease does not mar the development of organs by any mysterious or latent influence, but by causing a positive and recognizable attack of inflammation at a period when those organs are in very early stages of growth. Thus, if the teeth are found dwarfed and notched, it is because the patient suffered from severe inflammation of the mouth, with alveolar periostitis, at a time when the teeth existed as soft pulps only. If the skin look stretched and thin, and wanting in healthy softness; or if, on the other hand, it be thick, greasy, pale, and flabby—and the two conditions are often seen in opposite temperaments—the cause is that at a very early period it was the seat of long-continued inflammation. So with the form of the nose. If its bridge be sunk and expanded, it is that while the bones were soft the child had severe snuffles masking periostitis and chronic inflammation of the mucous surfaces.

"The *skin*, in these cases, may show one of two states: it may either look thin and stretched, or it may look thick, coarse, and flabby. The first is more diagnostic, requiring for its production a longer continued infantile eruption; but the latter is more common. In both it is usual and almost constant to see numerous little pits in the forehead, cheeks, lips, &c., resembling those of small-pox, and well-nigh invariably there are scars about the angles of the mouth. Very fre-

quently small patches of diffuse psoriasis are noticed about the face, and the skin looks uncomfortably dry. The appendages of the skin are rarely in a healthy state. The nails are stumpy and broken, and show numerous white marks on their substance. The eyelashes are few and ill-developed. The hair is thin and dry."

The author proceeds to deal with the teeth, the eyes, the tonsils, and throat, in a similar form, describing what he has recorded as prevailing indications of the hereditary taint. They are, however, not so precise as those of the skin, nor so likely to be guides for general observation. This writer has, however, done much service in aiding the effort to a better knowledge of the hereditary indices of syphilis.

This question of hereditary syphilis is one of such grave and vast importance that it is a matter of sincere congratulation and satisfaction amongst the profession generally that so much care and attention are being given to it. The responsibilities thrown on the medical adviser are frequently of the most painful kind, in reference to the delicate relationship of husband and wife. Often is he called upon to adjudicate between the infected wife and the apparently sound and healthy husband; to solve problems that puzzle both, and assign legitimate and philosophical reasons for phenomena that have unexpectedly appeared, and which have given rise to most unjust and painful recriminations. The ignorance or indiscretion of the medical attendant in such cases may be the means of perpetuating wrongs of the severest character, and a want of thorough acquaintance with the protean disease may sever the marital tie for ever, where no reasonable or moral ground for such an action exists. Nothing can be more harrowing to a faithful and honourable man than to find that he is the unwitting cause of physical and mental suffering which he would have fully guarded against had he known the danger and the means of avoiding

it. Equally distressing is it to be accused, on the dictum of an ignorant practitioner, of infidelity and reckless contamination.

There are two instances deeply fixed in my memory, in which I have been the means of bringing about a proper and satisfactory understanding between husband and wife, and have arrested the progress of the most disastrous intentions to the peace of their families. In one of these instances an opinion had been rashly given by a medical man, who, on the appearance of syphilis occurring in an infant soon after birth, jumped to the conclusion that actual phenomenal disease existed in the father at the time of impregnation, and thus accounted for the state of the infant's health. This case was at once brought under my notice, my opinion being asked in a sort of categorical form, as the error of the former opinion had made a serious impression. I examined the husband most minutely, and I found that he had not had any outward manifestation of the taint for fully three years prior to his marriage. He was by no means a stranger to me, and I knew sufficient of him to be quite convinced that when he married he believed himself to be perfectly well. My explanation of the case, and a fully written opinion, allayed the storm, restored domestic peace, and obviated a most serious rupture in an otherwise happy and affectionate family.

The other instance was one in which the accusation against the husband was made by members of his wife's family, no medical man having been consulted. I had delivered this lady a few weeks previously of a very fine child, and had no reason to suspect anything of a disagreeable nature to follow. Soon, however, syphilitic psoriasis broke out on the infant, with ulceration of the mouth and fauces, that could not be anything else than a syphilide. This state of things led to a relative suspecting that the disorder on the child was from

venereal infection. The next stage—that of accusing the husband—was brief and emphatic. At this juncture I was sent for, rather to treat the child than to ascertain the cause of the disease. I however learned from the nurse that there was a domestic feud of a very serious character existing, arising out of the child's illness. Wishing to rectify, if possible, what I knew to be a misunderstanding, I gave my opinion as to the true nature of the case, and was enabled also to throw satisfactory light upon the unfortunate circumstance of the child's ailment. I had known the father prior to his marriage some years, and knew that he had been five years previously under an advertising specialist.

Such facts as these, which are by no means isolated, and which occur in the experience of almost all men of extensive practice, go to show how very necessary it is to have a full apprehension of the difficulties which environ this subject, and to exercise considerable reticence and prudence in forming a diagnosis, and giving opinions in relation to hereditary phenonema. The most lamentable blunders may be the consequence of ignorance or haste.

I shall now furnish some cases which will strikingly indicate the wisdom of searching minutely for some clue to the mystery that surrounds syphilitic transmission to the fœtus in utero. I have before laid great stress on the fact that we have always to be on our guard against latent syphilis. Its latency is its dangerous feature, and it may be said to be its leading characteristic. This circumstance is the only one which enables us to account for many of the singular evolvements of this disease, where it could have no immediate origin. This phase of the question has been ably treated and sustained by one of the greatest authorities in England, viz., Langston Parker, Esq., M.R.C.S., and honorary surgeon to the Queen's Hospital, Birmingham,

who for many years has devoted much time and observation to the more subtle characteristics of syphilis. His views are put in a very concise form. He says—"Syphilis must have a starting point, either in one parent or the other, or both; and although this is frequently found in the mother, still I believe it is much more common to find it in the father."

The mother may become the source of disease to her offspring in four different ways—

1. She may be diseased before conception.
2. She may become diseased after she has conceived.
3. She may disease her infant in its passage through the vagina or external parts, a source of infection formerly supposed to be very common, but in reality very rare.
4. She may disease her infant after birth. The father has, however, generally the most direct influence on the health of the mother and child, and it is generally to him that, in the first instance, the origin of the contagion may be traced. The following cases will illustrate the theory propounded in reference to the superior influence of the male.

