

A report upon some of the more important points connected with the treatment of syphilis / by Holmes Coote.

Contributors

Coote, Holmes, 1817-1872.

Publication/Creation

London : John Churchill, 1857.

Persistent URL

<https://wellcomecollection.org/works/x8k2syrr>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.




Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

M17676



22101656187



Digitized by the Internet Archive
in 2014

<https://archive.org/details/b20396685>

With the Author's Comments



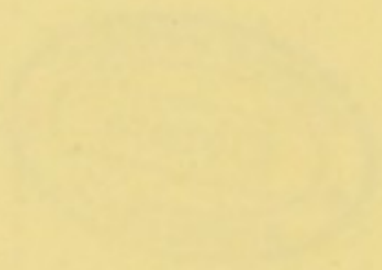
A REPORT

UPON

SOME OF THE MORE IMPORTANT POINTS

CONNECTED WITH

THE TREATMENT OF SYPHILIS.



A REPORT

ON THE MORE IMPORTANT POINTS

OF THE TREATMENT OF SLIPPER

A REPORT

UPON

SOME OF THE MORE IMPORTANT POINTS

CONNECTED WITH

THE TREATMENT OF SYPHILIS.

BY

HOLMES COOTE, F.R.C.S.

ASSISTANT-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL;
SURGEON TO THE BRITISH HOSPITALS AT SMYRNA, AND AT RENKIOI, DARDANELLES,
DURING THE LATE WAR IN THE CRIMEA.

LONDON :

JOHN CHURCHILL, NEW BURLINGTON STREET.

MDCCCLVII.

Wellcome Library
for the ^{History}
and Understanding
of Medicine

M17676

| | |
|-------------------------------|-----------|
| WELLCOME INSTITUTE LIBRARY | |
| Coll. | welmedmec |
| Call | |
| No. | W6160 |
| | 1857 |
| | C77r |
| | |

ADVERTISEMENT.

IN the publication of this Report, I have purposely abstained from quoting the opinions of others as far as possible, feeling that personal experience alone upon such a subject can now be acceptable to the profession. I mean no disrespect to those who have preceded me in this inquiry, as I am acquainted with the opinions they have expressed, and have perused their works with interest.

Venereal diseases are seen in the public hospitals upon a large scale. Their frequency must be a source of regret to all, invading as they do every branch of society. But I am far from regarding them in that very serious light which some would make us believe,—that they are interminable in their results, and pass out of one infection from generation to generation, blighting the growth, and being the parent of an endless variety of ailments.

It appears to me that the poison in general wears itself out, except in the very severe cases. Fortunately, the transmission of Syphilis from parent to offspring is comparatively uncommon.

I have endeavoured specially to prove that syphilitic sores owe their distinctive characters to the action of the poison on particular tissues:—that there is but one poison, which may produce any of the varieties of secondary or constitutional symptoms:—and that the occurrence of bubo, whether suppurating or not, has no influence upon the constitutional effects. Whether I have succeeded, must remain for others to decide.

HOLMES COOTE.

4, *Norfolk Street, Strand.*



CONTENTS.

CHAPTER I.

| | PAGE |
|------------------------|------|
| INTRODUCTION | 1 |

CHAPTER II.

| | |
|--|----|
| BLENNORRHAGIA AND GONORRHOEA | 19 |
|--|----|

CHAPTER III.

| | |
|----------------------------|----|
| PRIMARY SYPHILIS | 37 |
|----------------------------|----|

CHAPTER IV.

| | |
|--|----|
| ON INFLAMMATION AFFECTING SYPHILITIC SORES | 76 |
|--|----|

CHAPTER V.

| | |
|---|----|
| ON DISEASES RESEMBLING SYPHILIS | 82 |
|---|----|

CHAPTER VI.

| | |
|------------------------------|----|
| SECONDARY SYMPTOMS | 91 |
|------------------------------|----|

CHAPTER VII.

| | |
|-----------------------------|-----|
| TERTIARY SYPHILIS | 118 |
|-----------------------------|-----|

CHAPTER VIII.

| | |
|------------------------------|-----|
| INFANTILE SYPHILIS | 126 |
|------------------------------|-----|

CHAPTER I

CHAPTER II

CHAPTER III

CHAPTER IV

CHAPTER V

CHAPTER VI

CHAPTER VII

CHAPTER VIII

CHAPTER IX



CHAPTER I

INTRODUCTION.

I FEAR that in professing little veneration for the authority of the ancients in the matter of the Venereal Disease, and in refusing to quote copiously from their works, I shall be deemed guilty of entertaining heretical opinions, and of promulgating a dangerous doctrine. But when we reflect how little we know of the history of this disease, and how difficult we find it to recognise its various forms, with all the advantages of modern research, we may imagine the obscurity which must pervade the writings of men living in a superstitious age, and forcing a way by their unassisted genius through a mass of almost impenetrable ignorance which surrounded them. I may at once state my opinion that both Gonorrhœa and Syphilis are coexistent with promiscuous sexual intercourse as practised by the inhabitants of Europe; *i. e.*, where one woman receives several men. They scarcely exist among the inhabitants of the East, where the practice of polygamy is universal, unless, indeed, it has been introduced, as is the case in our Indian possessions, by the formation of large military depôts, or the construction of cities. The conditions necessary to call forth the venereal disease seem to be the same universally: namely, large assemblages of men, with an inadequate proportion of females.

That the early writers, whether Jewish or Arabian, should have made but slight mention of this disease may be explained by the fact, that the inhabitants of the countries along the eastern shores of the Mediterranean have from time immemorial lived for the most part an isolated and abstemious life, either wandering as nomad tribes over a great extent of uncultivated country, or occupying a little group of huts. When larger towns were formed, a system of shutting females up from public gaze was gradually introduced, and with this practice came the habit of very early marriages. Add to this, that the climate is enervating and exhausting to the male; and, as regards the female, a girl is marriageable at twelve, and sinks into a comparatively old woman by thirty. The one sex is not very earnest in pursuit, and the other is endowed with the sexual passion for a short time. The practice of polygamy seems to me to have been introduced in consequence of the rapid evanescence of female beauty and attractiveness.

In 1855 I was stationed for a few months in Smyrna, and was struck at once with the rarity of venereal disease in any form among the inhabitants, who applied freely for professional advice. Cases of gonorrhœa occasionally happened among the Greeks; and the leader of a band of robbers, since executed in the neighbourhood of the town, obtained from a medical man, whom he took prisoner during our residence there, a prescription for that disease, to be used in case of emergency. I saw two cases of excoriation of the glans and prepuce, with puriform discharge, among English visitors to the place, and a case of gonorrhœa in a ward-orderly. Several of my colleagues had a somewhat similar experience; but all

agreed in remarking the freedom of the inhabitants from venereal disease.

The same was noticed by me when visiting other places in Anatolia: there prevailed scrofula, marsh fevers, ophthalmia, and affections known in Europe; but of syphilis I saw nothing among any of the inhabitants.

It appears, then, that whenever large numbers of men are so placed that one female has connexion with several of the opposite sex within the twenty-four hours, for any length of time, gonorrhœa and syphilis both become common. As regards the first, to which Mr. Acton has applied the term "non-specific," its spontaneous origin is admitted. Once developed, it may be propagated by contact. Upon this point most surgeons have been long since agreed. Upon the question of the origin of the syphilitic virus there exists the greatest difference of opinion, and Mr. Acton hesitates to admit its spontaneous origin. "All the experiments made to produce it *de novo* have completely failed; and a careful investigation of the disease shows, on the contrary, that it has been contracted from a person, who has himself contracted it from another individual."—(*On the Urinary and Generative Organs*, p. 2.)

Now, I know no series of experiments which any person has tried, or would like to try, even if he had the power, to ascertain this point. Let us for a moment consider the career of the female from whom a healthy man contracts a syphilitic sore. Originally virtuous, and perhaps an object of admiration, she receives as many men during the day as she can bear, for the purpose of maintenance. Many of the lower order of prostitutes have informed the sister of the ward under my care that they have admitted seven or eight men a day, and per-

haps even more, for the period arrived when the combination of drink and excitement paralysed the action of the brain, and a state of half consciousness supervened, during which nothing was remembered. It is, I presume, under circumstances like these that the source of the syphilitic virus must be investigated. What proof, then, have we that it is not thus generated every day? and wherefore should we revive the hypothesis of Van Helmont, who attributed syphilis to farcy, transmitted from the horse to the human being, until we have clearly ascertained that none of our social habits are in fault? But Van Helmont's hypothesis does not advance our inquiry as to the origin of the poison. By shifting the matter from man to the horse, *i. e.*, from one animal to another, we do but put the same question in a different form.

The disease which medical writers described as prevailing in 1493-94 was doubtless severe; but at this distance of time we cannot tell how much was due to syphilis, nor how much to defective sanitary arrangements. During the late war in the Crimea, I saw a soldier in whom the penis and part of the scrotum were destroyed by a form of hospital gangrene closely resembling sloughing phagedæna. In this case there was no syphilitic history. How many of the cases which occurred during the memorable siege of Naples were of the same nature, namely, sloughing of the penis from hospital gangrene, brought on by want of proper food and clothing, and exposure to the privations attendant on a siege?

M. Ricord attaches great importance to the practice of inoculation "as enabling us to arrive at an exact knowledge of what is and what is not primary syphilis, and

of the means of distinguishing the specific from the non-specific diseases." But subsequent investigation has shown that this test can by no means be relied on. Mr. Henry Lee remarks, in an excellent paper published in the *British and Foreign Medico-Chirurgical Review* (No. XXXVI., October, 1856):—"The genuine infecting sores commonly commence as a pimple or crack, or a simple abrasion, from which there is little or no secretion: their progress is slow; they rarely become much inflamed, except when artificially irritated, and they do not furnish a secretion of pus. It is often extremely difficult to inoculate such sores; and sometimes when they are inoculated, not a pustule, but a sore showing the signs of adhesive inflammation only, will result." He relates the particulars of four cases in support of this statement.

About ten miles from a station in Asiatic Turkey, to which I was appointed in 1856, was a large encampment of native cavalry, in the pay of the British Government. I knew several of the medical officers, and was informed by them of the frequency among the men of primary venereal sores about the anus. The mode of communication may be understood without description; the vitiated habits of Orientals have not changed since the days of Cyrus. But the question arises, whence came the poison? Was it introduced by some one who contracted the disease from a female? This is the most ready solution of the question; but then it is destitute of proof, and the difficulty of access to women in the East is proverbial.

I cannot offer any suggestions respecting the exact mode of origin of the venereal disease; nor have I ever read any at all calculated to inspire confidence or explain its phenomena. Experience has however shown us, that wher-

ever promiscuous sexual intercourse exists, there will be the disease, and that sanitary regulations, though they may control, have hitherto failed to exterminate it. There is a strong probability, then, that the poison is engendered by the mode of life, to which prostitutes are exposed, although we are without positive proof upon the point. At least this appears to me to be the only explanation of the ubiquity of syphilis throughout all nations, in the enjoyment of the present customs of civilization. This want of exact knowledge should not excite either surprise or disappointment, considering that our knowledge is equally uncertain as to the origin of nearly every other disease affecting the human frame.

Dr. Gordon, surgeon, late of the 57th, now of the 10th, Regiment of Foot, has shown, in an interesting pamphlet, not only that the relative prevalence of different forms of local ulcers varied according to the station of the regiment; but from the circumstance of the Hunterian chancre being most abundant in large garrison towns in England, such as Chatham, Canterbury, and Dublin, it may be presumed that the filthy habits of the prostitutes of such stations had something to do with the prevalence of this form, which is the most severe. He also found that the ratio of cases of bubo to local ulcers varies according to station, but seems to be greater in India than in the United Kingdom. The occurrence of a *running* bubo would seem in the United Kingdom to diminish the liability to become affected with secondaries, but this rate does not appear to hold good in India.—(*General Statistics of Local Venereal Ulcers, Syphilitic Bubo, &c.*)

The statement here made, which is supported by the record of cases, contains points worthy of remembrance

in relation to the subject now under consideration. The prevalence of the severer forms of sore in densely-crowded cities implies a power of aggravation of the virus, through the deplorable habits of the female. Now, if it could be proved that the poison remained under all circumstances the same, and that increase in its activity was due to its working upon a constitution, on the side of the man, impaired by excess, no particular inference, already unacknowledged, could be drawn. But if, on the other hand, it can be shown, as Dr. Gordon's statistics seem to prove, that the poison may acquire a positive increase of virulence through habits of excess in promiscuous intercourse by the woman, I see no difficulty in imagining that this is the source whence the poison may have originated from the beginning: that nature has established laws, the transgression of which is followed by vitiation of the natural secretions, producing poisons capable of acting upon the human frame, in the same way as the decomposition of vegetable matter will produce the miasmata, the breathing of which is followed by marsh fever. We do not know the intimate nature of these combinations, nor are they often cognizable to us, save by their effects. I admit that the propagation of an unsound hypothesis is injurious, by diverting the mind from proper inquiry, and by satisfying those who are easily captivated. We have no other course open, therefore, than to suspend our judgment, whatever may be our bias, and to admit no new statements, unless supported by recent investigations and the observation of facts.

Let us next ask what are the channels through which the poison is absorbed into the system. Is it taken up by the absorbent vessels, or does it mix immediately with the current of blood in the veins?

The experiments of Hunter, whence he drew the conclusion that "the red veins do not absorb in the human body," and consequently that "the lymphatics were the only absorbents" (*On the Venereal*, p. 253), have been called in question by other physiologists, for instance, Tiedemann, Gmelin, and Ségalas. The experiments of the last-named physiologist is well known. A fold of small intestine was drawn out of a wound in the belly of a dog. All the blood-vessels passing to and from it were tied but one large artery. A vein, punctured upon the mesentery, allowed the blood to escape, which would otherwise have stagnated in the part. The lacteal vessels and nerves were left entire. The fold of intestine was then tied at both extremities, and an aqueous solution of the alcoholic extract of nux vomica was poured into it. During the hour which followed, the poison produced no symptoms. The ligature being then removed from one of the veins, the blood was allowed to return in the natural course of its circulation. In six minutes from this time the poison took effect. The absorption of the poison by a special set of vessels being thus denied, it is inferred that two very important points may be established by an extensive observation of cases of syphilis; first, that in those instances in which the irritation of the lymphatic glands is the greatest, and where, consequently, we have the best evidence that the morbid matter has entered them, there is very seldom indeed any secondary syphilitic affection; and secondly, that the best-marked cases of constitutional affection are as rarely preceded by any very evident signs of inflammation of the absorbent glands.

"It is proved," observes Mr. Lee, "beyond a doubt, that the syphilitic poison may remain in contact with an

abraded mucous membrane, or be inserted beneath the cuticle, and allowed to remain for two, three, or four days, and no absorption will take place. This requisite period of incubation is it that secures the system against infection in cases where, from the first, ulcerative or suppurative inflammation has taken place. A part in the course of being contaminated becomes by these processes dissolved or removed before the act of absorption can be completed. Fresh parts may continue to be attacked, but these in their turn are destroyed before they can act as the channels of infection to the constitution. Hence arise often extensive local intractable ulcerations, which are not followed by any secondary symptoms."

I do not see how we can with safety draw conclusions respecting the absorption of the syphilitic virus from the experiment of Ségalas upon the intestine of the dog. The lacteals cannot be regarded in the light of common absorbent vessels. They apparently possess a power of selection, as great as that enjoyed by any set of excreting vessels attached to or arising from a gland. The thoracic duct, which receives their contents, does not in all probability convey into the venous system the whole amount of digested food, but only the more highly organized constituents. The saline and some fatty material is supposed to be removed by the veins. Hence the only conclusion to which the experiment can lead, is that the lacteals refused to remove the poison from the isolated cavity of the intestine, and not that the absorbents would refuse to remove the syphilitic poison from the venereal sore into the circulation.

Next, as to the two important points said to be established by an extensive observation of cases of syphilis.

1. *In those instances in which the irritation of the lymphatic glands is the greatest, and where, consequently, we have the best evidence that the morbid matter has entered them, there is very seldom any secondary syphilitic affection.*

It is scarcely necessary to remark, that the accuracy of this observation can be confirmed only by a careful record of cases. Certainly it does not correspond with the impressions conveyed to me by my own experience; but inasmuch as such impressions, unsupported by accurate data, are valueless, I took the particulars of some cases of secondary syphilis in the hospital at one date, in reference to this point, with the following result:—

November 15th, 1856.—There are twenty cases of secondary syphilis in the venereal wards of St. Bartholomew's Hospital; some slight, others of very severe character. Of these, 11 are males, out of a total of 26 patients, and 9 are females, from a total of 52 patients. The reason of this apparently greater frequency of secondary syphilis among males than females arises from the fact, that, while the former are admitted only when suffering from the severer forms of the disease, the latter, who are compelled to support themselves by prostitution, are received in greater numbers and for a much milder attack. Men suffering from gonorrhœa are always made out-patients; but no such rule is applied to the opposite sex.

Of these 11 men, subjects of constitutional syphilis, not one had the true indurated chancre. The primary sores were superficial ulcerations of the glans and prepuce, leaving cicatrices, and one case of primary phagedæna.

Eight of the cases were preceded by bubo, of which suppuration occurred in two. But in most cases the

patients stated that the glands in the groin swelled up for a week or more, and then subsided. Among the females, five cases out of nine were preceded by bubo; of these, suppuration occurred in four. It must be remembered that women living on the streets are unable to rest at the commencement of their attacks of disease; and hence suppuration of the inguinal glands is by no means uncommon.

The forms of secondary syphilis among the men were scaly, pustular, and tubercular eruptions. There were three cases of iritis, and two of enlargement of the testicle. Among the women there was one case of iritis, two of sore throat and tubercular eruption, and one case of inflammation and ulceration of the meatus auditorius externus.

CASE.—*Tubercular Syphilitic Eruption—Iritis of both Eyes—Syphilitic Ulceration of the Navel, and of the Meatus Auditorius Externus, following no visible primary Sore, but non-suppurating Buboes in each Groin.*

Ellen B—, aged nineteen, barmaid, a pale and delicate-looking girl, but well grown, was admitted into the hospital under my care, October 15th, 1856, with syphilitic eruption—partly scaly, partly tubercular—over the whole body. She states that, twelve months ago, she was induced to leave her place to live with a person above her in rank, who, after having seduced her, deserted her, leaving her infected with venereal disease. The first symptoms became apparent three months ago, when she noticed a painful swelling in each groin; but it was not preceded, to the best of her knowledge, by either discharge from the vagina or ulceration. The buboes subsided without suppurating; but during pro-

gress the present eruption made its appearance, first on the shoulders; secondly, behind the knee; thirdly, over the whole body. The small detached copper-coloured patches of *lepra syphilitica* passed into tubercular elevations, which in greater part scaled, but in other situations ulcerated, producing phagedænic sores covered by dark conical incrustations. Examination of the vagina detected the same spots on the lining membrane, but no trace of primary ulcer or of gonorrhœa. There was one sore of larger size than the rest behind the right knee. She has become much emaciated. No mercury has ever been administered, so as to produce salivation. Pulse feeble; appetite bad. I ordered her three grains of the iodide of potassium in the concentrated decoction of sarsaparilla; beef-tea or meat, as she chose; and ʒvi. of port wine daily, with the idea that the eruption would run its course and subside under this treatment and the regular habits of the hospital. But, on October 25th, the right eye became attacked with acute syphilitic iritis, attended with discoloration of the iris, contraction of the pupil, impaired vision, and pain about the brows. On the application of eight leeches to the temples, the administration of two grains and a half of hydrargyrum cum creta three times a day, and frictions over the brow of strong mercurial ointment and powdered opium, in the proportions of six grains to two, the disease subsided within a week. On November 2nd there ensued inflammation of the lining membrane of the right meatus auditorius; and on November 7th, recurrence of the inflammation of the iris, and ulceration of the navel. Eight leeches were ordered to the temples, and continuance of the mercurial course, combined with good diet, essence of sarsaparilla, or cod-liver oil, during which

treatment the tubercular eruption faded, and the patient regained strength.

November 10.—A relapse of the inflammation of the iris occurred, attended with much pain and dimness of vision. Her strength having greatly increased since her admission into the hospital, she was directed to leave off solid animal food and wine, and to be on broth diet. Eight leeches were ordered to the temples: to continue the mercurial pills.

November 11.—She was directed to take pills, composed of calomel, gr. ii; opii, gr. $\frac{1}{2}$, every eight hours.

November 15.—The eye presents a perfectly natural appearance; vision is perfect. The skin is regaining its natural colour.

November 20.—She is well.

2. *That the best-marked cases of constitutional affection are rarely preceded by any very evident signs of inflammation of the absorbent glands.*

Upon this point my experience fails in supporting the conclusion of Mr. Lee. I have not found any relation between the severity of the attack of constitutional syphilis and the occurrence of bubo. The three men in the list above mentioned, who were affected with secondary symptoms without bubo supervening upon the primary sore, were by no means severe sufferers. One man had iritis, scaly eruption, and ulcerated tonsils. The second, phagedænic ulcers of the lower extremities: he confessed to being a drunkard. The third had ulcerated tongue, and an eruption partly of scales and partly tubercles. Among the women, two patients, who had had no bubo, were affected respectively with tubercular eruption and with lepra.

Upon several occasions have I taken a similar account of the patients at one time in the wards; and the result has been generally the same. From which reason I am inclined to the belief that the occurrence of bubo is not of any weight in enabling us to determine the probable character, as to severity, of the constitutional symptoms which may succeed the primary sore.

On the 20th of November, 1856, there were eight women with secondary syphilis in different forms, under Mr. Lawrence's care, in the hospital. Of these, one only had never had bubo; two described the glandular swelling as temporary. Of the others, suppuration had occurred in all. In two instances the abscess had been opened by the lancet.

Three years ago I saw a patient from Jersey, who gave the following account of himself:—Fifteen months ago he contracted a non-indurated sore on the inside of the prepuce, for which he was put under a regular mercurial course. The sore healed in three weeks; but subsequently there formed in the left groin a bubo, which suppurated, but did not burst. It gradually subsided. Twelve months ago an attack of rupia made its appearance over the whole body; and it has been "on and off" ever since.

He was directed to take iodide of potassium and sarsaparilla. After calling twice or thrice, he left this part of the world, and I have not seen him; but I recorded the case, to show,—Firstly, that a non-indurated sore may be followed by ulceration of the throat, even after proper treatment. Secondly, that syphilitic superficial ulceration of the throat may be followed by the eruption of rupia. Thirdly, that mercury does not destroy the poison after it has been absorbed, although it will produce temporary beneficial effects.

In St. Bartholomew's Hospital, between 7000 and 8000 patients, of both sexes and of all ages, are seen annually suffering from venereal disease. Of these, the proportion of women to men is 3 to 5; and of infants to adults, 6 to 1000. Cases of gonorrhœa are, for the most part, treated in a distinct department, termed the Casualty Ward, where about 1800 are seen annually, consequently the number of such cases upon the list of registered out-patients is much below the average. In the month of October, 1856, it was as follows:—Out of 93 venereal cases, seen by myself and one of my colleagues, there were 19 cases of gonorrhœa and 74 of syphilis. Of the syphilitic cases, 35 were primary sores, and 39 constitutional affections, *i.e.*, secondary and tertiary symptoms. Of these 39, only 6 were cases of tertiary syphilis. In the month of September of the same year there were, out of 86 patients, 34 cases of gonorrhœa, 23 cases of primary syphilis, and 29 cases of constitutional syphilis. Of these, 11 were instances of the tertiary form of the disease. The total number seen in the hospital during the same period would be represented by multiplying the above numbers by two; inasmuch as four surgeons are occupied in the out-patient department. The patients for the most part reside in London and in the neighbourhood of the hospital; but a proportion is derived from Deptford, Woolwich, Sheerness, and other similar towns; such persons being usually the lower order of females, who apply for admission into the venereal wards.