CASE LXXX.—*Five children died of hereditary syphilis. Father had chancre three years before marriage.*

L. Z., from Tasmania, aged 33, consulted me in 1863. He had contracted chancre in 1852, which he stated was followed by what must have been syphilitic psoriasis, which attacked both the body and the palms of the hands. Three years subsequent to infection, all manifestation of syphilis having disappeared under some treatment which he had undergone, he thought that he was cured, and he married. He continued to believe himself free from taint, until his first child was born dead. The second, soon after birth, was covered with syphilitic lepra, and died. The third child died also. The fourth did not long survive. The fifth was born

dead, with diseased placenta, evidently of syphilitic origin. The mother was a lady of unquestioned respectability, and she told me that she did not recollect having had any sores on her person.

CASE LXXXI.—*Premature delivery of a dead child. Father had syphilitic lepra twelve months before marriage.*

A trainer of horses consulted me about the same time as the patient last mentioned. He was suffering from syphilitic lepra. The eruption disappeared under the usual treatment, but he was advised by me to continue taking medicine for some time. This precaution, however, he did not adopt. Twelve months afterwards he married a healthy young woman, who was in a few months prematurely delivered of a dead child. The second child was brought into the world at the full period, and appeared well and hearty. In a month after, a dry eruption appeared round the mouth, with several large vesicles of pemphigus on the chest. This child was treated specifically, and cured. In this case the mother was not diseased at all, hence it is presumed that the tainted semen was the vehicle of contagion.

CASE LXXXII.—*Hereditary syphilis in an infant. Pustular syphilide on the father. Mother not tainted.*

A patient came under my care in the Melbourne Hospital six years ago, with a pustular syphilide. While he was under treatment I was requested to see his child, which was suffering from a skin disease. The mother said it was very well when born. Shortly after birth an eruption appeared upon the skin, and the child began to waste. The disease was, without doubt, syphilitic. I examined the mother's breasts and found them quite free from sores, fissures, or anything

abnormal. She also stated that, to her knowledge, she had not had venereal disease. I treated the child specifically, but not the mother, and it recovered rapidly. The semen of the father had in this case contaminated the fœtus.

These cases are remarkable as indicating the apparent immunity of the mother, although the child was manifestly and incontestably diseased. The latency of the virus in the first case is apparent, for no outward phenomena presented themselves at the time of marriage, so that the father felt sure of his safety and of that of his wife. His neglect to continue the eradicative treatment led to the disastrous result mentioned. It is not for me to say whether the virus permeated and fixed itself in the mother's system or not, to fructify at some other period. She gave no sign of its having infected her, it is true, but that is no criterion. Was it latent in her as long as she gestated and suckled? Would it at some future time become active in her organism? It is safer to answer these questions in the affirmative, as my observations have proved, and this we shall see as we proceed. The latency of the poison is our difficulty.

"There is no such disease in the world as syphilis, except itself—nothing resembling, nothing bearing the slightest similitude to it. *Here, and here only, is a persistent poison, remaining in the blood for years,* neither occasioning its own elimination nor the destruction of its victim, but continuing for an unlimited space of time interfering sometimes more, sometimes less, with the healthy processes of nutrition, and probably *vitiating and spoiling every one of the secretions.* In other diseases, if the secretions are universally or even extensively poisoned—and probably in many instances they are so—there is neither time nor opportunity for making the discovery; the patient is too much enfeebled to permit of the usual intercourse of society, and the malady terminates for good or evil too soon. But in syphilis there are both—for it may endure for

years—giving so little annoyance that the patient is unconscious of its presence. There does not seem to be anything unphilosophical in supposing that, where the blood is thoroughly tainted, *every secretion and every product of it should be tainted also.*

"Probably this is too comprehensive an assertion, but there is one secretion that cannot be dismissed lightly, and however unprepared we may be to admit the doctrine, and however contrary it may seem to the laws of the animal economy that two different, nay, totally different, fluids should be vehicles of one and the same poison—I think a careful examination of facts will convince any unprejudiced inquirer that the *seminal fluid possesses this most unhappy quality;* and that in the mysterious process of generation it may be the medium of contamination without the intervention of a single drop of purulent matter. Now, this is, as far as I know, a new assertion, and will probably prove startling to many; but for that very reason I entreat for it a calm and unbiassed examination—not the examination of authorities and books, but of the cases actually met with in practice. Cases are of frequent occurrence that cannot otherwise be satisfactorily explained; numbers exist at this moment where the absence of such explanation has led to distrust, misery, and estrangement. It can only be established by observation and experience, and to these unerring tests I willingly confide it.

"In the month of July, 1831, a gentleman married, being, as he supposed, perfectly free from any syphilitic taint. In the April following, his wife was attacked with condylomata at the anus, tubercular swellings at the pudendum, cracks at the corner of the mouth, and patchy elevations on the dorsum of the tongue. All this time the husband never had a sore or spot of any description. He was examined carefully, and exhibited no symptoms, and by his wife's account

he had taken no medicine since their marriage that had tainted his breath, or that had made his mouth sore. She had never been pregnant, and therefore could not have contracted the disease from a fœtus in utero; nor had she ever a chancre or sore that could be called a primary symptom. Both the husband and wife were subjected to full specific treatment, and the symptoms entirely disappeared.

"In July, 1840, a married gentleman, the father of several healthy children, whilst on business in London, unfortunately had impure coïtus, and contracted a sore on the penis, which was pronounced not to be venereal, and healed by topical applications. He returned in August, and in the latter end of September consulted me for sore throat, which I pronounced to be syphilitic. He appeared really distressed, but leaned with some hope on the opinion of the gentleman who first treated the case, who did not think it syphilitic. In January, 1841, he came to me in great fright, requesting me to see his wife, whom he feared he had disordered. I found her with several spots of button scurvy, and gave my opinion to the husband that they had a syphilitic origin. Still he was unwilling to believe in a calamity which he dreaded beyond anything in the world, and had a surgeon of eminence in consultation, who decided at once that it was button scurvy, and not venereal, and seemed to be fortified in the opinion by the fact of the lady never having had any previous syphilitic symptoms. In the course of a few days, however, the question was settled by the birth of a child, who died within a week, of unmistakable confirmed lues. Now this infant had been begotten in April, three months before the father's first contraction of the ailment, and must therefore have been poisoned through the circulation of the mother at a considerable period subsequently. The question is, how did that circulation become contaminated, seeing that the father had never a sore capable of furnishing a drop of matter, and the

mother never a symptom of any description until the doubtful one of button scurvy, which appeared only a few days before her confinement ?"*

In the case which I mentioned immediately prior to the quotation just made, the escape of the mother, although evidently in contact with active syphilis, is worthy of notice. The child alone was infected apparently, the semen having conveyed the poison to the ovum, or germ. I have before argued on the probability of the mother when gestating being proof against the virus to a considerable extent, and this case, I think, in conjunction with others, bears me out in the opinion. Another very important fact presents itself here, viz.—the destructive influence of the syphilitic virus in utero. It is seen that in the majority of cases the children are born dead, or so seriously injured that they die during the first year; and in the valuable statistics collected by Mr. Acton it is observed that children have to bear the chief taint of the syphilitic invasion.

CASE LXXXIII.—*Syphilis communicated by marriage four years after disappearance of symptoms. Death of infant.*

An officer, who had retired from the army, contracted chancre in the year 1859. While under treatment he had sore throat, and syphilitic psoriasis on the body, the hands, and the feet. The tongue was ulcerated. Four years after his supposed cure, having had no symptoms of syphilis during that time, he married a young and healthy wife. She became pregnant, but her health gave way. Between three and four months after conception she suffered from irritation of the bladder, and bearing down of the womb; she had small nodules on each labia, with syphilitic scales on the pit of the

* Langston Parker.

stomach. Under treatment these symptoms disappeared during the seventh month. She was delivered at her full time of an emaciated male child, which died forty-eight hours after its birth. She was pregnant a second time, and went the full period, but the child was born dead. During the whole of this pregnancy she had sore throat. Her third child was delivered at the full time, and apparently quite healthy; but, five weeks after, it had a scaly eruption on the head and left cheek, and condylomata at the verge of the anus. Her fourth child only lived three days after its birth. On examination by the speculum soon after this, I found a large syphilitic ulcer on the anterior lip of the uterus, which was treated by injections, and local applications; constitutional and anti-syphilitic treatment were adopted, and after apparently complete restoration to health, she left with her husband for Europe.

Case LXXXIV.—*Syphilitic taint and miscarriage.*

A policeman contracted chancre in 1860, which he healed up himself by means of black wash. Four months after, believing himself well, he married a plump, healthy-looking Irish girl, and soon after he suffered from syphilitic sore throat; at the same time his wife had ulcers of an evidently syphilitic character on the labia. She became pregnant, and miscarried at three months. She became again pregnant, and was delivered prematurely at seven months. A third parturition was at the full period, but the child only lived twenty days, covered over with a true syphilitic eruption.

The transmission of syphilis from the mother to the child at the eight month of gestation is illustrated in a case given by M. Chabalier in the *Journal de Medicine de Lyons*, May, 1864. That gentleman was consulted by a lady who had three indurated sores on the labia. She stated that her husband

had been absent for five months, and had only spent one day with her all that time. She suspected having been contaminated on that day. She was advised to use calomel ointment, and take iodide of mercury pills. Twenty-five days after this treatment the patient was delivered of a healthy boy. For fear of complications, M. Chabalier asked the mother to bring up the child by hand, and this was attempted, but some time afterwards she was persuaded by her friends to hire a wet-nurse. When seven weeks old the child had a general papulo-vesicular eruption, with mucous tubercles on the scrotum, tongue, &c. The wet-nurse was discharged, and the child partially recovered under the use of the bichloride of mercury. At the same period syphilitic symptoms appeared upon the mother in Italy, where she had joined her husband. The mother eventually recovered, but the child, owing to sudden weaning, wasted away and died. It seems to us that the lady was contaminated at an earlier period than the eighth month of gestation. She was confined October 30th, and the visit of her husband, to which she attributed her misfortune, took place on August 28th. This would make the seventh month of gestation. Here very probably the fœtus suffered by placental communication at that time.

A clear and precise description of a child suffering from the taint is given by one of our most reliable observers* on this subject, which will enable the lay portion of the community, for whom this book is chiefly intended, to recognise the features of the disease when present. He says:—"If the child be born at the completion of gestation, and do not at once display the disease which lurks in its system, it remains, to all appearance, well for the first few weeks, and is often plump and well nourished during that time. This

* Berkeley Hill.

healthy aspect is in most cases soon lost, though some children, who are but slightly affected, retain a flourishing appearance throughout the disease. The child *snuffles as with a cold,* is fretful and wasting. By the end of three or four weeks he has generally, but not always, lost the robust condition he possessed at birth. The child soon gets to look like a little old man. His skin is wrinkled and loose, of a muddy or bistre hue, from a dirty yellowish tinge pervading it. This colour is best marked on the forehead, chin, and other prominent parts. The skin, though loose, breaks around the mouth, eyes, and nose into chaps, that bleed easily. The cuticle peels from the fingers, hands, and feet, on which coppery patches can generally be found. The hair of the scalp, eyebrows, and lashes drop; and the nails are small and ill developed. The child's cry is especially worthy of remark: it is hoarse, peculiar, and snuffling, from the nostrils being stuffed with thick, yellow mucus. The inside of the mouth and palate is beset with white patches and sores. Around the anus there are also bright coppery red patches. In the course of a few weeks the wasting becomes extreme, the child is seized with vomiting and diarrhœa, bronchitis, and pneumonia, or some other visceral disorder, by which his remaining strength is exhausted, and he dies."

Sometimes the whole of the above symptoms are present, but commonly only a portion of them; still they are most of them characteristic, and can scarcely fail to be instructive to the parents and nurse after reading the sketch. It is of great importance that the symptoms should be recognised, and specific treatment adopted as early as possible, as the earlier this is done the greater are the probabilities of the infant being saved. The importance of an early discovery of the taint is further evident by reason of the danger that exists of its inroads upon the viscera of the child, as it is usual for hereditary syphilis to assume the tertiary as well as

the secondary forms. Prompt and decided treatment will, if adopted early, usually check visceral disorganisation, and save the child's life, especially where the taint is congenital, and not absolutely hereditary. This fact I have more than once demonstrated to my complete satisfaction, where I had every reason to believe that fatal results would have followed neglect or delay.