Hence I think we may infer that the more frequent accident from promiscuous intercourse is gonorrhœa.

As regards the cases of syphilis, the most striking fact is, that in the two months above named the numbers of the cases of primary and secondary syphilis were nearly equal.

Now, this large proportion of cases of secondary syphilis, as contrasted with the primary, is greatly at variance with the returns of the Army Medical Department. But we must remember the differences, to account for this, between soldiers and civilians. The former are generally healthy young men, trained to active exercise, well, but judiciously fed, and unable to indulge, without punishment, in repeated excesses. The latter are better paid, when in work, and free to riot in excess. To this often succeeds a period of poverty and scarce feeding. The artisan perhaps lives in a bad quarter of a thickly-peopled town or city, and enjoys but rarely the luxury of fresh air. The one is put in all the conditions necessary for health: the other may be surrounded by precisely the opposite conditions. And here it may not be out of place to remark, that the recurrence of the disease in any of its constitutional forms is in a great measure due to the habits of the patient. Overwork, excesses, imprudences of any kind, exert precisely the same effect over the specific disease now under consideration as they do upon diseases proceeding from other causes. Hence, in recommending prophylactic measures, we cannot too strongly inculcate the necessity of attending to fixed rules as to diet, and especially to the avoidance of all causes of excitement. My friend Mr. Nesbitt, who has had charge of the convicts at Gibraltar for some years, informed me, that although such persons have, at the time of their committal, almost invariably some form or other of venereal disease, yet they scarcely ever suffer from this disease while undergoing their punishment. He could not recollect, out of 1300 patients, a single case of secondary syphilis requiring his attention or treatment. I have frequently seen scaly eruption, iritis,

or ulcerations of the throat, succeed the imprudences and excesses of a night's debauch.

The number of female patients admitted by the several surgeons of St. Bartholomew's Hospital during the same period, varies somewhat. Thus, in 1855-56, the returns were as follows:— No. 1 admitted 118 females; No. 2, 90; No. 3, 84; No. 4, 108. The difference is accidental, and arises less from the severity of the cases than from the attention paid by the attendants to the instructions they receive. A female suffering from gonorrhœa may remain for months uncured, unless a proper examination be made, and some lesion beyond the reach of ordinary inspection be detected and treated in an effective way. Thus a young woman, aged eighteen, named Anne R——, was admitted into the hospital under my care, Sept. 11, 1856, with a large growth of vascular warts from the external organs, and copious puriform discharge. The use of zinc lotion, the application of powdered savine and verdigris to the roots of these growths, failed to produce any effect. They increased visibly, and I therefore removed them by operation, the patient having been previously rendered insensible by the administration of chloroform. The discharge, however, continued, and the girl told me that she had not been free from it for eighteen months. I ordered her nutritious diet; a pint of porter daily, and decoction of bark with sulphuric acid, but without any improvement in the local complaint. The warts recommenced their growth, and the patient's health began to fail. She became thin, feeble, and subject to hysterical fits of crying upon the least excitement. Under these circumstances I examined the os uteri by means of the speculum, and found there an abraded and slightly ulcerated surface, the size of a

shilling. On November 1, the caustic of nitrate of silver was applied to this abrasion. The day following, the discharge was considerably increased, and tinged with blood; but in the course of three days it subsided, and then ceased entirely. On the 10th of November, a second examination was made, and the caustic again applied to a suspicious spot. The general health during this time had manifestly improved, and on the 15th of the month she was discharged, well, and able to undertake again the duties of a domestic servant. Other patients are admitted in a state of syphilitic cachexia, covered with the scabs of *rupia prominens*, with open ulcers, and cicatrices; the bones irregular upon the surface, and painful to the touch. One such person occupies a bed for many months, being admitted only to die, for repeated outbreaks of the cutaneous disorder keeps up a constant irritation; the face and limbs gradually shrink; the appetite fails, and the bowels become purged. Death ensues, often without there existing any serious lesion of internal organs. The poison seems to have affected the entire circulating fluid, if we may judge from the absence of colour, and cessation of nutrition. The presence of one or two such cases in a ward makes a very considerable difference in the yearly return.

Sufficient has been said to show that the venereal disease, let it come from what source it may, is at the present time a widely-spread evil in this metropolis. Let us now proceed to examine both its local and constitutional effects.

CHAPTER II.

BLENNORRHAGIA AND GONORRHŒA.

BLENNORRHAGIA IN THE FEMALE.

THE occurrence of muco-purulent discharge from the generative organs of the female, as a result of sexual intercourse, is extremely common; and it appears to me that, for practical purposes, we may make the following divisions:—

1. Blennorrhagia, characterized by a simple, not infecting, yet irritating discharge.
2. Acute gonorrhœa, characterized by an abundant puriform discharge, calculated to produce in the male, after intercourse, a similar disease.
3. Chronic gonorrhœa, or gleet, the effects of which upon the male are uncertain.

It is necessary in speaking of the first division, namely, simple blennorrhagia, to observe, that, under a variety of conditions, the secretions from the external organs of generation in the female may become irritating to the male urethra, without there existing any reason to impugn the woman's virtue. For example, the menstrual period. In practice, it is not uncommon to meet such cases as the following:—A gentleman, whom I knew to be a trustworthy person, married a lady, to whom he had been attached for a few years. Three months after marriage he was greatly annoyed to notice a purulent dis-

charge from the urethra: it was not attended by pain, nor any amount of scalding in making water; but the discharge was sufficient to mark his linen. I inquired as to whether he had ever had gonorrhœa, and he replied that he had suffered from a sharp attack about two years previously, but had since then been perfectly well. There was not the slightest imputation upon the lady's character. It was unnecessary to press my inquiries further, inasmuch as it was apparent that this attack of urethritis was due to a little imprudence on the part of the gentleman, whose excess had perhaps induced some increased amount of secretion in the wife. I mention this case, of which there are many similar on record, inasmuch as a mistake on the part of the surgeon might lead to much domestic unhappiness. A purgative, a slightly astringent injection, and general abstemiousness, will speedily remove the disease. Another gentleman, between forty and fifty years of age, suffered in a similar way, after connexion with one female, whom at his request I examined, and found that there was little more than a slightly increased discharge of thin mucus. Women of the town are rarely free from this discharge, even when in what they consider health; and it is remarkable, that some men are exempt from contagion, while others are always unlucky. I have heard of a case, in which profuse discharge followed a first connexion on both sides, between two people; but I must confess to never having witnessed such an occurrence. In respectable married life, the class of diseases of which we are now speaking are uncommon.

There are many conditions, however, which may give rise to discharge, independent of sexual intercourse; and it therefore becomes necessary at times to examine the

vagina and the os uteri by the aid of the speculum. This is an instrument, the perpetual use of which I agree in condemning; but, nevertheless, there are some cases, the nature of which can be ascertained only by such a mode of investigation, and in which the means of cure would be unattainable in a different way. I am not only alluding to ulcers and excoriations on the uterine orifice, such as produce chronic discharge for years, by which the patients health may be seriously impaired, but also of cases which are less frequent, but which may occur in any grade of society. In illustration of this remark, I will relate the following:—

Diseases of the Uterus producing Chronic Discharge from the Vagina.

A middle-aged woman had been long subject to discharge from the vagina. Death having ensued from some other disease, I was enabled to obtain an examination of the uterus.

The os uteri was slightly abraded at the right side: the uterus was much larger than natural, and was filled with about an ounce of dark-brown turbid fluid: the mucous membrane was soft, thickened, and injected. Upon opening the organ, it was seen that the neck was greatly contracted by an old cicatrix, which had so reduced the size of the orifice, that it barely admitted the point of a probe. Fluid escaped from the uterus upon pressure.

A second case examined by me presented the following appearances:—There was a double cyst, containing clear fluid in the left ovary. The whole interior of the uterus was coated with a thick layer of yellowish-white

tubercle, which had in parts broken down and ulcerated the mucous membrane. There were numerous tuberculous spots, some as small as pins'-heads, others of the size of peas, scattered throughout the substance of the vagina. The mesenteric glands contained a quantity of tuberculous and cretaceous matter.

March 8, 1850.—I examined, for Mr. Lawrence, the body of a female lunatic, aged thirty-three, in Bethlem Hospital. The ventricles of the brain were distended by clear fluid. Upon examining the uterus, we found an ulcer the size of a sixpence upon its orifice; but the organ was otherwise healthy.

We may enumerate as causes of discharge from the vagina unconnected with syphilis,—

1. Cancerous degenerations of the uterus.
2. Tuberculosis of the uterus.
3. An indurated condition of the cervix uteri, whether produced by the cicatrix following laceration or division by surgical operation.
4. Internal verrucæ.
5. Those morbid conditions of the follicles of the os and cervix uteri, upon which leucorrhœa is said to depend; namely, simple congestion of the parts, follicular enlargement, or ulceration.
6. Displacements of the uterus.
7. In children, the presence of worms in the intestinal canal.

A few days ago, a patient requested me to state the cause of discharge from the vagina, from which she had been suffering nearly eighteen months. I found the

vagina very lax, and readily prolapsed ; the mucous membrane was highly congested, but of a dull-red colour, the rugæ strongly marked. There was a muco-purulent discharge, often of considerable amount. The patient was thirty years of age, and married: she had no reason to suspect the occurrence of venereal disease, but consulted me in anxiety, which was natural, about her complaint. Upon inquiry, it proved that she had married early in life, had had three children in quick succession, and had been obliged, contrary to her natural habit, to exert herself much for their maintenance. The uterus had fallen down in the vagina, from the external orifice of which it was scarcely three inches.

Discharges from the vagina may be kept up by a growth of internal verrucæ, long after the disease which caused their appearance has passed away. I was requested to examine a young woman, November 7, 1853, who had some time before been under my care for chronic gonorrhœa, and who had been pronounced well. She resumed her usual habits, which were those of a domestic servant, when the discharge returned in such profusion that she was unable to continue in her place. She was admitted into the hospital, and the usual remedies were employed with temporary benefit ; but a recurrence of the symptoms invariably succeeded her exerting herself for a few hours. Under these circumstances I deemed an examination by the speculum necessary, and found about two inches and a half from the orifice of the vagina, a large warty growth, soft, red, and vascular, two inches in length, and an inch and a quarter across the base, springing from the anterior wall. The patient was rendered insensible by chloroform, and the growth was re-

moved by the knife, the ecraseur, for which such a case is particularly suitable, not having been invented. Immediate relief ensued, and in the course of a few weeks the patient left the hospital, permanently cured of the discharge. She was heard of six months afterwards, and continued well.

Acute gonorrhœa in the female commences with a sensation of heat and irritation of the external organs, followed by swelling of the labia and nymphæ, projection of the latter externally, redness of the mucous membrane, and an abundant secretion of muco-purulent fluid. Sometimes, but not always, the urethra is inflamed, when ardor urinæ and pain in micturition ensue; inflammation and suppuration of the labium may occur, or the mucous lining of the vagina may ulcerate, or even superficially slough. But in the female this disease is not attended by the same distressing symptoms as in the male. The simpler construction of the urethra in the former spares her the complications from which men complain so much. The prostate gland in the female is so rudimentary that inflammation of the part cannot be said to exist: there are no convoluted ducts like the vasa deferentia, along which inflammatory action may be propagated; nor is stricture of the urethra, either spasmodic or permanent, a possible occurrence.

Suppuration in the labia is a painful affection, which may ensue wholly independent of venereal disease. Its seat is the mucous follicles of the labium, first described by Bartholini, and commonly called "Cowper's glands." They consist of an assemblage of small glands opening into a common reservoir, which is the commencement of an excretory duct, the orifice being on the inner surface

of the labium, about midway between its upper and lower extremities.

Cases have been recorded in which inflammation has extended to the cavity of the uterus, and thence along the Fallopian tubes to the ovaries, where changes have ensued, causing subsequent peritonitis and the death of the patient. Mr. Erichson remarks, "that he has known one or two cases in which rather acute attacks of peritonitis, probably induced in this way, have complicated this disease; and the same has been observed by all those who have the charge of female venereal wards. Some years ago a young Greek woman died from this disease in Corfu, in consequence of her receiving too-frequent attentions from the officers of a regiment recently arrived there."

Acute inflammation of the ovary is frequently complicated with inflammation of the veins of the affected side; and death may ensue from this cause, as well as from peritonitis. In the cases which have fallen under my observation, the disease has yielded to local depletion, combined with mercury, in doses sufficient to produce ptyalism. Mr. Acton, in speaking of this disease, observes, "that, in a former edition of his work, he directed the attention of the profession to this complication. I stated," he observes, "that there is one complication which we believe is new to British practitioners; at least, we do not remember having read of it in English works. We allude to an ovaritis, which bears an analogy to epididymitis in the male. Thus, a female suffering under uterine blennorrhagia may be seized with shivering and a feverish state of the system: vomiting may come on, together with pain referred to the iliac fossa, where more or less tension may be pre-

sent (in no way resembling the superficial pain produced by peritonitis); but if the finger be carried up the *cul de sac* of the vagina, and the patient desired to turn upon the opposite side, pain of a most acute kind will be felt."—(*On Diseases of the Urinary and Generative Organs*, p. 308.)

I scarcely can imagine this disease unknown to English surgeons; at least, I can remember in the hospital venereal wards, for very many years, the occasional occurrence of cases illustrating the above remarks. Acute inflammation of the ovary may produce abscess of the ovary, iliac abscess, or phlebitis. Acute inflammation of the vas deferens may produce iliac abscess, as well as inflammation of the epididymis; but anomalous cases in the progress of gonorrhœa are extremely rare, and may be in general referred to constitutional peculiarities on the part of the patients.

Buboes occur not uncommonly in gonorrhœa; but they rarely suppurate in healthy subjects. In persons of scrofulous habit they form more readily, and are dispersed with difficulty. Gonorrhœal ophthalmia in the female is a rare disease; at least, when the number of cases of discharge from the vagina treated annually is taken into consideration. When established, the disease pursues the same course as in the male, and requires a similar amount of active treatment.

Cases of gonorrhœal rheumatism in females are less unfrequent than the preceding. At the present time, November 20th, 1856, there are several cases in hospital, mostly under the care of Mr. Lawrence. The following may be taken as an illustration of the disease:—

Mary Ann M^cC——, aged twenty-three, a person of light complexion, blue eyes, and sandy hair, states that

she has had discharge from the vagina, on and off, for full two years: during that time she has often suffered from ardor urinæ. She has been in the Lock Hospital for this disease. She was formerly a domestic servant, but left her place to live with a man four years ago. After a time he deserted her. Her present attack commenced three weeks ago, in the right elbow, where she experienced most severe pain, without corresponding swelling, extending to the shoulder. The severity of the pain is at its height at 10 p.m., but continues through the night, causing her to start up when she is on the point of dozing. Admitted under Mr. Lawrence.

October 16.—Ordered—two aperient pills; a mixture containing iodide of potassium and colchicum; rice milk diet. An opiate at bedtime.

October 23.—No improvement or diminution in the pain. Ordered—ten grains of compound ipecac. powder thrice a day.

November 20.—The fingers and the whole hand have become contracted in complete flexion, requiring forcible extension to overcome, the patient being under the influence of chloroform.—Still under treatment.

Chronic gonorrhœa is a disease from which the lower order of prostitutes is rarely free. It exists also among the better class, who live highly and drink without scruple. In general it disappears when the patient is kept on moderate and regular diet, and confined to bed; but it returns upon the least excitement, or upon the patient moving about, or indeed from no apparent cause whatever. A little girl, aged thirteen, was under my care for gonorrhœa and superficial ulceration of the external organs. She was retained in the hospital some weeks

after she was well, that she might get admittance into the House of Occupation. During the time of probation the discharge recurred twice. It is this form of disease which any morbid condition of the os uteri may keep up, in spite of general treatment; and I have patients frequently under my care who, that they may be cured, require careful examination. How often do we fail to check the disease by antiphlogistic treatment, by rest, astringent washes, tonics, mineral acids, and the like; or, if the discharge be checked, how quickly does it return, until some internal ulcer or abrasion be cauterized and induced to heal.

One of the greatest inconveniences attending the continuance of this irritating discharge is, that it causes the most abundant growth of soft vascular warts. They usually commence at the lower part of the vagina, near the orifice, and extend upwards, at the junction of the mucous membrane and the skin towards the superior commissure. The rapidity of growth of these productions is quite striking: when removed by the knife, they return within a few weeks, if the irritating discharge be allowed to continue. I have had to remove masses of such size that the bleeding has been considerable, and the pain would have been excruciating had it not been for the employment of chloroform.

The treatment of gonorrhœa in the female is simple. In the acute stage, rest, abstemiousness, and the administration of aperient medicines, are essential. Combined with these, the injection of astringent washes, by means of a syringe. The patient should therefore be kept in bed; should take every morning, or every second morning, a dose of Epsom salts, or salts and senna; and use either the *lotio plumbi* of the Pharmacopœia, or a

lotion of alum and zinc. In the hospital the formulæ are—

Aluminis, ʒi.
Aquæ distillatæ, fʒiv.

or,

Zinci sulphatis, gr. xxiv.
Aquæ distillatæ, fʒvi.

Cases occur in which local or even general depletion may be necessary.

In the more chronic form of discharge the usual lotion is composed of—

Lotionis aluminis,
Decocti quercûs, equal parts.

It is not often that copaiba need be administered to the female; but when so, the hospital formula is excellent:—

℞ Copaibæ, ℥ xv.
Misturæ acaciæ, fʒi.
Cubebæ, ʒi.
Spiritus ætheris nitrici, ℥ xx.
Aquæ distillatæ, or
Misturæ camphoræ, fʒx.

F. haustus, ter quotidie sumendus.

GONORRHŒA IN THE MALE.

Gonorrhœa in the male is an extremely troublesome complaint, and in nine cases out of ten the surgeon fails to meet the patient's wishes in effecting a speedy cure. The disease commences usually about three days after connexion, but sometimes much later; and I have remarked that the disease is usually less severe when the symptoms come on tardily. The longest period I ever knew to elapse was ten days. A gentleman had con-

nexion with a girl at Cologne. He pursued his way to England, by Rotterdam and London. Gonorrhœal discharge came on five days after he had landed, in consequence, as he believed, of having exerted himself in a rowing-match, and partaken rather freely of strong beer. At first a slight itching is felt, then an irritation at the end of the penis, which some authors pronounce to be agreeable; then a smarting pain upon micturition; the lips of the urethra become tumid, and a discharge—at first thin, but subsequently puriform—flows from the passage. In some cases there is irritation and swelling of the glands in the groin: next the corpus spongiosum urethræ becomes thickened by inflammatory effusion, so that it does not yield; when the organ becomes erect, a state of chordee is produced. Hæmorrhages then ensue from the urethra, often to the relief of the patient. The inflammation may extend to the prostate gland, when it sometimes excites acute abscess—an accident characterized by the most excruciating suffering to the patient on making water. I have known strong men roll on the ground in agony. More commonly the inflammation spreads along the vas deferens, and produces swelling of the epididymis, with some effusion into the tunica vaginalis.

Now, of these symptoms, to which I have here briefly alluded because they have been so often described and are so well known, it will be asked, Do they result from simple or from specific inflammation of the urethra? Is the disease the consequence of the application of a simple irritating fluid to the mucous membrane, or is there a morbid poison acting upon the parts locally, and capable of being absorbed into the system? I must confess there appears to me to be a most marked difference be-

tween simple urethritis and true gonorrhœa, as we daily see it among those exposed to contagion. There are not only cases wherein it occasions the development of a peculiar train of secondary symptoms, but others, in which its existence retards, as it were, the action of the syphilitic virus. On October 20, 1849, a prisoner was admitted into the City Bridewell suffering from gonorrhœa, which he had contracted a fortnight before his imprisonment. It is unnecessary to observe that all prisoners are carefully examined by the surgeon upon their admission; and upon this occasion I can speak, from personal inspection, that the man was otherwise sound. He was directed to take the copaiba mixture, and to use a weak solution of sulphate of zinc, under which the discharge left him in about three weeks, when he went to full work upon the treadwheel. A superficial non-indurated venereal sore soon appeared upon the integuments of the under surface of the penis. It healed under the usual treatment. It is obvious that the man could not have exposed himself to contagion for at least three weeks—probably not for five. From what source, then, came the poison which thus acted upon him so as to produce ulceration?

There are some who will say that the discharge from the urethra proceeded from a syphilitic sore within the canal; that the discharge inoculated the skin of the penis; and that hence arose the external ulceration. To this I reply, there were no symptoms whatever of ulceration of the urethra; there was not excoriation at the orifice, nor induration along the canal, nor pain upon pressure, nor any sign by which such an occurrence could be suspected. The disease appeared to be genuine gonorrhœa; and it yielded to the administration of the usual remedies.

Now we know that the inoculation of gonorrhœal discharge will not produce a syphilitic sore, and that discharge from the urethra and syphilitic ulceration may go on simultaneously. How are we to explain the occurrences mentioned above, of the truth of which there can be no question? I am inclined to regard it as an illustration of Hunter's doctrine—that two constitutional diseases do not readily go on together.

But if gonorrhœa be dependent upon a morbid poison, that poison must be liable to absorption into the system, where it will make its presence known by its effects. This position I readily grant; and will add, that if the poison resembled that of syphilis, its constitutional effects would be the same. Such, however, we do not find to be the case. Gonorrhœa is followed, as already mentioned, by direct local complications, such as extension of the disease to the epididymis, to the prostate gland, the urinary bladder, the ureters, or kidneys. But beside these, it may produce one of the severest forms of inflammation of the conjunctiva, gonorrhœal purulent ophthalmia, by which the organ is, in many cases, seriously injured; gonorrhœal rheumatism, a most intractable disease, by which many a joint is permanently crippled; and a form of papular eruption. I remember a fine, handsome young man, about twenty years ago, who unfortunately contracted gonorrhœa, which was followed by rheumatism and a milder form of purulent ophthalmia. Under proper treatment these diseases were subdued; and he went to the West Indies, in the hope that a residence in a warm climate would free him from the possibility of a relapse. He returned, and married, but since then has suffered from frequent recurrence of the ophthalmic attacks. I heard of him last in

1852, when he was lying in a darkened room, with the eyesight quite unfit for useful purposes, and in a questionable state as to ultimate recovery.

In some rare cases the inflammation has spread to the bladder, and has extended thence along the ureters to the kidneys. Such an occurrence would be regarded in a very serious light by the surgeon.