Syphilis may be expected to make its appearance during the first few weeks, and the parents should be—if they have any suspicion that either of them have been tainted—on the alert to observe and note the earliest symptoms that may appear, especially the snuffling, which will generally be be one of the premonitory indications. This is by no means unimportant advice, as Mons. Trousseau thinks "the disease generally proves fatal when it appears within a month after birth, but is curable when it occurs two, three, or four months later." (*Gazette des Hopitaux*, 1848.) Mr. Acton, who is an eminent authority in all matters of a syphilitic character, but with whom I do not accord in reference to the communicability of syphilis, says—"When secondary symptoms occur in an otherwise healthy infant, and its case is treated early, the most favourable results may be expected; but if the child is puny, the mother in bad health, or the disease has already been allowed to make great progress, we must not give a favourable opinion. In even the very worst forms the complaint may be entirely cured, provided the parents have the ordinary means of comfort, and will follow the directions of the surgeon; but unfortunately these poor little children are often neglected, and die from want of care and breast milk, victims to syphilis, mercury, scrofula, and neglect."*

* Nasal catarrh is a prominent symptom in the syphilitic child, and is so inconvenient to it as to prevent its suckling, and by this to lead to wasting. It is so distressing to the infant that the nurse or mother endeavours to supply food by hand-feeding, but this refuge is more dangerous than the snuffles, and should not be resorted to. But one per cent. perchance of

The mortality in infant life is always great, indeed greater than it might be, and it arises from the vast number of ailments to which the infant is subject, as well as from the carelessness of nurses; but to my knowledge there are far more cases of early mortality than is generally allowed. It is the habit of some practitioners to overlook altogether the fact of infantile syphilis, and never suspect or record it, so much is the subject neglected. When more attention is paid to infantile syphilis, I feel assured that the Registrar-General's tables will exhibit a material alteration in the number of deaths recorded from that cause. In this disease and its multifarious phenomena, we are much in want of correct observation.

In this colony syphilis is very common, and is a by no means unimportant cause of our large infantile mortality, although it often fails to be registered as such. Circumstances have frequently come to my knowledge where I have been morally certain that the children have died of syphilis, but in the registration of the death another disease has been given as the cause. On referring for the sake of verifying this statement, I have found that death has been attributed to atrophy, bronchitis, catarrh, inflammation of the lungs, &c. I mention this fact for the purpose of suggesting to all concerned in the management of sick children that they should be as vigilant as possible in the search for syphilitic symptoms wherever it may be deemed at all probable that they might appear, and to be careful that no mistakes occur. If syphilis should be the active principle in the diseased state of the child, no treatment but a specific one can save its life. It is to be regretted also that the cause of death is often suppressed, from feelings of delicacy and from prudential

children brought up by hand live; hence a great authority once said, "he regretted that one had lived, for if all had died the abominable practice would have been abandoned."

motives. Statistical information is on this account very barren, when, as I am of opinion, it might be much more reliable, and of considerable service. Without accurate statistics, a difficulty stands in the way of a complete knowledge of the mortality from infantile syphilis.

CASE LXXXV.—*Abortion at seventh month from syphilitic contamination by husband supposed to have been cured. Placenta disorganised by syphilitic deposits.*

A soldier's wife of the 92nd Highlanders sent for me in haste during the temporary indisposition of Surgeon Stewart of that regiment, complaining of great pain of a bearing-down character. She was feeble, with rapid pulse, fetid breath, and coated tongue. She informed me that she was pregnant, and was in her seventh month, but—using her own language—she had not felt the child move for a week or two. On feeling her pulse, I observed a palmar eruption of a syphilitic character. I examined the uterus, and found the mouth dilated to about the size of a florin, from which exuded a sanious and offensive discharge, indicating the death of the fœtus. Brandy, opium, and beef-tea were administered from time to time until the pulse gained more power, and the general temperature of the body became normal. Steady pains set in, which continued with regular intermission until she was delivered, twelve hours after, of a dead male child. The cuticle had commenced to separate. The body was of a dark colour, and the afterbirth could be broken up in the hand like a lump of grease, being full of the usual syphilitic deposit. The woman denied ever having had syphilitic sores, but her husband stated that he had had a bad chancre six months before marriage, and thought he was cured. On his submitting to examination I found that, although the skin was quite healed, there was induration

behind the gland, indicating the previous existence of a genuine Hunterian chancre.

In diagnosing the condition of the infant, it is necessary to make a distinction between congenital and hereditary disease. The former may be defined as the tainting of the fœtus *in utero* by the mother after an impure coït during gestation: in other words, that the fœtus receives the virus during its growth in the womb. The hereditary disease would occur by the father supplying contaminated semen at the time of impregnation, thus communicating the taint to the ovum, he being the subject of latent or active syphilis. The importance of correct information here is great, inasmuch as the prognosis will be much influenced by it. Congenital syphilis may be treated successfully, but few cases of hereditary syphilis can warrant a favourable prognosis.

With respect to infantile syphilis, the transmission of taint from the parents to the child is about being set at rest. So much additional light has of late been thrown upon the subject, that little diversity of opinion now exists in comparison with what some time ago was current. The tendency of opinion evidently is towards the view that by any and every means the syphilitic taint may be communicated, whether by the secretions or by dry contact, no obstacle standing in the way of its subtle motion. Its most fatal and serious influences are to be found in the case of the infant subjected to the hereditary taint; it is here that its most destructive power is manifest. As will have been seen in the cases cited from my own records, and quoted from those of other syphilographers, the infant of diseased or tainted parents is subject to serious cutaneous eruptions and ulcerations of the mucous membranes, which exhaust its vital powers, and bring it to the grave generally in the first year of its existence; or should it survive, if the treatment has not thoroughly eradicated the disease, there will be a life of

feebleness, and sequelæ of a tertiary character may cut it off in a few years.

CASE LXXXVI.—*Congenital syphilis. Diseased bronchial glands. Syphilitic tubercles in throat.*

Two years ago a child was brought to my consulting-room, apparently suffocating. The breathing was difficult in the extreme, and indicated something unusual in the condition of the bronchiæ. Auscultation furnished evidence of extensive bronchial irritation. There was true syphilitic rash all over the body, with mucous tubercles at the anus and throat. The mother told me that during the time that she was carrying the child, both she and her husband had suffered from primary syphilis. A short course of anti-syphilitic treatment restored the child to health.