The treatment of gonorrhœa as usually practised in the hospital is comprised in a brief notice. In some cases it cuts the disease short; in other instances it proves of less immediate avail. But it must not be forgotten that, among out-patients, it is impossible to impose upon men the necessity of attending strictly to the first rule—namely, to abstain *in toto* from beer, wine, spirits, and every exciting beverage. This rule, in a healthy man, should not be transgressed until some time after all the symptoms have subsided. A single infringement may bring back the nearly overcome malady. Next, a weak solution of nitrate of silver—namely, four grains to sixteen ounces of distilled water—should be injected by means of a glass syringe four or five times a day; and the mixture of copaiba, as given in p. 29, prescribed three times a day. The bowels are to be kept open. The patient should drink freely of barley-water; and if the ardor urinæ be excessive, he should take with it ten to twenty drops of liquor potassæ in each draught, immediately *after* making water, in order that the urine may become less acid by the next evacuation. Stronger injections

Of nitrate of silver, gr. i. to x. to the ounce of water;

Of sulphate of zinc, gr. iv. to ℥i. to the ounce of water;

Of chloride of zinc, gr. i. to ii. to the ounce of water;

Of tannic acid, gr. ii. to v. to the ounce of water;

and others have been recommended and tried, and with partially good effect. I do not recommend strong injections, for there always exists the possibility of injuring a mucous membrane, upon the integrity of which depends the important question of stricture of the urethra. I have never seen any good result from the passage of a bougie during the attack of gonorrhœa. Injections of opium and of iced water have proved of great use in soothing irritation. I have used, in private practice, such a combination with good effect.

Cases requiring the use of leeches to the penis do not commonly come to the hospital. Nor have I any experience of Mr. Milton's plan of applying a vesicating fluid to the penis. The principles upon which Mr. Milton grounds his practice are, however, sound, and as such must lead to useful results. A patient who gets so cured of a sharp attack of gonorrhœa in six weeks as to enable him to resume the pleasures of the table, is a fortunate man. When neglected, gonorrhœa may last six or eight months. Of course I am not now speaking of simple urethritis, which passes away after a brisk purgative.

In cases of epididymitis (*i.e.*, hernia humoralis, swelled testicle, &c.), I believe the best plan is to strap the testicle at once, after the fashion represented in the work of Mr. Acton. A layer of collodion over the strapping is often useful. The relief thus afforded to the patient is surprising; and the swelling will often subside to one-half in twenty-four hours. The application of cold, either by cold sponging or by the careful use of pounded ice and salt in a bladder, tends to relieve pain, subdue the inflammation, and reduce the swelling. When, in consequence of pain, this plan of treatment cannot be carried out, we

may fall back upon the practice of leeching the testicles, and of administering emetics. Nothing reduces inflammation of these organs more promptly than this; but the treatment is severe. When induration remains after the acute stage has passed, pressure is more serviceable than frictions, whether of mercury or of iodine. Both may, however, be employed.

Occasionally small abscesses form in the mucous follicles external to the urethra in the integument. They gather, and discharge upon pressure by the natural outlet—namely, their excretory duct, which is usually extremely small. A puncture made into them, and the application of lunar caustic, soon rectifies the morbid condition of the lining membrane.

Of abscess in the prostate, and of pyæmia, I shall not now speak in detail. The former requires to be treated upon the usual principles of surgery. When suppuration has taken place, the earlier an opening is made from the perineum the better. The latter is a most formidable disease, occurring for the most part in persons of some unfortunate peculiarity of constitution. Our means of controlling such a disease are few; the administration of tonics, of occasional opiates, and such like remedies, are indicated in most instances; but the specific character of the affection seems merged in one of far greater magnitude, to which the treatment must be adapted according to the symptoms of each case. I cannot dismiss this subject without speaking of the “abortive treatment of gonorrhœa:” that is to say, the practice of cutting the attack short by the employment of strong injections. For instance, ten grains of nitrate of silver, or two to four grains of the chloride of zinc to the ounce of water.

These injections are pronounced useful when a patient applies in the early stage of gonorrhœa, before scalding on making water has come on, or when the acute symptoms have passed. So many surgeons of experience combine in stating they have witnessed most successful results from this practice, that I will not express myself strongly adverse to the plan. I have never tried it in any but incipient cases of gonorrhœa, and here the utility of the practice has always been rendered questionable by the uncertainty as to the probable course and duration of the disease if left to itself. It is not wholly free from danger to the urethra, and is quite unsuited to general hospital practice. It may be tried, with proper precautions, when patients are very desirous of a speedy cure; but it should be remembered that it is in cases where the natural structures of the urethra are damaged that stricture occurs: the usual course of gonorrhœa, in its acutest form, being such as will pass away, if not aggravated, without leaving any structural change.

At the commencement of the disease large doses of tinct. ferri sesquichloridi, or of the citrate of iron and quinine, have been pronounced effectual in cutting short the discharge, and such remedies possess the advantage of inflicting no damage, if they do not produce the anticipated amount of good.

In all cases the necessity of habits of the strictest abstinence should be properly impressed, for in no other affection are irregularities of diet followed by more immediately injurious consequences.

In the administration of opiates, and the treatment of chordee, hæmorrhage from the urethra, and other minor accidents, the surgeon must be governed by the usual rules of practice.

CHAPTER III.

PRIMARY SYPHILIS.

THE following propositions I consider supported by such experience as we now possess :—First, That there is but one syphilitic virus. Secondly, That when the ulcerative action is chronic, as is almost invariably the case, the natural structure of the part on which the poison acts determines the character of the sore. Thirdly, That phagedæna and gangrene occurring during the course of the disease, depends as much on idiosyncrasy, either natural or acquired, as on the nature of the poison itself. Fourthly, That every form of primary disease may be followed by constitutional affections, the nature and duration of which no one can predicate.

1. *There is but one Syphilitic Virus.*—The great arguments in favour of a plurality of poisons are derived from the differences in the characters of the primary sores, and the relations supposed to exist between such sores and the different forms of secondary syphilis. To both these points we will refer shortly. The arguments in favour of the poison being one and the same in all varieties of the disease, are derived from the almost daily observation of such cases as the following :—

Mr. —, a surgeon in the employment of Government, had connexion with a female at a foreign station.

Immediately afterwards, he noticed an abrasion on the inner surface of the prepuce, which he disregarded, but which soon spread into a non-indurated ulcer. From the discharge—which was purulent—proceeding from this ulcer, five sores formed by inoculation. Of these, two only acquired the characteristic induration at the base. Under the influence of mercury, all the sores healed, but were succeeded by a crop of verrucæ.

It is stated by Mr. Acton that three students had connexion with the same *grisette* during one evening. One was affected with a phagedænic sore; the other was a long time recovering from an indurated chancre; the third had a simple excoriation, which was slighter than that which existed on the genital organs of the female, who had been examined a few days after the debauch. (Acton, *On the Urinary and Generative Organs*, 1851, p. 375.)

The syphilitic poison does not act through the thick epidermis on the exterior of the body. We are daily in the habit of examining syphilitic sores by the hands, without any appreciable effect resulting. But when the matter is applied to the mucous membranes, or the thin covering of the glans penis, or the lining membrane at the entrance of the vagina, or when it is inserted under the cuticle, its effects soon become perceptible. In by far the greater number of cases, as Mr. H. Lee¹ well expresses it, “ulceration takes place, and a loss of substance is the result; this is brought about partly by the action of the absorbents, partly by the breaking down of the tissues of the ill-nourished part, and the discharge of

¹ *Op. cit.*

small portions of *débris* mixed with fluid secretion. When the affected tissue is removed by the absorbents, the activity of the poison is not at once destroyed. Its presence may be clearly proved by its power of again inoculating the living tissues with which it comes in contact." More rarely the infected part becomes rapidly destroyed, when a mixed process, which we term phagedæna, ensues. More rarely still the part perishes entirely, and the dead tissues are thrown off as a slough. But these are changes which seem to require the existence of some constitutional peculiarity on the part of the patient; for the same poison will not necessarily produce the same results in different individuals.

The secretion from a venereal ulcer may be either thin and sparing, or thick, purulent, and abundant; and Mr. Henry Lee, in the paper to which I have referred, endeavours, by cases and observations well worthy very careful perusal, to prove "that, as the syphilitic poison may be, and generally is, destroyed by mortification of the part in which it is contained; or as the same result may be produced by suppuration in an absorbent gland, consequent upon ulcerative inflammation; so may the deciduous cell-growth, or suppuration on the surface of a poisoned wound, effectually eliminate the poison from a part."

It is possible that such may be the case; that, indeed, this may be the explanation why only some primary sores are followed by constitutional affections. But I apprehend no one could with safety assure his patient, on the ground of the sore suppurating freely, that he was safe from secondary syphilis, any more than he could promise him immunity because a bubo in the groin had suppurated, burst, and discharged. Without denying

the possibility of the poison being eliminated in this as well as in other ways, I unhesitatingly affirm that the occurrence of secondary syphilis after suppurating sores is a matter of very frequent occurrence. The following case is interesting, as illustrating the above :—

Large Circular Sore on the Body of the Penis, not indurated, but secreting a yellow, healthy-looking, purulent Fluid, followed by Scaly Syphilitic Eruption, Sore Throat, and Iritis.

John B——, aged twenty-one, fishmonger, states that this is the first time he ever had venereal disease. A large circular sore formed on the body of the penis, presenting the usual characters of syphilitic ulcers in that situation. The ulceration is quite superficial, the surface far from unhealthy-looking, and secreting a puriform fluid in sufficient abundance to form a thin yellow scab. Mercurial pills were given him; but the sore healed before they had time to affect the gums. Four months afterwards, he again came under treatment, with scaly syphilitic eruption over the whole body, and superficial ulceration of the tonsils. In the course of a short time, the scales of lepra acquired a darker hue, and the patches became elevated into tubercles. Then iritis ensued in the left eye, requiring more active treatment. Blood was taken from the temples by cupping; and two grains of calomel, combined with one-third of a grain of opium, were given every eight hours. The attack speedily subsided in the left eye; but the same disease broke out in the opposite eye, for which he was under treatment when circumstances withdrew him from my observation.

2. *When the Ulcerative Action is Chronic, the natural Structure of the Part on which the Poison is acting determines the Character of the Sore.*—In the male, syphilitic sores usually are seen within the prepuce, either on its mucous surface, or on the glans penis. They are not uncommonly met with on the body of the penis. In these situations they admit of the following classification:—

1. Excoriations of the glans and prepuce, with superficial ulceration and puriform discharge.
2. Non-indurated ulcers around the corona glandis.
3. Non-indurated ulcers around the orifice of the prepuce.
4. Superficial circular sore on the body of the penis.
5. Chancre of the urethra, generally at its orifice.
6. The indurated chancre.

There are three forms of sore which, by the severity of the destructive process, seem less influenced by texture than the preceding, namely,—

7. Phagedæna.
8. Sloughing phagedæna.
9. Sloughing chancre.

In the female, specimens of the non-indurated sore are seen on the lining membrane of the vagina, especially on the nymphæ: excoriations and superficial ulcerations occur in the clitoris as on the penis. The large circular sore common to the body of the penis is seen on the mons veneris. The indurated chancre generally occupies the loose cellular structure of the labia vaginæ. It is, however, uncommon, according to my experience. Phagedæna and its varieties may attack any form of sore, or it may occur from the commencement.

One of the most striking proofs of the dependence of induration upon the tissue of the part consists in the fact, so often observed, and first pointed out by Mr. Lawrence, that a syphilitic sore, half on the glans and half on the prepuce, will manifest induration at the base only in the latter part; the glandular portion being superficial. Of this so many illustrations are presented in the course of a year to those who witness venereal disease on a large scale, that it will not, I presume, be questioned. Occasionally, too, it happens that the indurated and the non-indurated portions are distinct; constituting in fact two ulcers, different in character, though resulting from the same poison.

It will be replied, that if this position as to the influence of texture upon syphilitic ulcerations be true, we should be able to produce by the inoculation of one and the same poison any or all of the different varieties of primary syphilis; and I have no doubt this might be done, were we certain of the inoculated poison acting in the same manner as when the disease is contracted in the usual way. But many circumstances conspire to render the success of such experiments doubtful, and I must confess to a feeling of dislike to the practice of producing sores, the progress of which may be tedious, and the results uncertain. I must leave to others the performance of such experiments; we have frequent opportunities of witnessing the effects of inoculation in watching the natural progress of the disease. The repetition from this cause of a crop of non-indurated sores around the corona glandis, or the formation of a sore on the integument, or in a leechbite, &c., presents invariably similar results in any number of individuals.

In thus expressing an objection to the practice of inoculation in syphilis, I am aware that I lay myself

open to criticism. To that, however, I must submit with the best grace I can.

The constancy with which these different sores seem wedded to the spots to which they are here assigned is quite striking in the specimens of disease presented for inspection in London. I really believe that in a very large proportion of cases I could depict or describe, without seeing it, the character and appearance of any sore, if its immediate seat were explained to me. This remark applies especially to the ulcers around the corona glandis, or the orifice of the prepuce, in both of which situations the disease presents but little varieties. But it is necessary that a more accurate language be used than has been common heretofore. I have heard surgeons of considerable experience talk of an indurated chancre on the glans penis. Why, the dense structure of the part renders such an occurrence impossible; at all events, one cannot there feel that cartilaginous knot which is regarded as the characteristic of the so-called Hunterian chancre. As in the male, so in the female, the natural tissues exert a marked influence in determining the character of the sore. The loose tissue of the greater labia permits the cartilaginous hardening: the large circular ulcer forms through the integument, where its ulcerative power seems in great part exhausted. The interior of the vagina is usually the seat of the non-indurated ulcers, which run their course less favourably circumstanced than when on the inner surface of the prepuce in man. They give the female, however, little inconvenience.

A cursory examination of this list, p. 41, will show that these various sores may be grouped under three heads.

1. Those in which the venereal or syphilitic poison acts superficially, as exemplified by Nos. 1, 2, 3, 4, and 5.

2. That sore wherein it acts deeply in loose areolar tissue; No. 5.
3. Sores influenced by constitutional causes; Nos. 7, 8, 9.

The superficial action of the syphilitic poison is as follows:—After connexion, an excoriated spot continues to feel sore for forty-eight hours; or after the same interval, it may be only a few hours, a vesicle, attended with considerable itching and smarting, forms. That the poison can act through the delicate covering of the glans penis, or the lining membrane of the prepuce, we have abundant proof in the formation of numerous sores by inoculation from the discharge proceeding from a single primary ulcer. Should the ulcer be exposed to the air, a thin dry scab forms, under which ulceration goes on for eight or ten days, when the poison seems exhausted, granulations spring up, and in three weeks from the commencement the part is cicatrized. Should the prepuce cover the glans, as is usually the case, no scab forms, in consequence of the discharge being kept moist: ulceration goes on for the same period; then granulation ensues. But the mass of granulations rising above the level of the surrounding skin imparts a peculiar elevated appearance to the infected spot, to which the term “*ulcus elevatum*” has been applied. The application of caustic brings this redundant mass of granulations to a proper level, when the part heals in the usual way. When the poison acts on the loose tissue at the extremity of the prepuce, it is attended by the same results; but the irritation caused by the frequent withdrawal of the prepuce for the purpose of ablution, produces inflammatory thickening of the part, and contraction of its orifice, giving rise to that condition which is termed phymosis. The

sores acquire in the collapsed condition of the prepuce the appearance of fissures.

The large circular sore on the body of the penis is not unhealthy in aspect: superficial, non-indurated, it secretes a sparing puriform fluid, which incrusts into a thin yellow scab. The syphilitic poison seems in great part exhausted by acting through the skin, and the sore shows a great tendency to heal, unless irritated. Among the lower orders, the constant friction of the dress in the pursuit of a laborious calling produces a spreading of the disease, and the sores may acquire the size of a crown piece. They heal readily without the action of mercury; but in a proportion of cases the poison is not exhausted after the cicatrix has formed, for the new tissue may become hardened and thickened, and acquire more or less the character of the indurated chancre. I have seen the penis occupied by two or more of such sores; they spread until they coalesce, when they form one large ulcer, with an hour-glass contraction. In the female they occur on the mons veneris, on the exterior of the labia vaginæ; but they are less common than in the male. The reason why they are not seen in the upper classes is, that gentlemen attend to themselves much earlier and more carefully than persons in humble life.

The urethral sore is superficial and circular, and in its unirritated state free from induration; but the constant flow of urine over the part prevents cicatrization, and produces inflammatory induration, or an almost phagedænic action. The great trouble is to protect the sore from this constantly-irritating fluid; and a considerably longer time than usual intervenes before it is healed. Urethral sores further from the orifice than where they can be readily seen, appear to me to be very uncommon.

I have seen a few, the existence of which was always indicated by a fixed pain on micturition, and by hardness in the affected spot. I need not observe that they are liable to be followed by two very unpleasant results. First, stricture of the urethra. Secondly, penetrating ulceration, by which a passage may be formed for the urine to find its way into the natural structures of the penis, when acute inflammation and swelling of the organ ensue, attended by the greatest pain, the affected parts being surrounded by dense and unyielding tissues. The abscess contains sloughs of either the corpus cavernosum or spongiosum; and the erectile power of the organ is speedily lost. In a case lately under my care, two inches of the corpus spongiosum had been completely destroyed before I saw the case, and the urine was voided about four inches from the natural orifice. An attempt made to rectify the loss by a plastic operation failed, in consequence of the patient being unable to retain a catheter in the passage.

Of the indurated chancre, which Hunter correctly describes as being very circumscribed, not diffusing itself gradually and imperceptibly into the surrounding parts, but terminating rather abruptly; or which Mr. Lawrence more graphically speaks of as feeling like a knot of cartilage under the skin, much has been written, in consequence of its obstinate character, and the danger to which the patient is said to be exposed of suffering from secondary syphilis, until some months have elapsed after the removal of all trace of the disease. For the last twenty years, I have been in the habit of occasionally seeing such sores, and have had from an early time a full knowledge of their true character impressed upon me. Induration rarely commences before the fifth, nor

after the fifteenth day, observes Mr. Acton ; and in this statement I fully concur, inasmuch as it embraces just that period when the primary action of the venereal poison is especially active. A mass of induration may form without any perceptible abrasion of surface; or the surface may be excoriated, or ulcerated, but rarely deeply so. In most cases of uncomplicated disease, the ulcerative part of the affection is of minor consideration, and it is found to heal readily under very simple treatment ; but the hard knot, as unyielding as cartilage, remains loose and defined, and slipping under the pressure of the fingers like a button. It is surprising for how many months it will remain, if unchecked by the administration of mercury. I lately saw a case where its duration had been above twelve months. The situation of this sore is limited to those parts supplied with a redundancy of areolar tissue. I have never met with it on the glans penis, nor in any part of the penis where the tissues are firm and unyielding. I have witnessed it more frequently in the male than in the female (in whom it occurs in the labia vaginæ), and at all ages after puberty, and at every time of the year. It does not appear to me that Mr. Acton is correct in referring the immunity of patients, in some institutions, from this form of primary syphilis to treatment.

“In procuring,” observes this author (*On the Urinary and Generative Organs*, p. 422), “indurated masses to examine, I have in vain sought for them in the practice of those who give five grains of blue pill night and morning to all forms of primary sores. I have met with them in larger abundance in institutions where mercury is not so indiscriminately given, and I believe treatment in this country has a great influence in preventing the

occurrence." It is not my practice to give mercury either indiscriminately or generally in primary syphilis, and yet indurated sores, *i.e.*, sores presenting the characteristic cartilaginous hardening, are not very uncommon. There may be thirty to forty consecutive cases, without one of true indurated chancre, and then perhaps three or more have occurred together.

The opinion of Wallace, that "induration is a protective process, or one of those processes that are set up to limit the effects of the venereal poison, and to repair the injury of texture which may have resulted from the action of the poison (page 306), appears to me to be just the reverse of the fact. The progress of the indurated chancre is essentially chronic, and it may lead to the manifestation of constitutional syphilis before the primary symptoms have been removed: this is especially the case when the induration is remarkable for its firmness to the touch. So great is this condensation of the tissue that the vessels supplying it with blood are occasionally strangulated or blocked up, when all or a part of the diseased mass sloughs and separates in the usual way. The disease may by these means be even completely eradicated. In 1840 I saw a case of the kind in a young woman, who had been in part relieved of a primary syphilitic sore by mercurial treatment, but the medicine was suspended before the proper time. Upon resuming her usual habits, the hard knot again formed, and at the expiration of four months, sloughed in its centre. An indurated mass, however, formed by the contracted circumference, remained, and required the action of mercury, in the form of inunction, for its complete removal. I may mention, that this sore was situated on the labium vaginæ.

The absence of pain when the hard knot is unattended by active ulceration, renders many persons inattentive to the existence of this really formidable disease, and hence it comes that, through neglect, secondary symptoms are far from uncommon. As regards the comparative frequency of the different forms of sore, the following statistics, short as they are, may be interesting:—

On the 29th of November, 1843, I saw twenty-three new venereal cases at St. Bartholomew's Hospital. Of these, there were—indurated chancres, none; superficial circular sores on the body of the penis, five; non-indurated sores on the glans penis and inner surface of the prepuce, ten; phagedænic sores, four; cases of gonorrhœa, four.

On the 6th of December, 1843, I saw nine venereal cases. Of these there were,—superficial circular sores on the body of the penis, two; non-indurated sores on the glans penis and inner surface of the prepuce, five; inflammation and excoriation of the glans and prepuce, one; gonorrhœa, one.

On the 13th of December, 1843, I saw thirteen new cases. Of these there were,—non-indurated sores on the glans and prepuce, eleven; on the body of the penis, one; gonorrhœa, one.

The cases at the present time do not differ in any essential point from those seen in the hôpital thirteen years ago; except as regards cases of sloughing sores, or those in which there has been inflammatory disturbance of an ordinary venereal sore, which are apparently more rare.

3. *Phagedæna and Gangrene occurring during the Course of the Disease, depend as much on Idiosyncrasy, either natural or acquired, as on the Nature of the Poison.*—Phagedæna, under which head are included those forms

of ulceration distinguished by a ragged undermined edge, is either acute or chronic, or of so destructive a nature that the ulcerative and sloughing process go on *pari passu*, when it is called sloughing phagedæna; or a part may be at once disorganized, and, as it were, "stricken with death," whence termed the sloughing sore.

These forms of primary syphilis owe their characteristics both to the nature of the poison and to constitutional peculiarities. They are four in number:—chronic phagedæna, acute phagedæna, sloughing phagedæna, the sloughing chancre. No well-marked line of demarcation exists between them: they pass insensibly one into another; and the same sore may illustrate two or more varieties during its course. It is hardly possible to attribute the existence of these forms of disease solely to impairment of the constitution. I witnessed a case of sloughing chancre some years ago in a young Irishman, who was, to all appearance, the picture of health.

Phagedæna attacks the old as well as the young. On the 5th of March, 1850, I saw an old-looking man, aged sixty-six, of feeble frame, who had contracted venereal disease three weeks ago. Two small pimples appeared on the outer surface of the prepuce, where they burst, and spread into a painful and irritable sore. He was admitted into the hospital, March 13. There is a large chronic phagedænic sore, which has destroyed the lower half of the prepuce, which appears as if cut off by a knife. The pulse was very feeble; there was no appetite; and he could not sleep at night.

Ordered—Hyd. chlor. gr. ii., opii. gr. $\frac{1}{2}$, octavis horis. Broth diet, black wash to the sore, and bread poultice.

20th.—The mouth was moderately affected by the mercury. The sore was granulating.

29th.—The sore nearly cicatrized. Omit all medicines. The following is a case of acute phagedæna:—

Charles N——, aged thirty-five, a well-made, healthy-looking man, contracted venereal disease, December 30, 1845, from a female whom he supposed to be sound. About ten days afterwards he noticed a small spot on the left side of the body of the penis, behind the glans. January 12, he applied at St. Bartholomew's Hospital, where he attended as an out-patient; but, following an intemperate life, he returned with the local disease greatly aggravated, and was admitted January 29. There is a large, black, circular sloughing sore on the left side of the body of the penis, behind the corona glandis. A large spreading phagedænic sore on the opposed surface of the prepuce. There is a large oval phagedænic sore upon the inner surface of the prepuce on the right side, equal in size to a shilling piece. Prepuce swelled and inflamed.