Dr. Wilks, of Guy's Hospital, has drawn the attention of the profession to this form of congenital disease of infants, in some excellent papers read before the Pathological Society of London.

When the syphilitic constitution is transmitted to the offspring, there are certain physiognomic signs which indicate its existence. It resembles very much the ordinary scrofulous diathesis. The head is rarely well formed. The stature is stunted and belly large; muscles flabby; diseased joints not uncommon. The nose is sunk and flattened, the result, according to Mr. Hutchinson, of snuffles, or inflammation of the membrane of the nose; and opacity of the cornea from early corneitis may be observed, as also scars of old fissures about the angle of the mouth. Occasionally too the glands of the neck are enlarged and hard, but the upper lip is not thickened. The complexion is of a pale earthy tint, contrasting strongly with the transparent tint of a scrofulous person of the sanguine tempera-

ment. The skin is sometimes thin and stretched, but is also dingy, coarse, and flabby, and shows scars or marks, the remains of former disease; it is uncomfortably dry, often with patches of psoriasis. The hair is also dry and thin; the eyelashes few, ill developed, and broken; and the nails have the same character, being stumpy and brittle, and often ragged.

The *teeth*, however, offer perhaps the most characteristic marks of the syphilitic constitution. The teeth of the second dentition are modified in development so as to be small, and *rounded or peg-shaped, instead of flat;* the upper central incisors sometimes presenting a broad shallow notch in their edge, which is usually obliterated by the twentieth year. Their colour is a dirty yellow.*

The state of the teeth constitutes one of the most valuable signs we have of hereditary syphilis. Its value depends not only upon its constancy, but on the circumstance that it is impossible that these structures can have been altered in form by disease in later life. I have had several cases in which, as the patient was between twenty and thirty years of age, it was very possible that the sunken nose, scars at the angles of the mouth, bad complexion, &c., might have resulted from acquired syphilis, but in which *the strongly-characterised state of the teeth wholly did away with such suspicion.*†

With reference to the hereditary phase of the question, much material for consideration exists with those who desire to enter into marriage relationships after having had at some time or other a syphilitic taint. There is perhaps no more difficult question put to the surgeon than the one, "Is it safe for me to marry?" The latency of the syphilis is its *bête noir*. It is that which often causes the best-informed surgeon to hesitate, although he knows that a very great many

* Dr. Laycock. † Hutchinson.

men marry, and their offspring escape the taint. Should the surgeon have had the entire conduct of the primary attack in the parent, and have persistently continued a course of eradicative treatment, he will not have much hesitation in answering the question in the affirmative. Many points are, however, to be considered—the virulence of the attack; the length of time since the cure or disappearance of the outward phenomena; the temperament and general state of the health. Still, under the most favourable circumstances, the surgeon must not—if he wishes to avoid the consequences of a blunder—venture upon a *positive* guarantee that the offspring will escape. The probabilities may be strongly in favour of immunity, and the surgeon can venture no further.

VARIOUS MODES OF SYPHILITIC COMMUNICATION.—Syphilis is a disease of so subtle a character, and so free from anything like defined periods of incubation and regular stages in its progress and order of development, that it is almost impossible to collect data of sufficient reliance to form exact opinions thereon. This is the chief reason why there are so many opposite and varying theories in reference to its communicability. The question has, nevertheless, received as ample discussion as any that has not uniform data on which to rest. It has long occupied the attention of the following syphilographers:—Ricord, Hunter, Acton, Lancereaux, Virchow, Trousseau, Hill, Parker, Jackson, Hutchinson, Cullerier, and a host of others; but, notwithstanding this galaxy of talent, the communicability of syphilis is still perplexing. Throughout my experience, which for years has been extensive in the treatment of syphilitic diseases, and my records of cases ample, I have not met with anything to lead me to modify an opinion which I early formed in reference to the many modes of syphilitic com-

munication. I have not been unmindful of the difficulties in the way of exact observation; of the conflicting reports which patients themselves may give; of the eruptions which often present themselves having a strong resemblance to syphilis; and of the obstacles which patients frequently place in the way of our obtaining correct histories of the case. Still I believe that there is no disease more readily communicated than syphilis.

Another difficulty in the way of acquiescence by some in this communication theory, as held by myself and others, is, that where there is no breach of continuity of any mucous membrane a taint may still be given, and be a very long period in exhibiting external phenomena as indices of its presence. This delay in phenomenal expression I have several times witnessed, and have been surprised that some symptom did not present itself; when, ere long, my wonder has been disposed of by true syphilides appearing either on the skin or on the mucous membranes. This has been especially the case in some instances where the husband has had secondary eruptions, and the wife has for a time appeared to have escaped altogether from contamination. The result, however, has been that circumstances have arisen, in the form of exanthemata for which she could not account, requiring her to consult me.

There is a view of the question, referred to previously, which I intend to discuss more fully in another work that I have already partly prepared for the profession, on the treatment of syphilis, but which I shall briefly glance at in this place. It relates to the contamination of the mother at the time of impregnation. It has been said by some, amongst whom Mr. Acton and others are prominent, that the father taints the ovum, but not the mother. To me this conclusion appears a hasty one, and cannot be said to have sufficient evidence on its side to war-

rant the confidence with which it has been advanced. It is true that the mother in a great many cases presents no indication whatever of having been contaminated; but is that simple and unreliable fact to be taken as a ground of any value on which to build an opinion of so much importance? I think not. The chief difficulty lies in the fact that a woman may for a long time retain the virus in a latent form—much longer indeed than nine months. Then, again, we have another which is well known to all physiologists—viz., that a woman during gestation possesses a kind of charmed existence, or immunity from diseased action in her organism. May it not then be a fair presumption that in the event of her being herself impressed by the virus, her vital forces centering on the fœtal development would communicate the virus to the fœtus rather than give it phenomenal expression on the periphery of her own body? We know how readily her psychological nature stamps upon her offspring in its vestibule of existence every phase, emotion, and peculiarity of her own being. It is scarcely possible, however, that after the act of impure impregnation she should not be tainted.

This theory of communication is in perfect harmony with the physiology and psychology of the gestating female, and will if fairly considered present sufficient reason for moderation in the expression of opinions limiting the modes and extent of syphilitic contamination. I have thus been led to retain the opinion that it is quite possible to taint both the mother and the ovum at the same time, so that the semen *per se* will transmit syphilis. It will also doubtless communicate the periodic phenomena of the father, so that if he have primary symptoms or secondary, they shall be repeated in the mother at some time after gestation has been completed.

The cases illustrative of these conclusions given by careful observers in Europe, as well as my own, which have been collated with equal care, render it impossible to avoid the

conviction that the infant can be tainted with constitutional syphilis, and that vast numbers die from it in the first year of existence. There is on this point almost perfect unanimity. Many have fallen victims to this baneful disease, whose death has been attributed to a scrofulous diathesis, but it is not probable that this blunder will be so frequent for the future, the nature and pathology of syphilis being so much better understood. Some writers maintain that scrofula is of syphilitic origin, and that it may go on descending in families *ad infinitum*. This is in parallelism with the statement generally admitted, that syphilis imperfectly or unscientifically treated will go on for an indefinite period to reproduce itself in family after family. I shall not enter here into the discussion in reference to scrofula being a form of syphilis, as that will have to be treated by me in another work. I am in a position to state, from my own observations, that there is no known limit to the march of syphilis when once it has acquired the constitutional condition.

It has then been presumed that the male may infect the ovum and the child without injuring the mother; also that the fœtus thus contaminated may taint the mother. It has been seen also that the mother may be infected by the seminal fluid as well as the ovum; and that sometimes both wife and child of a syphilitic man may apparently escape infection, and enjoy an immunity from syphilitic disturbance for years, and yet that without any well-defined reason, at any time, one or both shall furnish distinct evidence of infection. Thus it is seen that this protean disease, with all its terrors and frequently appalling phenomena, has a character of its own that is often more terrible than the plague, inasmuch as it is a lurking enemy that cannot always be driven out, but tenaciously retains its hold of the constitution, and without warning commences from time to time its destructive disfiguration of the surface of the body, and the con-

sumption of the internal organs. Though the parent may be in seeming health, and unconscious of its proximity, it still is concealed in the germ of impregnation, and takes its seat at the initial step of the future being, occupying each atom of the growing fœtus till it culminates in the hour of parturition, and then accompanies the child into the theatre of life, often to drag it during its early months into the grave.

Much controversy has existed as to the capability of the several secretions of the body to communicate syphilis, and there are not wanting abundant illustrations of the theory that all the fluids do contain the poison, and are vehicles of it to other bodies. The blood, the milk, the saliva, and the semen have all been the subject of test and experiment; and although the results *sometimes* have been of a negative character, still there is an overwhelming mass of facts to sustain the theory. As I before remarked, the question of transmission is environed with great difficulties, and furnishes material for doubt and hesitation; but this state of things only renders the observations more exact, and the analysis of events more careful. The subtlety of the question has captivated the attention of many of the ablest and most distinguished physiologists of Europe, and has led them to apply their practised acumen and skilled methods of research with singular industry towards unravelling the tangled mass of evidence. The light which modern physiology and pathology throw upon such questions has been used in its full force to direct research in reference to this great question of transmission, involving as it does many important points of medical jurisprudence. The names of the men who have entered this field of research are sufficient, when mentioned, to show its vast importance and the necessity that exists for a decided opinion to be formed. The following are a few of the foremost:—Waller of Prague, Professor Pellizari of

Florence (who inoculated Dr. Bargioni in 1860 with the blood of a syphilitic woman), Ricord, Gibert, Lancereaux, Landwürm, Divergie, Fournier, Clerc, Bell, Wilson, Acton, Berkeley Hill, Wallace, Hunter, Diday, Lee, Hutchinson, Wilks, &c.

The most remarkable instance on record by which the blood was proved to be a vehicle of transmission, is the one in which Dr. Bargioni was publicly inoculated with the blood of a woman suffering from syphilitic eruptions. It is expressly affirmed that by this act "he contracted syphilis, and underwent the several stages of the disease: first, incubation of twenty-five days; then a papule, which developed to an ulcer by the forty-fourth day. The lymphatic glands simultaneously enlarged, and a macular eruption appeared on the sixty-fifth day on the trunk." Several writers quote this case, and some of them at full length. Many other experimenters have also tried inoculation by the blood, and in some instances with complete success. It was not to be expected that all subjects could be successfully inoculated, for the proportion of those who would react upon the virus would not probably exceed those in small-pox inoculation or in vaccination, when we know that many out of a given number vaccinated from the same lymph do not take, as it is said in common parlance. Besides this there are the receptivity and latency in reference to syphilis, which are not analogous when drawing the parallel with vaccination, inasmuch as the phenomenal period may be very far from the date of syphilitic inoculation.

Another point of importance is, whether the milk of the mother or nurse contains the virus in sufficient force to communicate the disease. This is certainly the most important of the secretions, being the entire sustenance of the young being. Any deterioration of this fluid is followed by issues of vital consequence to the health and life of the infant.

Some writers are found who give no credence to the reports of cases that are recorded of syphilis having been transmitted by the milk of the diseased nurse to the child; but there are others who as strenuously affirm that they have incontrovertible evidence of its transmission by such means. My own observation leads me to conclude that the milk of the nurse, if she be syphilitic, does infect the infant she suckles. Several instances have occurred in France where the milk has been considered to be the direct vehicle of infection, and on referring to these cases I see no reason to dispute their accuracy or validity. The instances of such transmission are however by no means so numerous as might be expected, hence their rarity leads to doubts as to the possibility of lacteal infection. I hold the opinion that the milk of a syphilitic nurse does often communicate syphilis.