Prepuce divided by Mr. Lawrence. There was not much hæmorrhage.

30th.—The slough is separating; there is no extension of the mischief.—Meat diet. A pint of porter daily. Bread-and-water poultice to the sore.

On the 24th of February he was discharged well, after a mild mercurial course.

March 24.—Readmitted with indurated knots over the preputial cicatrices on both sides of the penis. Slight return of ulceration. Rupial spots over the body, and a painful periosteal swelling of the right leg.

To take three grains of the iodide of potassium in decoction of sarsaparilla thrice a day.

April 1.—He quitted the hospital at his own desire, nearly well.

June 2.—He was readmitted with a foul ulcer, the size of a split pea, at the base of the glans penis, behind and to the right side of the frænum preputii. There was an inflamed phagedænic sore, the size of half-a-crown, upon the right forearm. He says that he had connexion with a healthy female ten days ago, having been in perfect health up to that time. Five days ago these sores appeared.

To take two grains and a half of hydrargyrum cum cretâ thrice a day. Black wash to both the sores.

June 24.—Discharged cured.

There was an opportunity of examining the female with whom this man had been cohabiting up to the time of his last attack. She was to all appearance free from any disease, and declared that she never had had syphilis.

Large and inflamed sloughing Syphilitic Ulcer on the Mons Veneris—Subsidence of the Inflammation by proper Treatment—Recommencement of the Syphilitic Ulceration—Cure of the Disease by the action of Mercury.

Anne S—, aged thirty-nine, married, but of very intemperate habits, states that she has contracted venereal disease from her husband three times. She has suffered continuously from discharge for the last two years. A year and a half ago, she was examined by a physician, who used the speculum; and it was averred that she had an ulcer of the uterus. She has had seven children, all born healthy, and to use her own words "clean." Three weeks ago a painful swelling formed on the pubes, and burst as an abscess, but spread into a circular sore. She says that the sore became bad on account of her drinking.

She had eaten scarcely anything solid, but “ had been at the beer and ale from morning till night.”

There is a circular sore, the size of a crown-piece, on the mons veneris. The surface is covered with a thin and adherent ash-coloured slough. The circumference is of a dusky-red colour; the edges are raised and eaten away. Admitted under my care August 30, 1856.

She was ordered bread-and-water poultice to the sore. Five grains of soap-and-opium pill at night. Broth diet. In the course of a week the inflammatory redness had subsided. The sore, much diminished in size from the cessation of the swelling, had assumed a red and apparently granulating character. But it made no effort at cicatrization; on the contrary, it became painful and acquired the characters of a syphilitic ulcer. September 7. I determined to put her under the influence of mercury, and ordered her two grains and a half of hydrargyrum cum cretâ thrice a day. Under this treatment the sore healed within a fortnight.

Sloughing Phagedæna of the Thigh—Application of the strong Nitric Acid—Recovery.

Martha Selwood was admitted into Magdalen Ward, Nov. 6, 1856, with a large circular sore, three inches in diameter, on the inner side of the right thigh, about its middle, just over the course of the femoral artery. The whole surface is covered by a thick black slough, which tightly adheres to the subjacent parts: the circumference of the sore is of a dusky-red hue: the femoral glands are swelled and tender. This patient, who had been in the hospital some time before for primary syphilis, has been living in Woolwich, where she confesses to have

drunk very freely of spirits, and to have lived otherwise irregularly.

Chloroform having been administered so as to produce complete insensibility, the strong nitric acid was applied freely to the surface of the sore. After which, when the effects of the chloroform had subsided, an opiate was administered.—Nov. 8. The whole of the black slough has separated, leaving a healthy granulating surface. To take quinine, gr. ii., thrice a day. Meat diet.—10. A small suppuration is forming in the thigh: the wound is granulating and closing.—17. Patient nearly well.

4.—*Every form of primary disease may be followed by Constitutional Affections, the nature and duration of which no one can predicate.*—The proof of this statement consists in the record of a series of well-authenticated cases, of which the following may serve as specimens.

Indurated Sore under the Prepuce, accompanied by Gonorrhœa, supposed to be from the same Infection, followed by Ulcerations at the Roots of the Nails of the Hand, Tubercular Eruption, Ulceration of the Tonsils and of the right Ala Nasi, Suppurating Node of the Tibia, and Phagedænic Ulcer of the Face.

Robert B——, aged twenty, was admitted into the hospital, Feb. 20, 1846, with an indurated sore on the penis of six months' duration; gonorrhœa of six weeks' duration. He was ordered five grains of blue-pill night and morning, and the capivi mixture. On the 24th the sore was beginning to assume a healthy character, and the gonorrhœal discharge was diminishing.—March 21. Discharged; the sore having completely cicatrized, and the discharge having stopped. In the beginning of May he

came to the out-patient room, with ulcerations at the roots of the nails, tubercular eruption, and ulceration of the tonsils. On July 30, the ala nasi became ulcerated. He then had three distinct attacks of rupial eruptions. On December 10 he came again, with a suppurated node of the tibia, and a phagedænic sore of the face, with ragged edge, and yellow bloody surface.

*Lepra Syphilitica over the whole Body—Falling of the Hair
—Rhagades Digitorum following on extremely superficial
Primary Sore.*

James J——, aged twenty-two, was employed during the late war at a station on the coast of the Dardanelles, where he had the prepuce divided for congenital phymosis. Upon his return to London he exposed himself to infection, and states that six weeks elapsed between connexion and the appearance of the primary ulcer. I presume the ulceration must at first have been so slight as to have escaped his observation. In course of time, however, he noticed on the cicatrix from the previous operation on the prepuce a small superficial sore, which scabbed. He went over to Dublin with a regiment of infantry, and there put himself under the care of an eminent surgeon. He took mercury, but the gums never became sore. A week after his arrival, he noticed the appearance of the spots of lepra; at the same time there was dryness of the throat. Soon afterwards he experienced difficulty of walking, from a painful affection of the toes. He came over to London on business, and put himself under my care.

The whole surface of the body, including the palms of the hands and the soles of the feet, are covered by the

detached, slightly-elevated coppery-coloured spots of syphilitic lepra; between the toes are deep fissures, pouring forth a foetid secretion. There are traces of ulceration on the tonsils and soft palate.

Ordered—Two grains and a half of hydrargyrum cum cretâ thrice a day. The nitrate of silver lotion, of the strength of four grains to the ounce of water, to be applied between the toes.

Under this treatment he recovered in about a month.

Papular Eruption, attended with acute febrile Symptoms, following superficial Ulcers of the external Organs.

Emma L——, aged nineteen, a healthy-looking girl, states that she has been eight months on the town, during which time she has once had gonorrhœa. Admitted, under my care, in the hospital, with two small superficial sores, without any indication of induration at the base, of probably a week's duration. The application of caustic produced speedy granulation and cicatrization; and in a week they had both healed.

A fortnight after the healing of the sores acute febrile symptoms came on; the skin was hot; the head ached; she lost her appetite, and was unable to rise from bed.

On the third day of the fever the skin became red; and on the day following a copious eruption of papulæ ensued, not unlike the eruption of small-pox.

The fever having subsided under the administration of salines, she was ordered five grains of blue-pill night and morning, and the concentrated decoction of sarsaparilla thrice a day. But I remarked that the eruption of pimples subsided with the fever, and nothing re-

mained but a mottled condition of the skin, which was benefited by the use of alkaline baths.

We did not, therefore, continue the administration of the mercury so as to affect the gums, for salivation is a condition of considerable discomfort, and not to be brought on unless some decided and definite object is to be gained.

*Circular Phagedænic Ulcer on the Back of the Pharynx,
following superficial Ulceration of the external Organs.*

A respectable-looking woman, aged thirty-two, applied to me, October 21, 1856, with the statement that she was the wife of a small tradesman in London, and had been married thirteen years, during which time she had had two children, both born healthy, but who died at an early age of diarrhœa. Twelve months ago her husband gave her venereal disease. She had excoriation and superficial ulceration of the external organs, which healed without leaving either scar or cicatrix. Three months afterwards her throat became sore, and several spots appeared on various parts of the body. She has been frequently under medical treatment, and has considered herself well from time to time; but the disease of the throat has returned without apparent cause, attended with a general feeling of debility.

The ulcer of the throat was circular, and equal in size to a crown piece. It was situated low down in the pharynx, and to the right side, and could scarcely be seen without depressing the tongue. Its surface was covered with an ash-coloured secretion.

She was ordered iodide of potassium and sarsaparilla thrice a day: a gargle composed of vinegar and water,

equal parts, and as hot as she could bear it; nutritious diet, and six ounces of port wine daily. Under this treatment she recovered so far that in three weeks she discontinued her attendance.

Scaly Eruption following Non-indurated Sore—No Bubo.

Mr. R., student of medicine, had connexion one Saturday. A scab of dark colour appeared on the penis on the following Monday. Sore the size of a sixpence, circular, and without induration, on the integument of the penis. Healed without mercury in three weeks.

He contracted gonorrhœa at the same time, and took cubebs and copaiba.

Five weeks afterwards there ensued a few spots of lepra over the body, and ulceration of the tonsils.

Took syr. iodide of iron, under which he recovered.

TREATMENT.

The treatment of syphilis by mercury in the form of external application seems, from the writings of the physicians of the fifteenth century, to have been in vogue very shortly after the disease was recognised and described as the Morbus Gallicus, between the years 1494-96. The fears which had existed from very early times as to the injurious effects which this mineral might produce upon the human frame, combined with the dis-

astrous consequences following its reckless administration by uneducated, itinerant quacks, deterred the profession from employing it internally till about the middle of the sixteenth century, when it had been ascertained that guaiacum, sarsaparilla, and other remedies were inefficient in controlling the progress of this dreaded malady. Since that time, so numerous are the authors who have recorded the results of their experience upon the subject, that a host of learned names can with readiness be brought forward to support almost every shade of opinion existing at the present day. The favourable view taken by Astruc of the superior efficacy of mercury over all other known medicines in the treatment of syphilis received support from John Hunter, who, unfortunately, went one step too far in maintaining the absolute necessity of its employment to arrest the morbid action of the venereal poison. The very great importance of clearly establishing the accuracy or the inaccuracy of the opinion which ascribes to mercury the wonderful power of eradicating and destroying a poison by which the whole organism has become infected, cannot be better illustrated than by showing the consequences which naturally ensue if this opinion be founded in error. Let us suppose that a patient who has contracted syphilis places himself soon after the first manifestation of the disease under the care of a surgeon of eminence, by whose direction he commences a course of mercury, under which the primary sore heals; the administration of the mercury is continued a few weeks longer, and then the patient is pronounced free from all risk of secondary affections. Trusting to this opinion, he may unintentionally infect an innocent person—his own wife, and perhaps his offspring. Whether the patient himself suffer from secondary dis-

ease, or whether he communicate it to others, it is the surgeon who receives the blame; and it is a singular fact, and one which well illustrates the unsettled state of opinion upon this subject, that precisely the same set of symptoms will by one set of practitioners be ascribed to the fact of the mercurial course not having been pushed far enough, and by another to the unfavourable influence of mercury upon the constitution.

For the elucidation of these points, neither argument nor reference to authorities can be of material use. We must rely upon the observation and impartial record of cases, which, watched for a considerable number of years, afford a solution of some of the difficulties. In 1843 I took, with the concurrence of Mr. Skey, fifty consecutive cases of patients suffering from severe secondary and tertiary symptoms. Inquiring minutely into their histories, and often cross-questioning different members of the same family, I adopted every possible precaution against errors. From the list thus formed I select the following, of which the remainder are but reflexions. In each case, the number of the attacks, both primary and secondary, from which the patients have ever suffered, is carefully recorded:—

CASE 1.—Samuel H—— states that four months ago he noticed, a few days after exposure to infection, a series of small sores around the corona glandis. For two months he took a mercurial pill night and morning, and he says that during the whole period the gums were more or less swelled and tender. The sores healed speedily, but the salivation was continued some weeks after their cicatrization, in order that he might be protected against the occurrence of secondary symptoms.

October 25, 1843, he became an out-patient, with syphilitic enlargement of both testicles, and an eruption of rupial spots over the whole body.

CASE 2.—Henry B—— contracted syphilis thirteen years ago, when he suffered from a large primary sore, which healed after a three months' salivation. A large cicatrix occupies the extremity of the glans penis and the orifice of the urethra.

October 25, 1853, he became an out-patient, with a large periosteal swelling of the left tibia, attended with severe nocturnal pains. There were two foul ulcers of the leg, formed by mortification of a portion of integument over two patches of sloughed areolar tissue.

CASE 3.—Henry M—— was salivated over a period of four months, three years ago, for some slight primary affection, which has left no trace behind.

November, 1843, he became an out-patient, with a periosteal swelling of the left tibia.

CASE 4.—Elizabeth F—— contracted syphilis from her husband eight years ago. She put herself under medical care, was salivated, and considered herself cured in about two months.

A twelvemonth ago she suffered from foul ulceration between the toes. Eight months ago there appeared upon various parts of the body, especially upon the limbs, large spots of tubercular eruption, which exist at the present date, *Nov. 1, 1843*.

CASE 5.—Albert J—— has been twice salivated for primary syphilis: the last attack was five years ago.

November 29, 1843, he became an out-patient, with a node on the tibia.

CASE 6.—Henry S—— contracted syphilis twelve months ago. A small sore came on the glans penis. At the end of six weeks it assumed a phagedænic aspect, and spread with great rapidity. Cicatrization ensued under active mercurial treatment; but he was greatly reduced in strength.

November 28, 1843, he became an out-patient, with phagedænic ulceration of the fauces, by which the uvula and part of the soft palate have been destroyed. There is the cicatrix of a large phagedænic sore upon the penis.

CASE 7.—William S——, upholsterer, a married man of dissipated habits, has been twice salivated for primary syphilitic sores, which have healed without leaving any visible cicatrix.

January, 1844, he put himself under my care, with a bubo in each groin, and the imperfectly-formed cicatrix of a large syphilitic sore upon the right elbow and forearm.

CASE 8.—Matilda S——, wife of the preceding, contracted venereal disease from her husband two years ago. Not wishing to communicate to any one the nature of her complaint, she took, by her husband's direction, a great number of mercurial pills, and rubbed in, on the thighs, freely, the strong mercurial ointment. Under this treatment the gums swelled, and she suffered the miseries of a profuse salivation. They lived apart until the surgeon, who had charge of the husband, pronounced his patient cured; when she, believing that the disease

had long been eradicated from her constitution, left her friends and returned to her husband, at his earnest request. Intercourse with the wife speedily produced in the husband two very painful buboes, of which that in the right groin burst; that in the left was opened, and discharged a quantity of thin yellowish-brown sero-purulent fluid, tinged with blood.

She then came under my care, January, 1844. The eruption disappeared, and she regained her strength, under the administration of sarsaparilla, iodide of potassium, quinine, and other suitable remedies. A profuse discharge, dependent on ulcerations of the os tinæ, was healed by their cicatrization.

In May she went to the sea-side, where she resided with her family, in the enjoyment of perfect health. About the middle of September she came to town, where she suffered from a most severe attack of *rupia prominens* over the head, neck, and extremities. Her face became shrunk and pallid; the spirits were depressed, and the appetite failed. Then large spreading phagedænic ulcers appeared on the face and scalp; the *alæ nasi* were next destroyed; the upper lip was disfigured; portions of the scalp, with the hair, perished, and the cranial bones became exposed in a state partly of ulceration, partly of necrosis. In January, 1844, she was a well-looking, healthy woman. In January, 1847, there was scarce a trace of her former self. In 1848 she applied for admission to another hospital, where she died of syphilitic cachexia.

Professor Graves observed, in a clinical lecture delivered at the Meath Hospital, 1837-38:—"The want of fixed opinions as to the treatment of the venereal disease is felt in London as well as in Dublin, and displays itself

in a not less marked manner among the practitioners of Paris, Hamburgh, Vienna, and Berlin. If you compare together the modes of practice pursued by that highly-instructed and intelligent class of medical men—the surgeons of the British army—you will find the same want of unanimity, and consequently the inmates of the venereal wards of one regiment are often treated in a manner the very reverse of that pursued by the surgeon of the other regiment stationed in the same barrack; of which I have seen some striking instances in the Dublin garrison. Matters are quite as bad in the Prussian army. In a letter which I lately received from Dr. Robert Froriep, the distinguished pathologist of Berlin, he says, ‘I have taken advantage of the vacation to examine the Medical Reports of the Army, having obtained the kind permission of the Physician-general, Dr. Lohoneier, for that purpose; but I could not make out anything likely to assist in your researches. In fact, these documents furnish *data* apparently the most contradictory. Thus one report praises the mercurial, and another the non-mercurial treatment; while in almost no case do we find the symptoms, treatment, and results detailed with sufficient precision to enable us to arrive at anything like a satisfactory conclusion.’ ”—(*London Medical Gazette*, Vol. XXV., 1839-40.)

However much British practitioners may have erred in the indiscriminate administration of mercury, they merit the credit of having been the first to point out the benefit of non-mercurial treatment. The names of Carmichael and Graves of Dublin, of Rose, Hennen, Guthrie, Thompson, and others, are familiar to those who have made any progress in the principles of surgery.

Mr. Green, of Bristol, in a *resumé* published in the second volume of the *Provincial Medical and Surgical Association*, draws the following inferences:—That every form and stage of the venereal, except iritis, can be completely and better treated without mercury than with it; that in some cases mercury not only fails altogether to cure, but aggravates the disease, and therefore is not a specific;—and what have been considered as some of the worst secondary cases of syphilis result from mercury itself, from the very means used to cure the disease. Dr. Thompson, of Edinburgh, advocates the non-mercurial treatment, and supports his views by 400 cases treated without mercury.

The most important question, however, as regards the treatment of primary syphilis, is in relation to the frequency of secondary or constitutional disease; for the primary affection is, in by far the greater number of cases, an evil of comparatively little magnitude. Secondary syphilis, when once established, is a disease of which no one can predicate the termination. Its various phases, their succession and complications, are always beyond the reach of our knowledge, and often out of the sphere of treatment.

The returns of the army medical men upon this point are worthy of attentive perusal, because, if confirmed, they offer a very favourable contrast to the results obtained by the same method of treatment in civil practice, and may consequently suggest some valuable hints in reference to treatment. Dr. Hennen treated 105 cases of primary sores without mercury: secondary symptoms followed in eleven cases. All were cured without mercury, except one obstinate and anomalous case. The Report from the Army Medical Department,

December, 1816, to December, 1818, states that, during this period, 1940 cases of all kinds of primary chancre were treated, of which 65 were subjected, for certain reasons stated in the report, to the action of mercury. Of these 1940 cases, only 96 have had secondary symptoms of different sorts. Of these, 12 took mercury, for reasons assigned. If we deduct the 65 and 12 cases in which mercury was used from 1940, 1863 cases remain completely cured without mercury. The average time required for the cure of primary symptoms without mercury, when bubo did not exist, has been twenty-one days; with bubo, forty-five. The average period for the cure of secondary symptoms without mercury, has been from twenty-eight to forty-five days. In the same period, 2827 cases of primary symptoms were treated with mercury: secondary symptoms occurred in 51 of them. The average period for the cure of primary symptoms without bubo was thirty-three days; with bubo, fifty days; and for the cure of secondary symptoms, forty-five days.

Thus it appears that the average duration of treatment of the primary cases with mercury, was twelve days longer than the treatment without mercury. When bubo existed it was five days longer; and no difference existed in the treatment of secondary symptoms.

Of 100 cases treated by Mr. Green without mercury, buboes supervened in 16 cases: 6 only suppurated. Constitutional affections followed in 9 cases. These were cutaneous eruptions: papular in 3, pustular in 2, vesicular in 1, and vesicular and scaly in 2. These eruptions were, at their commencement, generally accompanied by pains in the limbs, and more or less fever. One of the cases of pustulæ closely resembled small-pox. He has

generally seen this particular form occur in persons of strong constitution. The vesicular and scaly eruptions occurred in delicate persons, and were very obstinate. Sore throat occurred in 4 cases: in 3 conjoint with eruptions. Periostitis occurred in 2 cases, which yielded to counter-irritation. There was not one case of iritis.

In 154 cases treated by Dr. Thompson without mercury, iritis followed in 1. In 417 cases, similarly treated by Dr. Hennen, iritis occurred only in 2.

The longer a venereal sore remains unhealed, and containing or secreting the poisonous material, the greater, *cæteris paribus*, is the risk of secondary symptoms: therefore, a patient who permits an indurated chancre to remain on his person many months runs a fair chance of being infected constitutionally; but I think the more robust the patient, the greater the power of resisting infection. At the present date there are thirteen patients under my care in Magdalen Ward, and of these three are suffering from constitutional syphilis. The ten subjects of primary syphilis tell the usual story, that they have been on the town one to three years; and that during the whole period they have been subject to occasional ulceration and discharge, the latter having rarely left them; but they have remained in good health with this exception. Of the three suffering from constitutional syphilis, the first was a pallid, strumous-looking girl, under sixteen, on whose legs and thighs there was a copious eruption of ecthyma. She was a person wholly unsuited to the life she had followed, being utterly without physical strength. The second was a woman at thirty-five, covered with rupial sores: she had been married, and respectably placed, but had, through her own misconduct and intemperance, lost both her home

and her health. The third was a young female who had lived with a man who had seduced her, and communicated the disease. No history could be obtained of the nature of her primary symptoms. All three had occupied a somewhat better position in life than the others, and had suffered from their misfortunes more severely both in body and mind; and I am inclined to believe that it is precisely in that class of patients that the absorption of the virus goes on with rapidity.

It is stated that among labouring men secondary symptoms are commonly overlooked or completely neglected. I doubt the accuracy of this statement. Many such men have quite a superstitious horror of "the disease," and are not satisfied with the treatment which is common on such occasions.

If it be true that secondary symptoms are especially apt to occur in those whose constitution has been broken by intemperance, suffering, exposure, or similar causes, it is easy to understand how the old practice of frequently salivating patients with prolonged doses of mercury, by way of "protection," accomplished a precisely opposite result. In the absence of any statistical information on the subject, it is possible only to express general impressions; but I believe few surgeons will deny the fact, that since the period when the general faith in mercury as a specific was shaken, and that mineral was administered in infinitely smaller quantities, the venereal disease has lost the greater part of its virulence. Among the older patients, who present themselves at St. Bartholomew's with haggard and colourless faces and teeth destroyed by caries, there are still occasionally some who relate how, thirty years ago, they were severely salivated for gonorrhœa.

I am far from undervaluing mercury as a remedy in syphilis; on the contrary, it is the most certain and powerful remedy we possess, but it requires to be administered with caution. The best method of securing a patient against the invasion of secondary symptoms is by destroying the primary sore, when small and manageable, by caustic; next by healing the primary sore, when that measure is impracticable, as quickly as possible, without detriment to the patient's health. If we salivate a patient in whom a small superficial sore is running its usual brief course of two or three weeks, we positively do the man an injury. But if induration should occur, either in the base of the sore, as in the indurated chancre, or in the cicatrix, a course of mercury, judiciously administered, is invaluable.

I cannot omit quoting an excellent remark by Dr. Graves:—"Syphilis and mercury are not like two opposite forces—not like an acid and an alkali—so that by putting them together you are sure to neutralize them. No. It is a melancholy fact, that the constitution may be impregnated with both at the same time."