The saliva also has been said by some to be equally dangerous as a vehicle of contamination, and cases are recorded which certainly sustain the theory. The saliva of the infected infant has in numberless instances been discovered to be injurious to the nurse, from actual observations made on women who have been tainted by the children they were nursing. "The Tribunal of the Seine has recently had before it an interesting case in the shape of an action, brought by a nurse against the mother of a child she had been engaged to suckle. It was proved that on her assuming this duty she was quite well, and her moral character was unsuspected. The infant, four months old, had an eruption on the face, which however the family doctor pronounced to be of an innocent nature. In about a fortnight she began to perceive an eruption about the nipples, and although the same medical man pronounced this harmless, it continued to prove aggravated, so that other practitioners pronounced it syphilitic. She gave up the infant, which afterwards died of undoubted syphilis. The infant's mother was

free from an eruption, and the father had died soon after its birth. The nurse brought the action for the damage her health had sustained, and the expense she had been put to for its reparation. The Tribunal awarded her 8000 francs damages, and all the expenses.

"Van Sweeten relates a case of a woman whose business it was to draw milk from breasts, and who had a chancre; a number of women became tainted, who gave the taint to their husbands, and even many of their children caught it and died.

"There is also the well-known case at Sarenta, where every nun became affected by kissing a little girl who had previously been kissed by a stranger. I may also mention the case of an infant which was taken from Paris to Montmorency, which affected its nurse; she infected her husband, and he another woman, and so the contamination went on.*

The following is one of the cases which came under my own observation:—A youth, about fourteen years of age, was brought to me, suffering with an eruption on the skin. The medical man whom the parents had consulted informed them that the disease was psoriasis, and the patient was treated in accordance with that opinion. When seen by me I immediately noticed a copper-coloured eruption, and pursuing the examination further, I found the throat congested, with herpetic-looking spots upon it. The glands of the neck were also considerably enlarged. On questioning the mother as to the state of her health, she said that her husband had given her sores on her person two years before, and three months ago she had ulcers on her lips and the inside of her cheeks. She was in the habit of kissing her son night and morning; it is probable, therefore, that he might have had some breach of con-

* *Lancet.*

tinuity in the mucous membrane of the lips, by which the moisture on the lips of his mother communicated the taint to him.

This is a remarkable instance of the communication of secondary syphilis, a point on which there has been much debate. In this case there was no doubt whatever, and I may say that in my mind it is one of the most conclusive of the many that are adduced in proof of such a form of communication. It is in fact settled almost beyond dispute that secondary syphilis may be communicated. Even M. Ricord, who long held the opposite theory, has since modified his opinion, and no longer denies the danger of infection from secondaries. While alluding to this phase of the subject, I may as well furnish two or three cases from my records, as illustrations of such contamination.

CASE LXXXVII.—*Constitutional syphilis. Secondary stage. The wife contaminated during the existence of secondary eruption.*

F. D., a publican, called upon me some time ago, when he presented the following symptoms:—Sallow complexion, and much emaciated. He had a copper-coloured leprous eruption about the forehead, hands, chest, and scrotum. He had mucous eruptions on the verge of the anus, and similar ones on the lips; thus, as usual, the extremities of the great mucous tube were equally involved. His tongue and throat were also ulcerated, and his breath was intolerably offensive. His hair had nearly all fallen off, and what little was left had become grey. He informed me that some time previously to his calling upon me he had contracted a hard (Hunterian) chancre, which was a long time in healing. He was married, and his wife had then been some time in New Zealand. I placed him at once under a course of anti-syphilitic treatment,

by means of which he rapidly improved. Before he was quite restored his wife returned to him, but had not been long with him before she called on me complaining of hard swellings on the bones of the leg, pain in the collar-bones, together with stiffness and pain of the knees, wrists, and finger joints. She also had ulcers on the tongue, the inside of the cheeks, and throat. This patient was cured in three months by an anti-syphilitic course of treatment. Her husband was progressing favourably, when he committed suicide.

In this case the secondary symptoms were not preceded by any of the primary phenomena, but at once presented themselves, thus adding another fact in support of the assertion made by so many syphilographers, that each type gives its own impress. The following one is equally valuable on this point of identical communication.

Case LXXXVIII.—*Secondaries communicated, and latent eight years.*

When attending the practice of the late Dr. Maund, I was asked to visit Mrs. J——. Her husband was holding an official position, and had just returned from India. She was a lady of about 30 years of age, had never had any family, and had enjoyed good health until two years previous to my seeing her. She complained of pain and stiffness in all the joints, which an Indian surgeon had pronounced to be rheumatism. There was pain and tenderness on the shin-bone of the left leg and in the lower part of the spine; also pain in the head, which generally occurred at night. This patient had formerly a most luxuriant head of hair, but on this occasion she had so little as to be scarcely able to dress it. There were patches of ulceration on the right tonsil, the left cheek, and copper-coloured eruptions on the body, especially on the arms and chest. On interrogating her

husband he informed me that twelve months before he married he had primary syphilis, and a year after marriage he had the secondary form. Since then he had not had any indications of the activity of the disease in himself. His wife was not diseased until eight years after the secondaries had disappeared from him.

Authors of undoubted reputation have assured us that they have been unable to produce secondary syphilis by inoculation, although they have used pus and other secretions from incontestably syphilitic subjects. Still, Mr. Langston Parker asserts that MM. Walker and Vidal de Cassis declare that they have succeeded, and that he, as well as Biett, Cazenave, Lagneau, Stark, and Todd, has frequently seen secondary syphilis communicated, not indeed by inoculation, but by contact, more especially between husband and wife, the husband having had primary symptoms which were entirely removed before marriage.

Dr. John Elliotson, F.R.S., writing on secondary characteristics, says:—"My case, so striking and interesting to myself, sufficient to create a doubt in those who have never seen an example of the communication of secondary syphilis, and have habitually supposed it impossible—notwithstanding the common and universally admitted fact of the contamination of the germ within the mother by the father, who shows no sign of the disease, and must therefore communicate it as in the constitutional or secondary way, and does in truth produce not primary, but secondary symptoms—perfectly coincides with the recent observations of certain careful practitioners. For secondary syphilis was communicated, and the effect was, as indeed these words imply, not primary, but secondary syphilis. The symptoms produced were, as far as the disease went, those of the communicating person; the effect resulted, not from inoculation, but from mere continued and repeated contact and friction."