The rules which guide me in the treatment of primary chancres are the following:—When the sore is small and spreading, but without induration, the application of caustic is imperatively called for. The nitrate of silver, the strong nitric acid, the acid nitrate of mercury, or the Vienna paste, may be used, as the surgeon prefers. The rapid destruction of the syphilitic virus is a great safeguard against the occurrence of secondary symptoms.

In the case of a non-indurated sore spreading feebly, and showing signs of incipient granulation, the administration of mercury is injurious, as retarding the healing

process, and in no way protecting the patient from secondary accidents. When a sore continues to spread quickly, or after seven days shows no inclination to heal, mercury may be given with advantage. That mineral also is required when syphilitic induration exists in the slightest degree. The administration of mercury in cases of primary phagedæna requires the nicest discrimination. It is useful in many cases of chronic phagedæna, but generally dangerous, if not positively injurious, in the acute varieties.

Mercury is, as a rule, inadmissible, or not requisite, in cases of sloughing chancres. The action of the poison is too rapid to be under the control of mercurial treatment.

It is customary in this country to administer mercury in the form of the *pilula hydrargyri*, *hydrargyrum cum cretâ*, the chloride or the bichloride of mercury. Of these, the two former are commonly preferred. They consist of finely subdivided metallic mercury; not the oxide, as has been heretofore believed. Specimens of the *pilula hydrargyri*, *hydrargyrum cum cretâ*, and the *unguentum hydrargyri*, present nearly the same appearances; under the microscope finely subdivided metallic globules occupy the field of vision. A chemical combination must take place after the medicine has been taken into the stomach or applied to the skin. A salt of uncertain nature must be formed, before it can be capable of producing its usual results.

The *hydrargyrum cum cretâ* is now preferred to the blue-pill, the latter being apt to become hard and insoluble by long keeping. About three grains of the former is equal to five of the latter.

The chloride and the bichloride of mercury exist in the

form of salts, which act without further change. The chloride is by far the milder and more manageable of the two, but it is a much more powerful drug than either of the two preceding. It is usual to give one to two grains for a dose, combined with a third or a quarter of a grain of opium.

The bichloride is rarely given in primary syphilis. It should be kept for severe cases of tertiary disease and cachexia. Occasionally it happens that given in small doses, gr. 1-12, gr. 1-8, combined with the tincture of cinchona, it proves of considerable benefit.

Mercurial frictions or inunctions were formerly much more commonly practised than at the present time. The chief objection to them is, that they render the patient's dress black and dirty. But they produce the complete effect upon the constitution, and may be used with advantage in cases of chronic bubo, combined or not with primary disease; or in cases where the stomach rejects mercury taken by the mouth. Suppurated buboes, or solid hard inguinal swellings, will often disappear under this method of treatment, which, to be effectual, should be done in the following way:—The patient, sitting before the fire, should rub on the thin skin at the inner part of the thighs a drachm of the strong mercurial ointment every night, or every night and morning. When, through friction, no further particles remain loose, the patient should slip on a pair of drawers and go into bed, there to remain, that the absorption of all that which stains the skin may go on uninterruptedly. The patient should on no account be allowed to wash the part, except at intervals, to prevent the skin from being chafed. Occasionally a drachm or two of the ointment is put into

the axilla at night time, when absorption will go on equally readily. I am not aware of the change which the particles of metallic mercury undergo in their passage through the skin.

BUBO.

There is a difficulty in obtaining accurate statistics as to the frequency of bubo, because in many cases the glandular swelling is both inconsiderable and temporary, and is scarcely sufficient to attract the patient's attention. But I believe it to be very frequent, especially among persons who have neglected the primary disease, or have a scrofulous habit.

That any local irritation may produce enlargement of the neighbouring absorbent glands is a fact too well known to need further remark, except that in such cases it is bad practice, as a rule, to abstract blood in any way, inasmuch as suppuration is apt to follow such a proceeding. The administration of opiates, of tonics, and the local application of warm fomentations, constitute the best remedies.

In the case of the direct absorption of the syphilitic virus a bubo assumes a more important signification. The line of absorbent vessels from the sore are seen, red and swelled, passing as hard lines to the assemblage of glands either on the same or on the opposite side of the body; they can be traced entering these glands, when their further course is lost. It is presumed, that from this point there are direct channels of communication with

the venous system, and that the venous blood becomes thence contaminated. This is perfectly probable, but we are in want of any observations or experiments directly bearing upon the question. All that we may affirm is, that the venereal poison pursues precisely the same course as any other animal poison. An examination of the enlarged glands, constituting bubo, after death, reveals nothing hitherto unknown. The usually small knots are enlarged to five or six times their natural size, and we see, under the microscope, the usual products, constituting inflammatory effusions disseminated through the substance of the gland. It was customary at one time to make a great point of the statement that suppuration never took place in the gland itself, but in the cellular or areolar tissue connecting several glands. This I believe to be a very unmeaning assertion, and untrue as far as it goes. The chief products of inflammation I have always found effused among the convoluted tubes constituting the gland, and it is here I apprehend that suppuration commences, as the pus-elements diffuse among the constituents of the gland. When a large abscess forms, all the surrounding tissues become consolidated, and contribute to circumscribe the pus. Irregularities of living, excess, or the reverse, namely, want of food, exert the same influence upon a syphilitic bubo as upon any other glandular enlargement. We therefore see the part red and inflamed, or bursting and discharging a thin ichorous or sanious secretion. There may be foul and irregular ulceration, or even sloughing; and there are many cases on record, in which death has ensued from sloughing phagedæna in the groin.

As I have already stated, I know of no relation between the occurrence of bubo and the frequency of

secondary syphilis. It appears to be by no means necessary that the syphilitic virus should cause irritation and swelling of the inguinal glands in its passage towards the venous system. The chief rule which guides me in the treatment of bubo is, to employ all remedial measures for the dispersion of the swelling before proceeding to open it, even when full of pus. It is surprising how many will disappear when left to themselves, the patient being kept at rest. The idea that a copious suppuration from the groin eliminates the venereal poison, I believe to be unfounded. Whereas, the annoyances and the inconveniences to the patient from having an open wound in that situation are often considerable. A young woman was lately under my care with a foul spreading ulcer in the right groin. She stated that she had been married at the age of seventeen, and had one child, in good health, now six years old. Her husband had left her, after having given her the disease; in fact, he returned to her only to obtain money, which she earned with great labour as a collar-maker. She informed me that she could rarely make more than five shillings a week, that sum being paid for the gross, or twelve dozen. She has been poorly off, and in want of proper nourishment. Nine weeks ago she noticed a small sore upon the external organs: it healed in eight days, without particular treatment. A week afterwards she noticed the swelling in the groin, where it suppurated, burst, and assumed its present foul aspect. The proper treatment in this case was to administer nourishing diet, with a proper amount of stimuli; to cover the ulcer with a charcoal poultice until the sloughs separated; subsequently to dress the wound with lint soaked in balsam of Peru, and finally to apply pressure by means of a bandage.

I have no new observations to make respecting the treatment of syphilitic bubo, of which the usual treatment is as follows :—When swelling of the glands occurs in conjunction with primary syphilis, or is supposed to depend upon the syphilitic poison, mercurial frictions are directed upon the thighs, that the mineral may pass through the enlarged parts. In more chronic enlargements it is customary to cover the swelling with a plaster, spread on leather, of the unguentum hydrargyri, or the unguentum ammoniaci cum hydrargyro. Leeches are not often required to an inflamed bubo, but they may sometimes be applied with advantage. The existence of suppuration should not induce the surgeon to use the lancet early : many are absorbed even after the skin has become red and thinned. Such absorption does not add to the patient's danger of secondary syphilis. When an opening is to be made, it should always be perpendicular to the body, *i. e.*, in the long axis of the thigh. A transverse opening is frequently followed by burrowing of the matter all round the thigh. Cases of this description frequently require the administration of tonics ; for buboes are very apt to occur in persons who have a scrofulous constitution. I rarely use iodine as an external application in enlargement of the inguinal glands, although there is no objection to its employment.

It sometimes happens that sores either in the body of the penis or in the labia vaginæ may produce swelling of the upper femoral glands ; this is an accident dependent on the course of the superficial absorbents, which is as uncertain as the distribution of the superficial nerves.

CHAPTER IV.

ON INFLAMMATION AFFECTING SYPHILITIC SORES.

THE external organs of both sexes, and particularly of the male, are often affected by primary syphilis in the form of phagedænic and sloughing ulcers. In other cases, however, a primary sore, in itself of small size, becomes, through neglect or the intemperate habits of the patient, inflamed, and is attended with heat and swelling of the neighbouring parts, by which changes are induced, frequently involving great loss of substance, and injury to the organ in which they occur. That want of proper nourishment, inattention to cleanliness, and similar causes, may induce acute phagedænic ulceration, is more than probable; but, beside all this, there must be some relation yet unexplained between the syphilitic virus and the constitution of the individual, to account for these severe symptoms. We see patients in whom one-half or two-thirds of the prepuce are destroyed before their arrival at the hospital by a phagedænic ulceration, which presents a foul, irregular, angry-looking and tender surface. The part looks as if the prepuce had been chopped off, and the cut surface had assumed an unhealthy ulcerating aspect. It is not, however, to these cases that I would direct attention so much as to instances in which the penis becomes actively inflamed during the progress of primary disease.

The patients may be either young or old; and in both

cases the danger is the same, namely, a tendency in the attack to terminate in mortification; when the same effects are produced as by mortification in any other part of the body, namely, great depression, feeble pulse, and a general failing of the bodily powers. The condition of such a patient is best described by the narration of a case.

James B——, aged twenty-two, was admitted into the hospital, January 9, 1846, under Mr. Lawrence, with acute inflammation of the glans and integuments of the penis, with considerable swelling. A syphilitic sore was supposed to exist under the prepuce, which could not be withdrawn. He contracted the disease four days ago. The day following the connexion he took a long walk, and returned home with the penis swelled and painful. Beyond the fact that the swelling increased and became more painful from this date, he could give no history.

He was directed to take an aperient draught. Ten leeches were applied to the part, and then a poultice. Milk diet.

Jan. 10.—He has complained of pain all the night, especially at one point near the tip of the penis. In the afternoon violent hæmorrhage from under the prepuce ensued, which lasted three hours. The prepuce was then divided in its entire length, when a sloughing sore was discovered, situated partly on the glans and partly on the body of the penis, and equal in size to a shilling piece. The bleeding then ceased. Cold lotion. The day following fresh hæmorrhage came on, which lasted two hours. It was computed that he lost during the two days four to five pints of blood.

The destructive process was, however, stopped. The patient from this time forwards was free from pain. The sloughing process had destroyed two-thirds of the glans penis, and had burrowed deeply down by the extremities of the corpora cavernosa, where it had doubtless opened one of the terminal branches of the arteria dorsalis penis, which encircle the organ behind the corona glandis. In a month from this time he was discharged well.

The case illustrates an accident of by no means unfrequent occurrence, and suggests the proper mode of treatment.

From a variety of causes inflammation comes on while the glans is occupied by a simple venereal sore; swelling becomes painful because of the prepuce, which girds the swollen part. The apposition of two mucous surfaces in such a state, upon one of which there is a specific ulcer, leads to aggravation of the primary disease; the pain increases; the discharge, at first purulent, becomes thin, ichorous, or sanious, and the patient cannot bear to have the organ touched or examined. Under these circumstances sloughing ensues; and the mortified structures may be discharged from the preputial orifice. But more commonly under the slough is a foul spreading ulcer, which may extend to the prepuce and destroy it.

I have seen cases in which both general and local bleedings have been required, and very many where spontaneous hæmorrhage has ensued from the fact of some arterial branch being opened. The destructive process is so rapid, that there is not time for the coagulation of the blood in the vessel, nor even for any of those processes by which nature plugs up an opened artery. Immediate

benefit results from these copious bleedings, but the ulceration rarely ceases, when in the state above described, until it has been freely exposed by the division of the prepuce; and I will therefore state the condition of parts under which the performance of that operation is sanctioned. When the penis is swelled at its extremity, and from under the prepuce there flows an ichorous or bloody discharge, generally fœtid; when pressure upon the swollen part gives extreme pain to the patient, especially over one spot, and from the history of the case there is reason to expect the existence of a syphilitic sore, the division of the prepuce, generally along its upper surface, is indicated. But the contrary may be inferred, although the organ be swelled and the prepuce cannot be withdrawn, if the discharge continue thick and puriform, and the patient's sufferings are not extreme. It is impossible that a foul sloughing or phagedænic ulcer should secrete good pus. The character of this secretion may therefore be said to afford an important indication.

A patient came to the hospital on August 10, 1846, with inflammation and great swelling of the prepuce, which was of a dusky-red colour, contracted at the orifice, and poured forth a quantity of thin ichorous discharge. The patient complained of agonizing pain about the corona glandis. The prepuce was slit up in its entire length, when the surface of the glans was observed to be in a state of superficial slough. Upon the inner surface of the prepuce, and towards the right side, there was a large phagedænic ulcer. He was ordered an opiate at night twice, and bread-and-water poultice to the penis.

11th.—He still complained of agonizing pain along the penis. The ulcer of the prepuce much in the same state.

Ordered to take half a grain of opium every six hours. The parts to be dressed with balsam of Peru.

13th.—The wounds are all healthy; but two-thirds of the prepuce have been destroyed.

The cut surface of the prepuce may take on the ulcerative action. This occurrence however is rare, and does not in general give the surgeon any trouble to arrest. The appearance is as if an oval sore occupied each cut half of the prepuce.

It is of course necessary to be careful to introduce the director under the prepuce, and not into the urethra. But such a mistake must imply either carelessness or ignorance on the part of the operator.

The following case of sloughing sore presents one point of interest, namely, the occasional fatal termination of this affection:—

John W——, aged fifty-five, an old-looking man, married, contracted some trivial venereal affection two months ago. Since that time he has cohabited only with his wife: the disease, however, became worse, and he was admitted into the hospital, November 28, 1846, with a thickened state of the prepuce; foul, thin, and bloody discharge; extreme pain upon pressure. The prepuce was slit up, and a large sloughing chancre was exposed, at least one inch in the antero-posterior measurement, occupying two-thirds of the circumference of the glans penis. There was not much bleeding, pulse very feeble.

He was ordered half a drachm of tincture of opium immediately, to be repeated at night.

Two grains of the disulphate of quinine to be taken thrice a day.

30th.—The slough, very deep, is separating; one

bit, still adherent, was divided by the scissors, and the whole disorganized mass was removed.

Ordered six ounces of wine daily.

December 1.—The wound is looking healthy, but the patient is very weak, and unable to leave his bed; pulse feeble.

Brandy, four ounces daily; wine as before; arrowroot.

3rd.—Continues feeble; appetite very bad. Tongue moist and clean. Wine, sixteen ounces daily; brandy and arrowroot as before.

4th.—Prepuce flaccid and bloodless: wound healthy.

8th.—Died. The body was removed by his friends, and not examined.

CHAPTER V.

ON DISEASES RESEMBLING SYPHILIS.

THERE are morbid appearances so closely resembling the effects of the venereal contagion and of the syphilitic poison, both in the primary and secondary stages, that the surgeon may feel a difficulty in deciding at one glance as to the nature of the case. He may require to know the history and other circumstances, and, even more, may desire such additional information as can be obtained by watching the effects of medicine and local applications.

FIRST, as to primary venereal disease. I may dismiss with a few words the well-known instances of vaginal discharges in young children. There is rarely much difficulty in determining the nature of the case. No attempt at intromission can be made by the adult male without the infliction of damage to the soft structures constituting the labia and nymphæ. If, therefore, a child with vaginal discharge, but with the external organs intact, should be brought for inspection, we may conclude that the disease owes its origin to dirt, intestinal irritation, the presence of worms, or some such cause. Nevertheless, it should be borne in mind that an idea prevails among the lower orders, that gonorrhœa in the male may be cured by connexion with virgins, and hence young female children are occasionally exposed to contagion.

I remember two young children in the hospital under treatment for gonorrhœa. The discharge was by no means difficult to control, inasmuch as it was confined to the inner surfaces of the undeveloped labia. An occasional purgative, and the application between the parts of lint soaked in the common lead lotion, or in solutions of alum or zinc, brought the membrane to a healthy state.

The mucous follicles of the labia are sometimes the seat of disease. These structures are called Cowper's glands, and are described, in Weber's *Anatomy*, by Hildebrandt. There occur in them—1. A simple accumulation of mucus, producing a swelling pressing inwards towards the opposite labium.—2. Acute inflammation, terminating in abscess.—3. Chronic inflammation, followed by a succession of small suppurations.

Acute Inflammation and Suppuration of Cowper's Glands in the Female.

Anne R——, a healthy young woman, who has been living since she left home, two years ago, with an itinerant musician, states that a fortnight ago she travelled a long distance on foot, and felt in consequence considerable soreness about the entrance of the vagina. She adopted such means as were in her power to obtain relief, but was not able to rest. Constant locomotion produced swelling in both labia, and she came to the hospital in great pain, July 1, 1853. Admitted under Mr. Lawrence. There is suppuration in both labia. From a spontaneous opening in the right, there is a discharge of extremely offensive bloody matter: puncture of the left side gave escape to a fluid of similar colour and consistence, and equally fetid. The countenance was worn; the pulse

small; and she appeared to have suffered considerably from pain: for several nights she had obtained no sleep.

She was ordered eight ounces of wine daily; meat diet; soap-and-opium pill at night; and proper applications to the abscesses, under which treatment she recovered.

A young female, aged nineteen, who had been but a short time leading the life of a prostitute, came to the hospital in June, 1853, with inflammation of Cowper's glands in the left labium. A small suppuration was opened, June 28. A piece of lint was inserted, and the wound granulated and healed. Upon resuming her former habits, the same occurrence took place, and fresh abscesses formed in the part, which were opened successively in the months of August, September, and the January of the following year; after which time she ceased attendance.

It is desirable to know that there is an assemblage of mucous glands opening into a dilated sac, which is the commencement of the excretory duct, and that consequently a single free opening, followed by the granulation of the wound, in cases of collections of fluid, does not of necessity protect the patient from the recurrence of the disease.

The introduction of foreign bodies into the vagina or the urethra may lead to ulcerations of various kinds. The pages of the weekly journals contain numerous accounts of the substances taken from this part in persons whose intellects upon other matters appear sufficiently sound. I will not enumerate particulars which are accessible to all; but simply remark that these morbid fancies are not confined to the young and unmarried,

but may develop themselves at all ages and under every condition. Some years ago Mr. Lawrence removed a calculus from the urinary bladder of a woman of fifty, the mother of a large family. The nucleus of this calculus consisted of a fragment of the bone of the sheep, as I detected by microscopical examination.

Girls about the age of puberty sometimes allow intercourse before the full development of the vaginal canal, and in such cases it may occur that considerable violence, followed by inflammation and mortification, is done to the mucous membranes. It is desirable upon many grounds to recognise the possibility of such an occurrence, and to distinguish it from syphilis; for the administration of mercury would prove hurtful both to the local disease and to the general health.

Mary G——, aged fourteen, in service, was admitted into the hospital with acute inflammation of the entrance of the vagina; both labia and nymphæ were swelled and of a bright-red colour, and on the left side there was a large black slough, the size of a crown-piece, and apparently of some depth. There was general febrile disturbance, the skin was hot, and the tongue white. The girl refused to give any explanation of the affair, but circumstances indicated that connexion, attended by violence, had taken place some days before. The entrance of the vagina was narrow. Upon the separation of the slough, a deep granulating cavity was left, which healed in the usual way.

It may not be quite out of place here to remark that the eruption of syphilitic lepra upon the mucous membrane of the vagina may be mistaken for primary syphi-

litic ulceration. Whether the common form of lepra ever attacks the genito-urinary apparatus, is a point upon which I have no present information.

A case of tuberculosis of the vagina has been recorded by Virchow. "Some time ago," he observes, "I had an opportunity of witnessing in an old woman an affection hitherto unknown to me. The patient had long suffered from dysuria, and there was found after death very extensive tuberculosis of the urinary organs. The upper part of the right kidney was in a great part destroyed; the corresponding parts of the infundibula and pelvis were in a state of cheesy ulceration; the remaining part of the renal pelvis and the right ureter studded throughout with small knots, partly grey and solid, partly white and ulcerous. Even in the cortical substance of the kidney there were found yellow knots. The urinary bladder was, in the upper part, thickly granular, with numerous little groups of grey knots; at the lower part, by the neck and urethra, it was hyperæmic and studded with more isolated and finer grey tubercles. In the vagina there was found a similar eruption, mostly arranged in groups upon a base of red and injected mucous membrane, each single tubercle appearing as a fine grey pearl. They were sparingly distributed at the entrance of the vagina. They had not ulcerated in any part. Under the microscope they appeared to consist of granular masses, composed of soft cells—a deposit which constitutes in all cases recently-formed tubercle. I saw none in the rectum or in the uterus of this patient."—(Virchow's *Archiv*, 1853.)

The possibility of the existence of cancerous diseases at the entrance of the vagina should always be present to the mind of the surgeon when examining a respectable person on account of a doubtful malady. The whole of

the natural structures in this part abound in secreting glands, where malignant deposits are especially liable to occur. My limits will not allow me to enter upon this subject at length.

Cancerous disease occurs usually in two forms. 1. As a kind of vegetating epithelial growth. 2. As a hard scirrhus knot, terminating in ulceration. The former I have seen on the clitoris and the labia, commencing at the line of junction of the skin and mucous membrane; the latter, more commonly on the nymphæ.

I remember two well-marked cases of cancer of the clitoris, in both of which there was return of the disease after extirpation. The disease commenced by hypertrophy of the glandular structure of the skin covering the organ, infiltration of cancerous matter, and subsequent efflorescence into a radiating fibrous-looking growth. The microscopic characters consisted of numerous enlarged epithelial cells, flattened, rhomboidal, or oval, containing one or two nuclei, and granules around the nucleus. Besides which there were numerous small granular bodies (cytoblasts) at the base of such tumours and in the interior of the papillæ.

Cancer of the external organs of generation seems to me to commence in the mucous follicles, which become distended by the diseased epithelial cells. These cells multiply until a warty growth, followed by ulceration from a vascular basis, ensues.

The history which patients usually give of this disease may be learnt from the narration of the following case:—

Elizabeth W——, aged twenty-eight, married eight years, but never pregnant, states that three years ago she felt great itching in the vagina; then came a hard knot,

the size of a pea, in the clitoris; then warty growths of more rapid formation from the surrounding parts, the latter only of four months' duration. She has fallen away very much, and complains of constant thirst. She perspires profusely at night. So severe have been the pains in the loins, that she has required pressure to render them tolerable. There is enlargement of the clitoris, preputium clitoridis, nymphæ, and inferior commissure of the vagina, with ulceration of the orifice, which is larger than natural. There are numerous large red vegetations from the clitoris. Enlargement of the absorbent glands in each groin.—Only palliative treatment could be adopted.