The case to which Dr. Elliotson alludes is so excellent an illustration of communicability by contact, that it would be an important omission not to cite it. It was that of a lady who called upon him with an eruption on her face, which was manifestly syphilitic. It had then been in existence two months. He treated it, according to his silent diagnosis, as a syphilide, and did not make any special inquiries in the matter for a short time, until he determined to put his patient under mercury, when he asked the husband, whom he held in the highest esteem, if he knew of any possible means by which his patient could have contracted such an eruption. It transpired that they had dismissed the lady's maid, having a similar eruption. It also appeared that the maid had an eruption, with cracks on her hands. On Dr. Elliotson's next visit they showed him a prescription given to the girl as an out-patient at one of the London hospitals. On the ticket the disease was called *Psoriasis Syphilitica*. Dr. E. says—"I have no doubt that the disease was communicated to the mistress from the maid, the palms of whose hands were sore, and fissured with syphilitic psoriasis. The maid arranged the lady's hair night and morning, doing much with her bare hands; applying oils, pomatums, &c., and smoothing it down flat with her palms, according to the fashion. Any *diseased secretion* must then have *been well rubbed into the scalp, especially at the central and front portion,* where *the hair was parted and the skin bared.* Had not the disease been arrested, there cannot be a question that it would have spread beyond the face, and probably affected the palms of the mistress like those of the maid. A wound or raw surface is not necessary for the effect of a contagion or poison applied externally; friction may secure its admission. Primary syphilitic sores constantly appear where there has been no abrasion; and I have known the poison of a person who had died of a malignant or virulent disease introduced

fatally *by a sound finger being incautiously rubbed upon the most diseased spot during an autopsy.* Even friction is not often necessary; repeated application of the poison may prove sufficient."

This case, which is thought so conclusive by Dr. Elliotson, is in complete harmony with many of a similar nature which I could cite as having come under my own observation and treatment, and it aids materially in establishing the conclusion which my experience has forced upon me.

This section of the work is written especially to instruct the general reader that the dangers of contamination by syphilis are many and varied, and that the disease may be contracted without ulceration or breach of continuity in a mucous membrane or in the skin; and even that there need not be any external phenomena on the husband, still he shall contaminate his wife if he should at any time have been the victim of primary or secondary syphilis, without proper eradicative treatment. In the emphatic language of Parker, who stands high as one of our great authorities:—"*I am now as certain as I can be of anything in the domain of medicine,* that a healthy female may be contaminated by a man *apparently healthy,* but who has *been the subject* of a syphilitic constitutional taint, and *may receive from him a constitutional disease* without pregnancy or a primary sore having preceded it." Long experience and unquestionable facts urge me to this conclusion, and I am persuaded that continued observation will but confirm my belief in the facility with which not only primary but secondary syphilis may be communicated. The case of Mrs. J., which I have cited elsewhere, is but one of the many decisive illustrations which might be given in support of the perplexing theory of communication, and in addition furnishes valuable evidence of the long period of latency that frequently exists.

CASE LXXXIX.—*Syphilitic sores in the mouth, communicated by a husband to his wife, the saliva being the vehicle of contamination.*

Mrs. R., aged 30, who had never borne children, although she had been married six years, applied to me in January, 1868, suffering from an oval indurated ulcer on the lower lip. It was of a reddish colour, exuding an ichorous discharge. It had been on her lip for several weeks, for which she had been treated by a club doctor. She said the sore was very painful. I asked her if she had spots on the skin, to which she replied in the affirmative. By examination I found on her legs and chest *Herpes syphilitica*, which was conclusive that I had before me a well-marked case of syphilitic ulceration of the lip. Shortly after coming under my care her tongue also became sore. She had not—according to her own statement—had any sores on the genitals, but she informed me that her husband had ulcers in his mouth and on his tongue. This therefore was, in my opinion, an evident case of communication by diseased saliva. A course of anti-syphilitic treatment for six months was necessary to effect a complete cure in this case.

I may here again allude to the fact of a woman being infected by diseased or contaminated semen. It is a question of grave importance in its legal aspect, involving as it often does the happiness of families. A medical man is frequently placed in a most embarrassing position, when asked to give a reason, from his professional stand-point, for the appearance of phenomena that are suspicious in their nature. It is an easy matter, unless he be well versed in the pathology of syphilis, to make mistakes of a serious character, and interpret the circumstances of the case in such a way as to give rise to the

most unjust recriminations, as well as sever ties of the most sacred nature. An instance of this is given by Dr. Porter in the following words:—"But a very short time since, a young friend of mine, being professionally consulted on the subject, answered that a female could not be infected save in the ordinary way, except she had conceived, when she might be poisoned by her promised offspring; and as the person who had given occasion to the question was not in that condition, the opinion wrought an estrangement between her and her husband that has never since been cleared up. One such case occurring in a man's experience, and the untold miseries arising out of it, ought to be sufficient to prove the necessity of practically determining the point; for supposing this young surgeon's opinion to have been, *as I believe it was, decidedly* wrong*, he will have been, most unintentionally on his part, the cause of an accumulation of suffering too painful even to reflect on." Cases like this may occur in the practice of any one at some time or other; hence the importance of close attention to the study of syphilitic phenomena, and caution in pronouncing an opinion as to the mode of contagion. The same eminent writer remarks—"I have observed enough of these cases to *establish as a law of syphilis, that the semen of a diseased man, deposited in the vagina of a healthy woman, will, by being absorbed, and without the intervention of pregnancy, contaminate that woman with the secondary form of the disease, and that without the presence of a chancre or any open sore either on the man or the woman!*"

Having touched briefly upon all the leading features of syphilis in as popular a shape as the subject permitted, with the intention of drawing public attention to it, that it may be recognised, and at once treated scientifically, I cannot do

* The husband was free from any phenomenal indication, the semen alone being the vehicle of contagion.

better than closes this work with the following remarks made by Dr. Jenner, F.R.S., President of the Epidemiological Society, in his inaugural address of 1866-67:—

"Syphilis, like rickets, is a preventable disease. The mortality from syphilis is *far greater* than appears in the Registrar-General's returns. It is only in recent times that physicians have begun to appreciate *the gravity of the chronic constitutional consequences of this affection on the individual, and on his offspring*. The frequency with which cases of hepatic disease; of so-called tubercular phthisis; of Bright's disease; ot brain disease; are referable directly to syphilis: and the many cases of so-called strumous disease in the child, due to inherited syphilis, *become daily more apparent.*"

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