In the male, herpes and excoriations of the glans and prepuce, and simple abrasions, frequently occur from sexual intercourse, without venereal taint. They admit of easy diagnosis, inasmuch as they are usually noticed a few hours after connexion. The only disease affecting the penis with which syphilis is apt to be confounded is cancer; and it must be admitted that mistakes have occurred at the commencement to surgeons of great experience. Cancer of the penis may commence as a wart; or as an indurated knot under the prepuce, which, in a large number of such cases, has been contracted at its orifice (phymosis) from birth. The course of the disease is ulcerative: the glands in the groin become affected, as in cancer affecting the female breast. The following case was under Mr. Lawrence's care about ten years ago:—

Francis J——, aged fifty, married, formerly a publican, afterwards a commercial traveller, accustomed to live freely, states, that two years ago he noticed on the inner surface of the prepuce a small wart, which he

picked with his fingers. Upon its recurrence he went to a chemist, who burnt it away with caustic four times, after which he one day dragged it out by the roots. The wart never came again, but the raw surface would not heal; but when touched with bluestone became very tender, and spread. Twelve months ago a small subcutaneous knot, the size of a pea, very hard, but not particularly painful, came behind the preputial sore. He then consulted a hospital surgeon, who put him under a mercurial course for seven weeks, in the belief the disease was syphilitic. The knot had become as large as half a walnut. He then came to St. Bartholomew's Hospital. A hard mass, the size of a small walnut, is situated in the skin and corpus cavernosum penis of the left side, behind the glans. There are two ulcerated surfaces, one as big as a shilling, the other as big as a pea, upon its surface. The penis was removed.

October 17.—The case went on favourably till November 25, when a stricture formed three inches down the urethra. This was relieved by the use of catheters, and he left the hospital in a comfortable state.

December 10.—He was admitted, suffering from an extravasation of urine. An opening was made in the perineum; but the patient died.

Upon examination after death, it was found that the urethra and bladder were healthy; the orifice of the former alone being contracted. There was no return of disease in the penis, but the inguinal glands were slightly infiltrated with cancer.

A patient has just left the hospital, from whom I removed the entire scrotum and the testicles, with some of the integuments of the right thigh, for that form of epithelial cancer, termed chimney-sweeps' cancer.

The disease commenced in the usual manner, as a soot-wart in the scrotum, and gradually extended until the whole surface was occupied by a vascular wart and ulcerating surface, secreting a most offensive discharge. The inguinal glands were somewhat enlarged, but not very hard. Under the circumstances, it was considered right to give the patient the benefit of an operation, and the morbid parts were removed, including the testicles, which, though not absolutely diseased, adhered firmly to surrounding parts. The case went on favourably, the wound healing completely by granulation, and the glandular swellings subsiding. A very little inquiry will suffice to enable the youngest surgeon to distinguish this affection from syphilis.

CHAPTER VI.

SECONDARY SYMPTOMS.

IN the preceding pages I have endeavoured to show that the poison producing any kind of primary syphilitic sore (the varieties or the characteristics of which depend chiefly on the structure of the part occupied), may become the means of infecting the system by its direct conveyance along the absorbent vessels into the venous circulation. Buboes occur far more often than is generally supposed; that is to say, the inguinal glands very commonly swell, and remain tender for a few days, and then subside; this occurrence, after a lapse of years, is often forgotten by patients, or misunderstood, and called a passing stiffness of the hip-joint, attributed to a sprain.

Mr. Acton observes, "that the simple and the phagedænic sores are rarely followed by constitutional syphilis, whereas the indurated chancre rarely if ever fails to be succeeded by the most positive secondary symptoms."—(*On the Urinary and Generative Organs*, p. 475.) I beg, with every respect, to dispute both these positions. From my observation of a vast number of cases of primary and secondary syphilis in St. Bartholomew's Hospital, I have come to the conclusion that secondary symptoms, in an immeasurably larger proportion, ensue after every variety of simple and non-indurated chancre. Indeed, the indurated sore is, according to my experience, rather of rare occurrence. After primary phagedæna, too, secondary

symptoms may be dreaded, with this most unhappy complication, namely, that no lapse of time seems to render the patient's constitution free, and that the constitutional disease partakes of the character of the primary sore. If a person were to have a well-marked phagedænic ulcer, I would not guarantee his not suffering from phagedænic ulceration of the throat after an interval of ten years' health, or even more. Then as to the Hunterian chancre rarely if ever failing to be succeeded by the most positive secondary symptoms, I remember a case which gave me a useful lesson. In the year 1843, a gentleman called upon me with the following statement:—He had been travelling in Spain, and when at Cadiz had connexion with one of the better class of prostitutes. Almost immediately afterwards he embarked for England, and arrived after a week's voyage. Circumstances prevented his immediate journey to London, so that about a fortnight elapsed between the time of his leaving Cadiz and calling upon me. He had a well-marked indurated chancre, the subcutaneous knot was about the size of the last joint of a man's little finger. Upon its prominent part was a small excoriation: the whole occupied the loose areolar tissue at the root of the prepuce. Of course I directed a course of mercury, to be continued until the hardness had entirely disappeared. He requested my opinion as to the probability of secondary symptoms, and I gave an unfavourable reply, to his evident distress. Thirteen years have now elapsed, and I am in a position to state, from intimate acquaintance with him during the whole time, that he has never had a spot or blemish about him. On the contrary, he has married, and is the father of several healthy children.

It appears to me that it would be more correct to say

that no one who has primary syphilis in its slightest form can be safely guaranteed from the occurrence of constitutional disease; but that if six months elapse after the healing of the primary sore, the patient remaining well, the chances are greatly in his favour that he will not experience any further annoyance. An exception to this, however, must be made in the case of primary phagedæna, because experience teaches us that in this form of disease the interval between the primary and secondary symptoms may extend over a period of ten to fifteen years. The peculiar danger attending the Hunterian or the indurated chancre arises from the fact of its being obstinate and chronic in its course; and the longer the primary disease remains, so many more are the chances of constitutional infection from absorption.

M. Ricord lays it down as a recognised truth, that a person who has once had secondary symptoms possesses by the very fact an immunity from a second attack—that as the vaccine will act but once, so will constitutional syphilis. It is hardly necessary to observe that it is impossible either to prove or disprove this assertion; for if a patient who has once had primary and secondary syphilis were to contract a second sore, also followed by secondary symptoms, this second constitutional affection would be regarded as part of the original infection by those who hold with M. Ricord. But I protest against the doctrine in its present unsupported state, because it contains the belief upon which the dangerous system of syphilization is founded.

In hospitals, men are more commonly seen affected with secondary symptoms than women, at least the class of women admitted into the venereal wards. Per-

haps the freer mode of life of the former has something to do with this fact. It seems, however, a truth, that women who have long been on the streets may acquire a certain immunity from syphilis. This perhaps arises from the vagina losing its natural delicacy of structure, and from the part being constantly lubricated with a chronic mucous discharge.

I have never noticed any connexion between that state of constitution commonly called "scrofulous" and a predisposition to secondary syphilis. As has been often remarked, constitutional syphilis attacks, without much distinction, old and young, strong and weak, rich and poor, male and female. Thus much I have seen, that intemperance and irregularities exert the same injurious effects on constitutional syphilis as on other diseases, and that temperance and abstemiousness often effect a cure where medicines fail.

Some of the severest cases occur in young and delicate females, in whom there is no account of primary disease, and upon this subject I beg to offer a few remarks, as it serves to illustrate the mode of transmission of secondary syphilis. We are told that a man, suffering from the disease constitutionally, *i.e.*, in whom no primary sore exists, cannot communicate the disease to a woman, unless through the medium of an impregnated ovum; that is to say, that the spermatozoon must convey the poison to the foetal germ, and that this infected foetus will contaminate the mother secondarily. This is, of course, a subject the investigation of which is fraught with difficulty; but I will bring forward such cases as appear to me to militate against it.

A female has been long under my care, and is at the present moment dying of syphilitic cachexia. She was

married, and has three fine children ; but after the birth of the last, she left her husband to live with another man, and subsequently took to drinking. Since quitting her home, she has never been pregnant, and has never had any primary disease whatever, not even gonorrhœal discharge ; but she has tertiary syphilis in its worst form, and is in that state when further treatment is nearly useless.

One morning I saw a patient—a pleasing and rather young married person—who had not been pregnant, but was suffering from phagedænic ulceration of the throat. Her husband, who was present, had had primary disease, which he had supposed to be cured before marriage. Five years had elapsed during which they had lived together in health, when, without apparent cause, this condition of the throat supervened.

I refer to the case of Ellen B——, page 11. This girl, whose friends were respectable, had never had connexion with any but one man. She had never been pregnant, nor had primary symptoms ; but she suffered from a severe attack of lepra and iritis.

Is Secondary Syphilis contagious?—There are many cases upon record, which seem to prove that it is so under the form of lepra or fissures about the mouth, &c. The remarks of Colles upon this point are familiar to all ; and I would now draw attention to the observations of M. Rizzi, of Milan, who had the charge of a large hospital in that city, and an ample field for recording facts relating to congenital syphilis. According to him, if a woman contracts specific ulcerations on the breast by suckling an infected infant, mucous tubercles may frequently develop themselves on the vulva and about the

anus. But this, it is stated, is not all; the syphilis, although secondary, is transmissible by contact, so that a perfectly innocent woman may communicate the disease to her husband; and it behoves the medical attendant to be well apprised of this fact, as upon his knowledge of it, not only the health, but the peace of mind and the honour of individuals, must rest. Of 100 individuals with chancres on the breast from impure lactation, or in the mouth or in the throat, derived from contact with an infected infant, 34 had tubercles of the vulva, 19 syphilitic angina, 2 iritis, 14 tubercles of the vulva and angina simultaneously, 5 tubercles of the vulva and others disseminated over other parts of the body of divers complicated symptoms, 6 tubercles of the vulva, angina, tubercles on the skin and iritis, and 19 no secondary symptoms. In nurses, as well as in men infected by them, M. Rizzi has remarked that tubercles are the most common form of secondary symptoms, and angina is frequently superadded. Discharge, vegetations, and exostoses are very rare; and buboes, when they occur, consist only of swelling and tension of the submaxillary or axillary glands.

In 53 infants, the disease manifested itself in one month after birth in 33; at the expiration of two months, in 11; of three months, in 4. These statistics show how easily parties may be deceived as to the condition of infants that have been subjected to the syphilitic poison, and how readily nurses may be exposed to the syphilitic poison from infants taken by them to nurse, without the slightest apprehension, whose parents even might not have a suspicion of the existence of the disease.—(From *Ranking's Abstract of the Medical Sciences*, vol. v., Jan.–June, 1847, page 250.)

The following list represents the secondary symptoms most commonly seen in this country :—

1. Cutaneous eruption.
 - a.* Erythema.
 - b.* Scaly eruption.
 - c.* Papular eruption.
 - d.* Pustular eruptions.
 - e.* Tubercular eruption.
2. Mucous tubercles, or condylomata.
3. Ulcerations between the toes. Rhagades digitoria.
4. Superficial ulcerations of—
 - a.* The meatus auditorius externus.
 - b.* The navel.
 - c.* The nose.
 - d.* The lips and the angles of the mouth.
5. Syphilitic affections of the tongue.
 - a.* Excoriations of its surface.
 - b.* Ulcerations, fissures, &c.
 - c.* Induration of its substance.
6. Ulceration of the gums.
7. Ulceration of the tonsils—soft and hard palate.
Excoriations of these parts without ulceration.
8. Ulceration of the pharynx.
9. Ulceration extending to the rima glottidis.
10. Affections of the eye and its appendages.
 - a.* Ulceration of the eyelids.
 - b.* Iritis.
 - c.* Sclerotitis.
11. Ulceration at the root of the nails.
12. Alopecia, or baldness.
13. Ulceration of the rectum and large intestines,
syphilitic dysentery.

Syphilitic affections of the skin must be coeval with the primary disease, and, as far as experience can guide us, seem to retain their original character. I cannot believe that the epidemic which reigned in the fifteenth century was in all instances syphilis, when we read of "livid patches appearing on the skin, of ulcers becoming hæmorrhagic, of circumstances bespeaking a liquefaction of the blood." This somewhat vague account seems to me far more to refer to epidemic scurvy, an occurrence by no means improbable, when we reflect that at that period Europe had long been convulsed by wars, to the detriment of all useful occupations and to the injury of productive pursuits. The colour of syphilitic eruptions in the skin is mostly of yellowish or coppery hue. It is rare that a bright rosy tint is noticed, and then only under circumstances of acute febrile disturbance. A patient was under my care in the hospital with superficial ulcerations of the external organs and glandular swelling of the left groin, when, just at the time of dismissal, an acute febrile attack, accompanied by soreness of the throat and general erythema, supervened. So acute were the symptoms, that opinions were divided as to whether they were about to usher in an attack of erysipelas or of scarlatina. On the third day an abundant crop of papulæ broke out over the reddened integument of the entire body. As the fever subsided, the eruption faded, and in ten days was nearly gone, a scaly condition of the cuticle remaining. In other instances there is a close resemblance in the acute cases between the pustular eruption of syphilis and the eruption of small-pox; and this resemblance is heightened by the existence of superficial depressions in the integumental stains of the former. Surgeons of large experience have had to wait, under

these circumstances, some days for confirmation of their diagnosis.

We must bear in mind that cutaneous eruptions of syphilitic origin do not always preserve one type in the same individual. We may have scaly and tubercular, or scaly and papular, or pustular, combined. It is by no means uncommon for a scaly eruption to become tubercular as the patient's health fails him; or for a person to have scaly eruption on the trunk and pustular on the head. Scaly and papular eruptions are very often combined, both terminating in desquamation, the former leaving broad copper-coloured stains; the latter, small spots, sometimes of deeper colour. The two can be readily distinguished. An eruption of minute papulæ is frequently succeeded by a crop of much larger pimples, among which are many showing a disposition to suppurate at their apices. Large elevated tubercles of the integument pass into deep excavated phagedænic sores, and may be combined with the usual form of *rupia prominens*. The spots in all syphilitic eruptions are mostly circular and detached, rather than confluent; and upon this ground the term syphilitic lepra is preferable to syphilitic psoriasis. "The scales," observes Cazenave, "are thin, dry, and of greyish hue; the crusts, thick, greenish, sometimes black, always hard and irregular."

Those parts of the trunk and body where the circulation is most active are usually affected by the erythematous, scaly, papular, and pustular eruptions; we usually observe them commence about the shoulders, face, chest, and upper extremities, though they spread thence over the entire body. The large tubercles, passing into deep ulcers, commonly occur on the lower extremities; but *rupia prominens* affects all parts alike.

The cicatrices from syphilitic sores in the skin are often characteristic, being rounded, depressed, of dull-white hue, and irregular on the surface. But I have seen cicatrices resulting from scrofulous sores exactly like them. Syphilitic erythema I have generally seen preceding other forms of eruption; but it may exist persistently when it appears in the form of dullish-red or coppery-coloured patches of irregular form. Lately, a female was in the hospital with this disease upon the thighs, just above the knees; it had not been attended by any perceptible febrile disturbance.

The most common form of eruption is undoubtedly the scaly or syphilitic lepra; it is characterized by small circular, coppery-coloured spots, covered by thin, dark scales, differing in a remarkable degree from the bright and almost silvery hue of lepra vulgaris. Syphilitic lepra may occupy the entire surface of the body, from the crown of the head, where it causes the hair to drop off, to the palms of the hands and the soles of the feet, where it produces splitting and scaling of the hard epidermis. It disfigures the face, especially of fair-complexioned persons, the stains having a great tendency to mark the forehead and eyebrows. In general it is accompanied by other symptoms, and may be said to spread into the mucous membranes and the integuments of various organs. Inflammation, ulceration, and discharge will occur in the external auditory meatus, the nasal apertures, the margin of the eyelids, the navel, the angles of the mouth, the tongue,—in which situation we observe the disease either in the form of ulcerated fissures at the sides, or excoriation and abrasion of the mucous membrane on the dorsum, or irregular tubercular elevations towards the posterior part, near the papillæ vaginatæ, or syphilitic

induration, which I have known to be confounded with scirrhus. *Lepra syphilitica* attacks the scrotum, which becomes red and excoriated from discharge; the vagina, where precisely the same circular detached spots may be observed in young subjects, when the mucous membrane retains its natural delicacy both of hue and consistence. Concurrently with this form of eruption, we commonly notice deep foul ulcers between the toes, mucous tubercles about the anus, the upper part of the thighs, in the axillæ, or on the skin, overhung by a dependent mammary gland; in short, in any situation where the surface of the body is kept moist. Ulceration commonly takes place in the throat, where it attacks the tonsils, which may be either superficially or deeply affected; or the soft palate, where it may present a winding surface, like a snail's track, bordered by thickened and white epithelium. Iritis most commonly accompanies scaly eruption, but sometimes also the papular or tubercular form; generally, however, the first.

Thus it will be seen that with syphilitic lepra a very large proportion of the symptoms of secondary disease is commonly associated, and I think we may regard it as the type of these specific cutaneous eruptions.

The elevation of the scales of lepra into copper-coloured tubercles is always associated with impairment of the general health, and may be taken as an indication, during a mercurial course, that the medicine is acting injuriously. It may become necessary, under these circumstances, to change the treatment, or at least to allow the patient better diet, and a certain amount of stimuli.

The most striking point in papular syphilitic eruption, or syphilitic lichen, is its occasional outbreak with well-marked feverish symptoms, when it may resemble

the eruption of small-pox. I lately saw a patient from whom the disease was passing away. Both the lower extremities were covered by small, dark-coloured, circular spots, covered with thin scales, which were being shed from central depressions. It is long before the marks from such an eruption subside. In proportion to the acuteness of the attack, so is the frequency of suppuration in the pimples. Therefore we may regard the eruption of small papulæ, and their conversion into pustules, as stages of one and the same disease.

The larger pustules of syphilitic ecthyma are generally few in number, and scattered over the body at long intervals. They are five or six times the size of the smaller pustule, which we have just been considering, and with which it is impossible to confound them. The epidermis is raised by a darkish sero-purulent fluid, and the spot is surrounded by a dusky-red, rather than a coppery areola. Under the scab which forms when the cuticle gives way ulceration proceeds, throwing off a fresh layer of viscid secretion, which pushes forward the first crust, until the elevated, dark-coloured incrustation of "*rupia prominens*" is formed.

The serpiginous ulcer is a rare disease, which may occupy a large part of the trunk and limbs without impairing considerably the patient's health. A man is at the present time in the hospital, in whom the back of the thighs, as well as the larger part of both legs, are occupied by irregular, spreading, creeping ulcerations, extending in one direction while they heal in another, leaving a red, nodulated, and unhealthy-looking cicatrix. These ulcerations, as Cazenave observes, describe circumvolutions of diverse forms, segments of a circle, entire circles, zigzags, spirals, kinds of ciphers, or

letters; and we find that the form of eruption with which they are associated comes under the head of "tubercular."

In other cases, large tubercles form on the skin, burst, and pass into deep excavated ulcers, with elevated edges, sufficiently large to hold a walnut. They mostly attack the lower extremities. I saw a female patient lately, aged twenty-one, in whom one of these ulcers occupied the front of the knee. She had had superficial ulcers, followed by suppurating buboes, two years ago, when she was a patient in the hospital.

Mucous tubercles of the external organs are seen about the vagina, anus, and axillæ in the female; about the scrotum and thighs in the male. I think they are more common in the former sex. A case was lately under my care in which a mass extended from the left labium towards the anus, which part it did not quite reach; the right labium was sound. The disease commences by redness and increased vascularity of a part of the skin; separation of the epidermis, and the rapid development of this warty-looking epithelial production; the discharge proceeding from it is generally very fœtid, and an exaggeration of the natural odour of the part whereon it arises. Thus, in the armpits and about the anus the discharges are often very offensive.

The treatment of mucous tubercles consists in bathing them with lotion of the sulphate of zinc, and in applying to the surface, should they not disappear when kept clean, either the nitrate of silver, or undiluted nitric acid. Calomel may be sprinkled upon them with advantage; but care must be taken lest salivation be induced.

Alopeceia, or shedding and falling off of the hair, un-

connected with syphilitic lepra, is a rare affection; but instances are met with where it affects the eyebrows, or the pubes, or the scalp. In the few instances which have fallen under my notice, I have observed neither general nor local irritation; the patient has complained only of the deformity it has occasioned. The general treatment for syphilis is of use in this affection; besides which, local applications of a stimulating nature may be employed. The usual one consist of

Tinct. cantharidis, ʒi—ʒii.

Cerat. cetacea, ʒi.,

combined with some essential oils, to give an agreeable perfume. This goes by the name of Dupuytren's Ointment. I have seen several cases where the eyebrows have been lost from this cause.

Among the rarer forms of secondary disease is syphilitic dysentery, or loose stools, containing mucus and blood from the large intestine, affected by syphilitic ulceration. A case of the kind is now in the hospital.

*Disease of the Rectum, Syphilitic—Hypertrophy of the
Integument and Subcutaneous Tissue around the Anus
—Removal of the Morbid Growths by the Ecraseur.*

October 30.—Elizabeth C——, married, aged twenty-five, was sent from Sheerness to St. Bartholomew's Hospital, in consequence of intractable disease, presumed to be of syphilitic origin, around the margin of the anus. She stated that between three and four years ago, she suffered from ulceration and discharge from the vagina, followed by buboes in each groin, contracted from her husband, who was at that time infected with syphilis. Under proper treatment, she recovered, but shortly afterwards a small knot, which she regarded as a hæmorrhoid,

appeared at the margin of the anus. The growth increased, and was accompanied by discharge, which flowed over the neighbouring parts, irritating them greatly. No medicine nor local application has at all checked the disease. Examination detected a large mass of pendulous growths, varying in size from a few lines to two or three inches in measurement, both verticle and across the base, extending from the posterior commissure of the vagina backwards around the entire margin of the anus; the neighbouring integument was thickened, discoloured, and elevated; between these pendulous lobes were ulcerated surfaces, which poured forth an abundant discharge of foetid, brownish-red, seropurulent secretion. The interior of the rectum felt to the finger irregularly tuberculated for two inches and a half, when the natural calibre of the gut became suddenly contracted, so as to form a stricture. The patient was very liable to prolapsus of the rectum, from the stricture downwards; and during one of these accidents we had an opportunity of noticing that the mucous membrane was morbidly congested and elevated into tubercles.

The vagina appeared to be quite healthy, and free from discharge or ulceration of any kind. There was no other disease; but the patient was feeble and pallid.

I had seen this disease before, but not quite to a similar extent.

The first step in the treatment consisted, in my opinion, in removing as much as possible of these masses of hypertrophied skin and subcutaneous tissue, for they were too firm to be capable of returning to their normal state; and for this purpose the ecraseur seemed to be suitable, as it was very undesirable that the patient should lose blood.

Great relief was afforded by the operation. During its performance, there was frequent prolapse of the rectum, to a greater extent than before, by which we were enabled to see not only that the surface of the mucous membrane was thickened, red, and tuberculated; but that near the anus there were several large white cicatrices; that further up the ulcerated patches were small and distinct, and that about two inches and a half from the anus there was a marked narrowing of the canal. Various medicines were tried. Hydrargyrum cum cretâ and opium, the sulphate of copper, sulphate of quinine, the ferro-citrate of iron, the tinctura ferri sesquichloridi in infusion of quassia.

She is still under treatment, and greatly improved in health.

In the treatment of secondary syphilis the first step consists in an attempt to disabuse the patient of an idea to which he is apt to cling, namely, that the surgeon is in the possession of some specific by which he will destroy the poison, and enable him to revert to his former habits with no further risks than before his first infection. There is no such remedy in existence; all that we can do is, to combat symptoms as they arise, and to point out those habits of living which are best calculated to insure a proper share of health. But irregularities, excesses, intemperance, and the like, seem to possess the power of keeping the syphilitic virus alive, of preventing its gradual extinction, and of deteriorating the blood, so as to induce a state of general cachexia. When secondary symptoms supervene, the surgeon must see that a proper amount of nourishment is supplied, that daily habits of health are inculcated, and that the mind is relieved of all unnecessarily gloomy forebodings.

When other circumstances do not contraindicate the measure, I advise patients subject to syphilitic lepra, or lichen, or other allied affections, to abstain entirely from spirituous and fermented liquors; to drink, in short, nothing stronger than tea or coffee for a considerable number of years. It occasionally happens that after a time that which was a privation becomes a habit, which the patient, from his improved condition of health and general feelings, would not willingly break through.

A mercurial course is generally unavoidable when the milder preparation of hydrargyrum cum cretâ is usually administered. I believe in the efficacy of sarsaparilla in secondary affections of the skin; that is to say, when its administration is combined with proper sanitary regulations. It is useless when given to a man drinking wine and beer daily. But sarsaparilla, to exert its proper effect, must be both good and concentrated, and taken in considerable quantities.

In England, proper attention has not been paid to the subject of baths—those necessary comforts in all countries where a hot sun pours down its rays for many months uninterruptedly. In such climates, cutaneous eruptions would be common, were it not for the attention paid by the natives to keeping the general integument in a healthy state. People who live in a temperate climate seem to forget how important a function in excretion the skin plays, or of the multitude of gland-ducts which open upon every part of its surface.

The common warm bath, wherein the patient is usually immersed for ten minutes to a quarter of an hour, at a temperature of 90° to 95° Fahrenheit, effects but little in comparison with the results obtained by the Turkish bath, which is admirably suited for the chronic stages of secondary syphilitic eruptions.

The process has been so often described that a short notice will suffice. The clothes having been removed, and a suitable bathing dress supplied, the bather is conducted into a heated apartment, where he is allowed to sit and accustom himself to the increase of temperature. During this time the body becomes covered with a tolerably profuse perspiration. Next he is conducted to another apartment, where there is a higher degree of heat (115° F.), and the atmosphere is charged with watery vapour. There he reclines upon a heated marble slab, and undergoes a slow process of shampooing. The quantity of cuticle that peels off surprises one who has not witnessed the ceremony ; but the skin is left in a cleaner state than perhaps it had been in for years. After the movements of the limbs have been tested in a variety of ways, the bather is conducted to a recess, in which is a fountain with hot and cold water, where he may apply soap and hot water as his taste dictates, or have the process performed by an attendant. A feeling of languor, not by any means unpleasant, supervenes, which renders a short period of repose on a couch agreeable. This process removes a large quantity of cuticle from the integument, causes the blood to circulate through the minute capillaries, and brings into activity the sudoriparous and sebaceous glands. We may, I presume, infer that without the proper performance of these functions the skin is not in a healthy state ; and that any morbid condition, such as lepra or lichen, would be materially benefited by rousing them into activity.

The rules of treatment, then, may be thus expressed:— Upon the first manifestation of secondary syphilis in the usual forms, inculcate total abstinence from stimulating drinks, quiet and regular habits, proper exercise, and the

use of frequent baths. The Turkish bath, which may now be procured in London, is indubitably the most efficacious. Administer mercury in a mild form, so as not to produce constitutional disturbance. Give sarsaparilla as a drink. Those who are in affluence may take advantage of horse exercise, or of a residence in a warm climate during the winter months. It must always be remembered that rapid alternations of heat and cold are injurious to a patient so diseased.

The ulcerative affection between the toes, or at the root of the nails, is cured by the internal administration of mercury, and the application of a solution of nitrate of silver, gr. iv.—x. to the ounce of distilled water.

When the hair falls in consequence of lepra syphilitica of the scalp, the best plan consists in curing the eruption and keeping the hair short. It is not necessary to shave the head, except in the case of pustular eruptions of the scalp, when the discharge breeds the usual epizoa.

When the incrustations of rupia have been removed, the red precipitate ointment is usually applied to the ulcerating surface with advantage. The serpiginous ulcer may also be dressed with the same application. Ulcers at the root of the nails of the hand are usually dressed with lotions containing nitrate of silver or arsenic; but these small local affections require the internal administration of mercury for a cure as much as the more general diseases.

It is necessary here to make a few remarks as to the proper cases for the administration of iodide of potassium. I believe it to be generally of little effect in those syphilitic forms strictly speaking secondary, *i.e.*, in scaly and papular eruptions, and in the train of symptoms usually

associated. But its use is undoubted in tertiary syphilis and the affections which seem to unite it with the preceding secondary form. Of this, no better illustrations occur than the eruption of rupia, of large excavated tubercular eruptions, of serpiginous ulceration; in all of these mercury often fails to produce a permanently good result, and cannot be administered from a variety of causes, while the iodide of potassium in sarsaparilla is taken with advantage.

There are many cases in which opium is useful. Patients must have sleep, and if the natural rest is disturbed, symptoms become materially aggravated.

There are many persons who do not bear the withdrawal of wine or other accustomed stimuli. In such cases the judgment of the surgeon is required; and it will be, perhaps, no easy task to direct his patient through the difficulties which have been created by previous habits and mode of life.

The syphilitic ulcer of the eyelids, first described by Mr. Lawrence, 1833, appears to me to be less common now than it was in former years, and perhaps this may be in some measure ascribed to the better method of treating syphilis and to the gradually-increasing scepticism as to the specific properties of mercury in destroying the poison. Prolonged mercurial courses, imposing upon patients the suffering of a perpetual flow of saliva during the twenty-four hours, are uncommon. This disease is, however, of syphilitic, and not of mercurial origin; for cases are seen in which it attacks people who have never taken this mineral in any quantity during their lives. The same disease attacks the ala nasi, where it produces similar effects.

Mr. Lawrence has thus described it as it occurs in the

lid:—"The ulcer commencing on the ciliary margin, where it is supposed to be a styne, may occupy the whole thickness of the lid, involving all its textures. It may have the same origin, and be confined to the external surface of the lid; or it may arise on the mucous surface, and never extend beyond that. . . . The ulceration is sometimes acute, attended with inflammation and great pain, and it rapidly destroys the affected part. On the contrary, there may be little inflammation or pain, and the disease may exist for months without destruction or loss of substance. The free use of mercury is generally the quickest and most effectual mode of arresting and curing the disease. But here, too, the combination of ulceration of the lids with tertiary syphilis points out the propriety of trying the effects of the iodide of potassium."

That acute purulent inflammation of the conjunctiva known as gonorrhœal ophthalmia, the effects of which upon the globe are interstitial deposits, suppuration, ulceration, or sloughing of the cornea, with escape of the humours and collapse of the globe, or protrusion of the iris, forming staphyloma, is fortunately of rare occurrence, as contrasted with the frequency of gonorrhœal discharge from the urethra. There exist an acute and a sub-acute, or mild, form of the disease; and it has so happened that, according to my observations, among the former were cases in which the patient had been, as it were, inoculated by discharge from the person of another.

The first case was that of a nurse, in whose eye a few drops of warm water, used in syringing the eye of an adult patient suffering from gonorrhœal ophthalmia, were suddenly spirted back after having been forcibly

expelled from a syringe. The pain and smarting commenced a few hours after the accident, and the disease ran its course with considerable severity. The second case occurred in the person of a friend, to whose eye the same accident occurred while syringing the eye of an infant suffering from congenital gonorrhœal or purulent ophthalmia. The symptoms were felt the same evening, and increased in severity in spite of the earliest advice and the most energetic treatment. This gentleman ultimately recovered, with perfect vision; but for a considerable time the result was doubtful. There can be no question, therefore, respecting the possibility of contagion.

The application of strong solutions of nitrate of silver at the commencement of the attack has not been followed by invariably good results in St. Bartholomew's Hospital, whether the solution were ten or five grains to the ounce of water. In robust subjects, considerable losses of blood were practised with benefit; and, in addition, the division of the swelled and chemotic conjunctiva, not in the way recommended by the late Mr. Tyrrell, by radiating incisions from within outwards, lest the vessels supplying the cornea should be divided transversely (a danger purely hypothetical), but by removing portions of the swelled mucous membrane by the scissors. The danger to the cornea does not result from the twisting of the vessels, but from the ulceration and even sloughing which may ensue from the pressure of this projecting mass upon its surface. The whole ring of chemosed conjunctiva may be cut away without fear, and no deformity remains when the organ returns to its former state.

The subacute form of gonorrhœal ophthalmia may be advantageously treated upon the astringent plan.

Cases of gonorrhœal inflammation of the sclerotica and iris are described as occurring in persons of rheumatic constitution. They are certainly uncommon. A patient was in the hospital five years ago with gonorrhœal sclerotitis supervening, after a considerable interval, upon gonorrhœal ophthalmia. The same treatment was required as in rheumatic disease of these structures. The combination of conjunctivitis and sclerotitis has been mentioned by many authors. In almost all the cases upon record, rheumatic inflammation of the joints and pains in the limbs accompanied these forms of ophthalmic disease, and the administration of iodide of potassium has been found of great advantage.

Syphilitic iritis has been correctly pronounced by Mr. Lawrence the most frequent description of iritis: "it is a secondary symptom, taking place in the constitutional stage of the disorder." It is rarely seen in infants; nevertheless, there are some well-authenticated cases upon record. The symptoms and progress of the disease are so well known that a particular description is unnecessary. The light-pink zone round the cornea, commencing partially, and ultimately completing the circle; the haziness of the cornea; dull and discoloured iris; sluggish and contracted pupil; and the effusions of lymph, or lymph and blood, in the anterior and sometimes posterior chamber, with adhesions of the pupillary margin to the front of the capsule of the crystalline lens, are symptoms familiar to all who have witnessed the practice of a London hospital. There are a few points, however, which are not so generally known. First, in some cases the disease will run its course and subside spontaneously, leaving the patient a very fair amount of useful vision. Secondly, mercury injudiciously admi-

nistered, *i.e.*, without preceding depletion in acute cases, or in too quick or too considerable doses in persons of feeble frame, is often injurious, by aggravating the disease. Thirdly, that the dangers of relapse, for a long time after the disease has been subdued, cannot be too highly magnified. Fourthly, that iritis, though usually associated with secondary symptoms, may come on in conjunction with the phenomena of tertiary syphilis, namely, periosteal affections, tubercular ulceration of the skin, and phagedæna of the pharynx. In these cases the administration of the iodide of potassium in sarsaparilla is often to be preferred to the exhibition of mercury.

The following case is interesting, as illustrating the course of syphilitic iritis in a person who was mercurialized without having undergone proper depletion :—

Henry B——, aged twenty-four, an active, healthy-looking man, has lived rather freely for the last two years. He contracted primary syphilis eight months ago; five months afterwards he had a periosteal suppuration of the forehead: to this succeeded an attack of acute iritis in the left eye. A small quantity of blood, namely, six ounces, was taken, by the orders of a surgeon, by cupping, from the corresponding temples, and mercurial pills were administered thrice a day, commencing September 20, 1856. The disease attacked the opposite eye in the beginning of October, when the patient was allowed meat diet and porter daily. Acute pain in the brow supervened, for which an opiate ointment was directed to be rubbed over the brow. On the 15th of October the mercury was discontinued, the eyes being no better; six grains of the iodide of potassium in tincture of cinchona were ordered thrice a day, and counter-irritants to the neck. On the 22nd, a lotion of

nitrate of silver, one grain to the ounce of water, was directed to be applied night and morning. November 3, he came under my charge. The left eye was weak and congested; but the cornea was clear; the iris discoloured; the pupil contracted and irregular; vision indistinct. The right eye was of a bright-red hue, vessels full of blood, the cornea hazy; the pupil contracted and fixed; vision nearly lost. He could just distinguish light from darkness. Pulse strong; appetite good. He complains of extreme pain about the temples and head.

November 3.—Twelve ounces of blood to be taken from the right temples by cupping. Two grains of calomel and a third of a grain of opium to be taken thrice a day.

Two grains of powdered opium, mixed with six of the strong mercurial ointment, to be applied to the brow at night time. A dozen leeches were applied on the 8th and 12th, and the effect of this treatment was to restore nearly perfect vision to the left eye; the right was considerably improved, but the health became somewhat impaired; he looked pale and dispirited. On the 17th the mercury was discontinued, the mouth having been tender from swelling of the gums for a fortnight, and he was directed to take five grains of the iodide of potassium in sarsaparilla thrice a day. Beef-tea; two eggs daily. Occasional counter-irritants in the form of blisters behind the ears.

Under this treatment the disease subsided; but in both organs the traces of the inflammatory effusions remained in the shape of adhesions between the iris and the lens. He could read small print, but the effort was painful, and made the eyes water. He was directed to abstain from over-excitement, and to re-apply upon any recurrence of syphilitic symptoms.

ON SYPHILIZATION.

The Academy of Medicine in Paris was occupied, in 1853, with a long discussion on the question of the introduction of syphilization on the principle of vaccination. Although this demoralizing and distasteful practice has been condemned by the Academy, yet there are persons to be found who persist in their experiments, regardless of consequences. I was informed by Mr. Lawrence that one of the most troublesome cases of phagedænic ulceration of the thighs which ever came under his notice was in consequence of inoculation performed by a foreign physician, now abroad. No treatment seemed to control the disease, and ulceration was still going on when the patient ceased his attendance. The *Presse Médicale de Bruxelles* has denounced, with justice, in our opinion, the dangers of these successive inoculations, undertaken to excite a hypothetical counteracting power, the existence of which is more than doubtful. "We have seen among the women subjected to these experiments the sixtieth chancre just as active and as well developed as the first. In one female the poison seemed to be exhausted after the fourth inoculation; but when fresh poison was applied the illusion disappeared, and the chancre became perfectly formed, and capable of producing the usual effects by inoculation. M. Bégin spoke during the discussion of the immorality of the proceeding:—"The cicatrices of the artificial ulcers produced by inoculation remain during life; that fact is indubitable; but the thought that the persons subjected

to the experiments bear ever about them the marks of syphilis does not arrest the footsteps of the innovators in syphilization. The law has suppressed, even for infamous offences, all corporal brandings; and you, professors of syphilization, in some mad experimental freak, impress upon young girls the indelible stain of their indiscretions and disorders. Seduction, misery, bad example, evil advice, may drive many to prostitution, and you render them, by your experiments, fixed in the slough of guilt. It is impossible for them to emerge, without being exposed to angry recriminations for a fault which they may endeavour to wipe out by the cultivation of every virtue. But you reply, 'the cicatrices are only on those parts of the body which are covered.' In society, there is no part of the body which can be said to be, under all circumstances, quite safe from being exposed to examination. Multiply your experiments on monkeys, dogs, rabbits, pigeons, or whatever animals you please, but spare man; let him be placed beyond the pale of your examinations on such a subject as this.'"

This subject is one on which I have no experience; nor do I think it probable that any circumstances would induce me thus to experimentalize with the syphilitic virus. Such information as I possess from witnessing the natural phenomenon of syphilis, both in its primary and secondary forms, is at variance with the opinions of those who consider inoculation as a safeguard.

CHAPTER VII.

TERTIARY SYPHILIS.

1. Inflammation of the periosteum.
2. Inflammation of the bone.
3. Inflammation of the joints.
4. Chronic inflammation of the testicle.
5. Tubercles of the skin, passing into phagedænic ulceration.
6. Phagedæna of the eyelids.
7. Syphilitic cachexia.

By the term Tertiary Syphilis it is not to be imagined that two stages of venereal disease must of necessity precede it; but only that it includes a group of symptoms usually occurring after both the primary sore and its consecutive eruption, and possessing these peculiarities—1st, that no interval of time seems too great for its manifestation; and, 2ndly, that it is rarely permanently benefited by the exhibition of mercury. I have had lately under my care at the same time the following cases:—1. Sarah N——, aged eighteen. Discharge from the vagina; suppurating bubo in the left groin; periosteal swellings of both tibiæ.—2. Sarah S——, aged nineteen. Enlargement of each labium; enlargement of the inguinal glands; periosteal node of the left leg.—3. Mary D——, aged seventeen. Superficial ulceration of the labium; enlargement of the inguinal glands; suppu-

rating node of the tibia, and rupia. In all these cases the so-called tertiary symptoms were coexistent with the primary disease. M. Lugol affirms that tertiary syphilis is not transmissible, nor is it contagious; but that it modifies the system in a different manner, namely, it engenders scrofula. The first part of the statement is generally correct. As to the second part of the assertion, namely, that tertiary syphilis engenders scrofula, we have no data to form conclusions.

I have not met with any instance of syphilitic affection of the lungs, and am not able to offer any opinion on the subject.

Periostitis occurs in a variety of situations, but generally in some part of the body exposed to the vicissitudes of temperature. A case is now under my care, in which a large periosteal swelling of the tibia was the precursor of an attack of acute iritis of both eyes. There are other instances under treatment where the periosteal disease has occurred in its regular rotation, and the sterno-clavicular articulation, or the front of the sternum, were the seats of this affection. By far the commonest situation is the tibia, where those irregularities of the bone, termed nodes, are produced.

Syphilitic diseases of the joints are less common; the effusion into the synovial cavity is consequent upon inflammation of the surrounding fibrous structures.

Combined with these affections of the bones and joints we usually have phagedænic ulceration of the pharynx, with inflammation and necrosis of the bones of the palate and nose; large ulcerating tubercles upon the integument, and syphilitic enlargement of the body of the testicle.

1. Phagedænic ulceration of the pharynx generally

occupies the posterior part, extending upwards towards the nares and downwards towards the œsophagus. It may involve the soft palate, and the orifices of the Eustachian tubes, or may spread backwards to the vertebræ, causing caries.

Cases occur in which the ulcer approaches the rima glottidis, when symptoms approaching suffocation may threaten, or actually supervene, causing death.

Phagedænic disease of the throat is generally amenable to treatment, but shows, under most circumstances, a great tendency to relapse, as the following cases will illustrate:—

Henry J——, aged twenty, was admitted into the hospital January 13, 1846, with several large circular phagedænic ulcers on the trunk and limbs; phagedænic ulceration of the fauces, right tonsil, and right side of the uvula; circular sore on the scalp; and pains in the limbs of six weeks' duration. The pulse was feeble, and the tongue furred; body much emaciated.

Ordered—Beef-tea and arrow-root; port wine, ʒxii. daily.

Three grains of the iodide of potassium in decoction of sarsaparilla thrice a day. Soap-and-opium pill at night time.

27th.—He looks better, but has refused to take any medicine, and contents himself with the soft food offered him. Some of the nourishment is administered per anum.

February 4.—He was removed to another ward.

26th.—He was discharged well.

December 1.—Re-admitted with tubercular eruption of the face and limbs; phagedænic ulceration of the throat, great emaciation, and weakness.

Ordered to take the iodide of potassium in sarsaparilla, as before. To rub in a scruple of the strong mercurial ointment every night. Meat diet; a pint of porter daily. After two applications of the ointment he became profusely salivated.

28th.—The eruption is disappearing; the condition of the throat is improved, as far as can be observed.

Ordered a gargle of hot water and tincture of myrrh.

January 15.—Discharged.

John G——, aged thirty-two, a tall, sallow-looking man, contracted venereal disease many years ago, when he had gonorrhœa and warts. He was ill eleven weeks, under the care of the late Mr. Earle, who gave him a mixture, but no pills. Seventeen years ago a bubo formed in the left groin after connexion, but it was not accompanied by any sore; it suppurated, was opened, and healed. After three years the throat became sore; phagedænic ulceration, commencing at the back of the pharynx, spread along the soft palate, destroying the uvula and making a large wound. He put himself under my care, January, 1846, and was ordered five grains of the soap-and-opium pill at night; iodide of potassium and sarsaparilla thrice a day. A gargle of hot vinegar-and-water, and the local application, by means of a glass brush, of a lotion, composed of one part of the strong nitric acid diluted with two parts of water, to the throat. The ulcerations healed slowly. Shortly afterwards both testicles became swelled, hot, irregular to the feel; and adhesions took place on either side to a small extent between the opposed surfaces of the tunica vaginalis.

He was admitted into the hospital July 10, 1846, when he took five grains of the iodide of potassium thrice a day.

31st.—He was ordered two grains and a half of the hydrargyrum cum cretâ thrice a day. The testicles under this treatment became both softer and smaller, and the morbid adhesions of the tunica vaginalis were looser.

August 20.—Discharged.

December 4.—He again put himself under my care, with phagedænic ulceration of the upper and back part of the pharynx, the lower edge appearing below the remains of the soft palate.

January 3.—He was re-admitted into the hospital with phagedænic ulceration of the fauces, thickening of the tibia, foul sore on the leg, and pains in the limbs.

The further particulars of the case we had no opportunities of noticing, as the patient soon left for the country.

2. Large ulcerating tubercles of the integument seem to commence as low inflammation, followed by sloughing of the areolar tissue and secondary phagedænic ulceration of the skin, which is raised into an irregular margin. Such sores have a most unhealthy aspect, but generally yield readily to the medicines usually administered, and especially to the iodide of potassium. The best local application is the ointment of the nitric oxide of mercury.

3. Syphilitic enlargement of the body of the testicle is a disease belonging to tertiary syphilis, and often both organs are simultaneously affected. The body of the testis becomes hard, hot, and irregularly nodulated; it feels heavy when examined; but the chord is unaffected. There may be effusion into the sac of the tunica vaginalis. Inflammatory adhesions may form

between its opposed surfaces, or soft spots are felt in the gland resembling suppurations. These spots may burst and discharge an unhealthy pus, when a foul greenish-looking sore, without any appearance of granulation, remains. In general the diagnosis of this disease is rendered easy by the coexistence of other venereal symptoms. But, should they be absent, the nature of the case may be surmised by the heat of the part, the weight and irregularly nodulated feel of the organ; the history, and especially the rapid development of the disease, and the frequency of the same swelling existing on both sides. A man, aged twenty-one, was under my care in 1846, stating that he had venereal disease five years ago, but had never had gonorrhœa. He is now suffering from syphilitic swelling of both testicles, the right being the larger. There is induration of the right epididymis, with irregular enlargement of the body of the gland. Effusion into the cavity of the tunica vaginalis. There is induration and enlargement of the left testicle, and likewise of the epididymis. Ordered—Two grains and a half of hydrargyrum cum cretâ thrice a day. Three grains of the iodide of potassium and of decoction of sarsaparilla thrice a day. The linimentum hydrargyri to the swellings of the glands.

February 20.—The left testicle is of its natural size: the right, though somewhat larger than natural, and hard about the epididymis, is much smaller than when he applied for admission. The fluid in the tunica vaginalis is absorbed.

March 4.—Discharged.

The practice of fumigating patients has now fallen into disuse; but at one time it was a favourite application to phagedænic ulcers of the throat. Some cinnabar was

put upon a heated metallic plate, and the fumes were conveyed by means of a tube to the affected part.

The following is Dr. Cumming's account of the native practice in India of fumigation in cases of obstinate syphilis assuming a secondary form :—

“Take of red oxide of lead, three rupees or three tolas' weight (nine drachms); quicksilver, the same quantity; and powdered litharge, half the quantity. Rub the quicksilver thoroughly in a mortar with the red oxide of lead till the globules disappear; or the rubbing may be suspended at the end of six hours, when the powder from the oxidation of part of the quicksilver will present some greyish spots: the last-named ingredient, the litharge, may then be added; after this, the process must be resumed, and continued, adding from time to time a little water; in about half an hour, the remaining globules will have entirely disappeared, and the ingredients become incorporated into a moist mass.—This must be divided into fourteen equal parts, and kept for a day or two.

“The fumigation is thus effected :—Take a fire-chattee, and put into it a number of pieces of cow-dung cake (dry); ignite these, and place on the centre of the fire a bit of chattee, which will be found to be quite hot, after the fire has burned for half an hour and the smoke dispersed. Then take freshly-ignited pieces of the same, and (the fire, though subdued, not being extinguished) place them all round the bit of chattee, so as to keep up the heat.

“One of the portions of fumigating substance is now to be put (having been previously powdered) upon the hot bit of chattee; and the pot being placed under a chair with a rattan bottom, the patient is immediately seated without any clothing, except a *cumbie*, in which he

and the chair are both wrapped ; the cloth is kept up even to the eyes, and is only occasionally detached for a moment from the face, so as to enable the patient to breathe when much oppressed by the fumes, which often excite coughing.

“A profuse perspiration is quickly excited. After half an hour, the operation is suspended till the following day. It is repeated every morning, until the whole of the fourteen parts of the fumigating compound have been consumed ; by which time a cure is generally completed. Ptyalism is rarely induced ; but in general, about the tenth day, there are more or less tenderness of the gums and soreness of the throat.”

It has not been common to find this practice now recommended in England ; but Mr. Henry Lee has lately reintroduced it, in the treatment of both primary and secondary syphilis, stating that the proper action of mercury can be induced much more quietly, and upon much easier terms, than when the mineral is taken by the mouth. He directs the patient to sit wrapped in a blanket once a day over a heated apparatus, on which ten grains of calomel are placed. Salivation seems to have been produced between four and ten days. It is not necessary for the patient to breathe the vapour.

CHAPTER VIII.

INFANTILE SYPHILIS

Commonly appears in the following forms :—

1. Scaly syphilitic eruption.
2. Ulceration of the mucous membranes of the nose and mouth.
3. Mucous tubercles.
4. Iritis.
5. Phagedænic ulceration of the throat.
6. Phagedænic ulceration of the scalp.

The chief points of interest are those connected with its various modes of transmission.

On the Direct Transmission of Secondary Syphilis to the unborn Fœtus.

An interesting subject of inquiry at the present day is the mode in which the syphilitic taint, in its secondary form, is conveyed from the father to the unborn infant. Does it happen that the mother is first infected, and next the child, through the vitiated fluids passing into its body from the placenta ; or is the germ, the ovum, the part which is first contaminated by the fecundating secretion of the father, in which case we must suppose the

spermatozoon to be the means of transmission. We are told that the latter is the only way by which secondary syphilis can in these cases be communicated; that the secretion from the male suffering from constitutional symptoms can neither inoculate an abraded surface nor be absorbed when deposited in the vagina. It is even affirmed that women, to whom secondary syphilis is given directly, always contract it through the medium of a contaminated fœtus, and that there is no other way of accounting for the phenomenon. When cases are related throwing some doubt upon this theory, inasmuch as they show that married women have had secondary syphilis communicated to them without their being pregnant at all, a reply is furnished by the assertion, that such females were pregnant without knowing it, and that they aborted at a very early period, also unconscious of the fact.

So complete a system is beyond the pale of argument. A ready reply is furnished to doubts from every quarter. But there are many who, with myself, would prefer seeing the matter further tested by practical experience, and corroborated or refuted by the record of cases. The following, from Dr. Porter's *Lectures on Syphilis*, bears upon the point:—

Transmission of Secondary Syphilis from the Father to the Mother in the 5—6 months of Pregnancy—Infection of the Fœtus—Premature Delivery—Death of the Child from unmistakeable Lues within a week.

In July, 1840, a married gentleman, the father of several healthy children, whilst on business in London,

unfortunately had intercourse with a servant girl at one of the hotels, 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 a sore throat. It was of that description which I am accustomed to describe as resembling the mark of a snail-track on the part, and I unhesitatingly pronounced it to be syphilitic. He appeared greatly distressed, and acknowledged his transgression, but still seemed to lean with some hope on the opinions of the gentleman who had first seen and treated the case, and refused to take mercury, which indeed I was unwilling to press, as I understood his wife was far gone in pregnancy. In January, 1841, he came to me in a 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 appeared to be greatly strengthened in opinion by the fact of the lady never having had a previous symptom of any description. In the course of a few days, however, the question was settled by the birth of a child, who died within a week of unmistakeable 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 by 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 the button scurvy, which only appeared a few days before her confinement.— (*Dublin Medical Press: Porter's Lectures on Syphilis.*)

Dr. Porter believes “that the semen of a diseased man deposited in the vagina of a healthy woman, by being absorbed, may contaminate that woman without the necessary occurrence of a chancre or any open sore secreting matter in either the man or the woman.”

When the mother has once been infected with the syphilitic poison, it becomes extremely difficult, if not impossible, to say when the taint will become extinct. The immediate effect, as regards the foetus, is to cause its death *in utero*. As the poison becomes less virulent, the child is born with the disease, and perishes in a few days or weeks. Then comes a class of cases in which the characteristic eruptions break out some weeks or even months after birth; but the exact limits of these periods have not been, and perhaps cannot be, accurately ascertained.

In illustration of these remarks, I refer to the two following cases. In the first, a respectable woman is infected by her husband. She is delivered consecutively of three dead children. At the expiration of thirteen years she gives birth to a living child, which is covered by the usual eruptions shortly afterwards. In the second, a fine healthy-looking young woman is infected by her husband a few weeks after marriage. She is delivered, like the preceding patient, of a dead child; after which she does not again become pregnant. But eight years having passed, she suffers in her own person from the original taint.

On the Influence of the Mother in Infecting the Fœtus.

CASE.—In November, 1856, I saw an infant, six weeks old, whose body was covered with the copper-coloured spots of syphilitic lepra; there were ulcerations about the nose and anus. The child was pallid and anæmic. The mother stated that she had been married between fourteen and fifteen years; that she had never had syphilis but once, and that was thirteen years ago, when she contracted the disease from her husband. Since that time she has had three children, all born dead.

CASE.—Elizabeth D——, aged twenty-six, married eight years. Had syphilis communicated to her by her husband a few months after marriage. At that time she was pregnant, and gave birth to a dead infant. She took no medicine for the disease, for the ulcerations readily healed. I saw this patient several times, at intervals of eight and nine years from the commencement of the case. She was suffering from phagedænic ulceration of the hard palate denuding the bone.

An Infected Mother need not necessarily communicate the same Disease to her Infant.

On November 12, 1856, I was requested to see the following case. Emma L——, aged twenty-two, a decent-looking and rather pretty young woman, stated she was suffering from the “bad disorder” in her toes. Upon examination I found that there were deep ulcerations (rhagades digitorum) between several of the toes, especially between the first and second, secreting a thin and rather stinking discharge. There was a copious scaly

and pustular eruption over the whole body, and she had superficial ulceration of the tonsils. She said she was unmarried, but had been living with "a gentleman," who gave her the disease twelve months ago, while she was pregnant, and about three months gone. She had at that time both a sore on the external organs and the eruption on the skin; but the child was born healthy, and is now alive, "never having had a spot upon it."

Tardy re-appearance of Secondary Symptoms in Children infected before Birth.

A respectable person, aged thirty-seven, the wife of a petty tradesman, consulted me for a tubercular eruption, occupying both cheeks and the nose, evidently of syphilitic origin. She stated, that fifteen years ago she contracted venereal disease, when she suffered from a discharge and an eruption over the face, chest, and arms. Upon examination I found cicatrices, the size of a shilling, upon both upper extremities, and upon the mammæ. At that time she was under the care of an experienced surgeon, now living, who administered without doubt such medicines as were suited for her. She was at that time pregnant, and gave birth in due time to a girl, who suffered from congenital purulent ophthalmia. The child, when cured of the ophthalmia, remained well until she was nine years of age, when she had a phagedænic ulcer of the scalp, equal in size to a half-crown piece. The cicatrix is nearly as large as a shilling.

A twelvemonth ago the mother became ill again with her present eruption, when she experienced remarkable depression of spirits. It became, indeed, necessary to give her rather stronger assurances than experience would

warrant, that she would in time get quite well, in order to calm her mind from the distress under which she was labouring. Under proper treatment the attack slowly subsided, and the skin regained its usual colour.

Transmission of Secondary Syphilis from a Nurse to a healthy Infant.

Martha B——, four months old, a meagre-looking infant, was born strong and well, of healthy parents. At the end of the third week after birth she was put out to wet-nurse, this person being an unmarried woman, upon whose body were subsequently seen, upon examination, the remains of a scaly eruption about the forehead and breasts. In a fortnight the infant became covered with an eruption, partly papular, partly scaly. There was no affection of the anus or nares; but the face, trunk, and limbs, were completely covered.

Two grains and a half of hydrargyrum cum cretâ were given thrice a day, and a warm bath every other day.

In the course of a fortnight the face had become clear, the eruption on the trunk and limbs was fading, and the child was regaining its former thriving condition.

Transmission of Primary and Secondary Syphilis from Child to Child.

Mr. Acton relates a case of indurated chancre in a child, aged seven, followed by condylomata, contracted by sleeping with a brother. Upon examination there was found an indurated chancre on the prepuce, with a large condylomatous growth on both sides of the anus; a patch of a similar kind on the tongue, with enlarged tonsils, and hair falling off. On inquiry it was found

that this child slept with an elder brother, who had been a patient of the Charing-cross Hospital, in the months of August and September, for some form of venereal disease.

In May, 1847, an infant was brought to the hospital with congenital syphilis by a female relative, who stated that the mother was too unwell to attend. It was remarked that the child had syphilitic lepra and excoriations at the angles of the mouth. Proper medicines were ordered, and directions were given that the child should be brought again in a week's time. At the expiration of that time, an elder sister, aged twelve, was also brought, upon whose mouth there were ulcerated fissures similar to those on the mouth of the infant, also an eruption of syphilitic lepra over the body. We were told that the elder girl had taken care of the infant from birth, and had been in the habit of frequently kissing it. She was put under treatment, and took two and a half grains of mercury and chalk thrice a day, with sarsaparilla. But this eruption displayed the same tendency to relapse as in the adult, where it follows a well-marked primary chancre, and a considerable period elapsed before both children were pronounced cured.

I remember a second case of a similar kind; but, having lost the note respecting it, I should not like to quote from memory.

It may be objected, that this last case is of the class which Dr. Hennen has described, and to which Mr. Acton refers, which "go far to prove that aphthæ are not only contagious, but capable of producing constitutional symptoms." He says, "I am intimately acquainted with a physician who contracted aphthous affection of his lip

by taking a last farewell of a most respectable lady, who was far advanced in phthisis, and whose lips were affected with those aphthous eruptions which so often arise in the latter stages of that disease. In a short time the point of his tongue was covered with small and very painful ulcers, extremely like minute chancres; and in some weeks after, he became affected with a scaly eruption of the hairy scalp. I had occasion particularly to examine him. At about three months after the first appearance of the ulceration of his tongue, the eruption was gone, but from one part of his scalp the hair was dropping very fast.—(Hennen's *Military Surgery*, page 566.)

Mr. Acton has seen a boy, twelve years of age, suffering from worms, with aphthæ on the tongue, patches at the corners of the mouth, and spots of lepra on the back of the head, which might have been mistaken for secondary symptoms, had there been any suspicious circumstances attending the case; but happily they were not present.

But, granting the possibility of such a case as that described by Dr. Hennen, I am not inclined to believe that any person with considerable experience in infantile syphilis is apt, after a careful examination, to be mistaken. The fissures at the corners of the mouth, and the swelled and excoriated condition of the tongue, are as characteristic of the disease as the fissures between the toes, or the rarer form of ulceration at the tips of the fingers. On November 12, 1856, a child in arms was brought to me with syphilitic ulceration between the great toe and the toe next to it. Upon my stating the nature of the case to the mother, the possibility of syphilis was most strongly denied, and it was with difficulty that I could obtain a view of the child's body. It was then seen that there were excoriations of the extremity

of the penis, which was swelled, and condylomata about the anus. Further inquiry, conducted in a manner to show that deception was useless, ultimately wrung from the person a tardy confession, "It might just be true;" but no reliable statement could be obtained as to when and how the first disease had been contracted.

It is not possible to say when the disease thus communicated to the infant will cease. A child, seventeen months old, was brought to me with syphilitic lepra and fissures at the angles of the mouth, ulceration of the mucous membrane of the nose, and condylomata. The mother, who assured me that both she and the child's father were in good health, and had never had a day's illness to the best of her knowledge, stated that the infant, who had been born healthy, had remained so until two months old, when the present symptoms showed themselves. They had been sometimes better, and sometimes worse, but never entirely absent, although she had applied to many "doctors." Under the administration of hydrargyrum cum cretâ and sarsaparilla the rash is disappearing; but the child continues still under treatment.

The following case, illustrating the possibly contagious nature of secondary syphilis, is taken from the *Lancet*, as communicated by the late Mr. Hector Gavin:—

In the beginning of January, this year, I was applied to for advice by Mrs. A., aged twenty-two, under the following circumstances:—She was married in May, 1844, and delivered of a healthy child on the 31st of August, 1845. Previous to her confinement, she had enjoyed perfectly good health; a day and a half after

delivery, on account of her child being unable to suck her breasts, the person who attended her recommended the infant of a Mrs. B. to be put to her breast. The child of Mrs. B. was accordingly put to her left breast, twice a day, for four or five days. The left nipple was cracked at that time; but in consequence of the milk not flowing freely from the right breast, the child was seldom put to it. Mrs. A.'s child was applied to Mrs. B.'s breast as often as the other child was applied to Mrs. A.'s breast—that is, about eight or ten times.

Within a few days, or a week, after Mrs. B.'s child was put to Mrs. A.'s breast, her nipple, which was already fissured, exhibited a number of spots; many similar afterwards appeared upon the breast also; and the nipple and the breast, to the extent of its areola, were inflamed and sore—"raw." There was also some resulting induration.

Six weeks after her confinement she first observed an eruption of reddish spots over the back, which shortly afterwards spread all over the body. She first noticed swelling of the glands of the throat in the beginning of November, a few days before which, she had remarked her throat to become sore. When the eruption became extensive, she had swelling of the glands along the inside of the thighs, and in the hams. Her hair began to come off her head in the middle of December, and the scalp was then noticed to be covered with white elevated spots on the places left bald.

In January, when she applied to me, Mrs. A.'s body and limbs were covered pretty thickly with reddish spots of extremely well-marked syphilitic lepra; the face was blotched, the eyes were weak, the scalp had numerous white, circular, elevated spots, from which the hair had

fallen; the spots and patches of lepra were extremely irritable and painful. The left nipple and the surface, for an inch and a half around it, were covered with the same eruption, and the right nipple and areola were becoming affected. Her throat was so sore that she swallowed with difficulty; there was ulceration of both tonsils, and of the posterior pillar of the pharynx of the right side; she also stated that she had lost much flesh.

Her child had an attack of white gum a fortnight after its birth, and very shortly afterwards an eruption of copper-coloured spots came out upon it, and till about the end of November continued to spread over the body; since which time little change has taken place. In January, the spots were chiefly spread over the nates and the perinæum; the chin, lips, and nostrils, as well as forehead, were covered with a dusky copper-coloured eruption, which was very characteristic. There was much "sniffing" and discharge from the nostrils; that from the right nostril was purulent. There was no sore throat, but the child appeared miserably cachectic. The copper-colour of the spots was more marked and distinct upon the child than on the mother. On her they were redder, and closely resembled Willan's plate of syphilitic lepra. The eruption on the child was precisely the same as that represented in the sixth last plate of Willan, as affecting a child (*syphilide maculæ*). The resemblance was most accurate, except as to position.

Mrs. B. had had syphilis before her last confinement, which was known to the person who attended Mrs. A; but he *supposed* Mrs. B. to be quite well when he desired her child to be put to Mrs. A.'s breast. Mrs. B.'s child, when put to Mrs. A.'s breast, had a sore mouth, "sniffing," and discharge from the nostrils—appearances which ex-

cited observation and remarks; but they were imputed to a bad cold, and this excuse was deemed satisfactory. Since then, Mrs. B.'s health required her to leave home with her child. She afterwards returned, it is said, quite well.

The husband of Mrs. A. is a market-gardener, aged twenty-five; he has always had good health. About the beginning of December, he had "a bad cold in the head, and sore throat," with the usual symptoms, but he has had no other disease whatever. He denies ever having had syphilis in any form, and there is not the slightest foundation for a doubt as to his veracity. There is no cicatrix whatever to be noticed on the most minute examination of the glans, prepuce, &c.

Mrs. A. and her child were subjected to a proper and prolonged course of remedial treatment, and gradually the child became perfectly well, and recovered its plumpness, the discharge from the nostrils being the last symptom to disappear. Slowly every appearance of disease left the mother, except some of the leprous spots, which were rather rebellious.

The points to be noticed in this case are,—

First,—The husband has never had syphilis.

Second,—The wife exhibited no symptoms of a syphilitic taint till some time after her confinement.

Third,—Her child was perfectly healthy when born, and the blotches did not manifest themselves for a month after it was suckled by the contaminated nurse.

Fourth,—Mrs. B. was known to have been, and her child manifestly was, contaminated.

The question may be narrowed to this:—Did the husband inoculate the wife? This being answered in the negative, the wife, being virtuous, could be inocu-

lated in no other way than through the suckling of the diseased babe, and afterwards of her own, which had become diseased.

A most important question which arises in this case is—Is Mr. A. entitled to damages from the person who attended his wife, and who recommended that Mrs. B.'s syphilitic child should be applied to the breast of his healthy wife, for the consequences which resulted from the acting upon this recommendation?

The expense, and much more the unhappiness, resulting from the state of things described can readily be conceived. Not only was the health of a woman greatly injured by a loathsome constitutional disease, and the health of a first-born child also, but it became a vital matter to remove the opprobrium which might be fixed upon the husband.

Dr. Snow has seen several instances in which the foetus died of the effects of syphilis, either *in utero* or a few days after birth. One patient, whose husband had suffered from syphilis before marriage, had had five children born about the end of the eighth month. Of these, only the last was living, and it had been treated as soon as it was born with mercurial ointment to the knee, in the way recommended by Sir B. Brodie. This practice consists in spreading mercurial ointment on a piece of flannel or lint, and surrounding the knee or some other joint with it, for a period of twenty-four or forty-eight hours, at the expiration of which time the symptoms usually disappear. If the application produce too much irritation, it is desirable to remove it before the expiration of either of these periods, and again apply it if necessary. Of the other children, one or two were still-born, and

the rest died three days or a week after birth, the last which died having syphilitic eczema. Another patient had three very healthy children, which were still living; and after the birth of these, the husband contracted syphilis, and he and his wife had the disease in the secondary form; and the treatment for this was scarcely concluded, when the wife became pregnant again. The child was still-born at about the full period, and there was effusion of blood into the serous cavities, particularly that of the peritonæum.

CASE.—*Destruction of the Nasal Bones—Phagedænic Ulceration of the Throat in a Boy aged twelve.*

Edward H——, a pallid, unhealthy-looking child, of stunted growth, the bridge of whose nose has sunk from previous disease of the nasal bones, was brought to the hospital by his father, November 10, 1846, on account of a sore throat. Upon examination there was found a large ulcerated opening of the velum palati, and a phagedænic ulcer of uncertain extent at the back of the pharynx. It appeared, upon close cross-questioning, that the child had been born with the “snuffles,” and that he had had occasional ailments during childhood; but it was evident that the father had no intention to be communicative.

November 10.—He was ordered two grains of the iodide of potassium in sarsaparilla; common gargle, and broth diet.

November 20.—The ulcerated opening looks healthy, and is granulating in every part.

December 8.—Discharged.

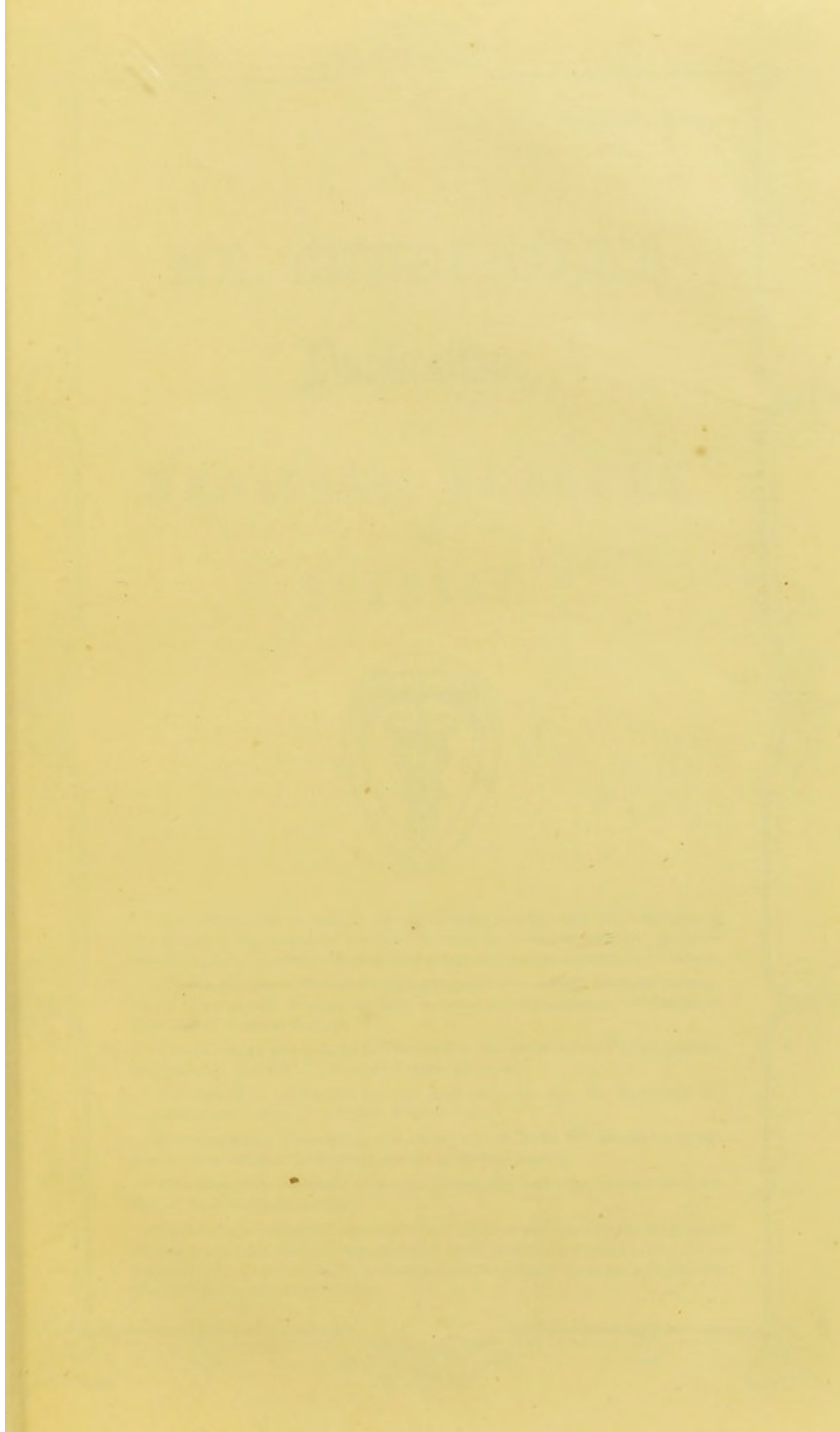
CASE.—Joseph F——, aged ten, a good-looking but

delicate child, was brought to the hospital November 20, 1846, with a penetrating phagedænic sore on the right side of the soft palate, with incrustation about the nostrils, and foetid discharge. He says he has been ill two years; and that this sore of the throat lasted, some time ago, about a month, but then healed. The mother denies ever having had venereal disease, but she has copper-coloured marks about the forehead. The child was ordered the same medicines as in the preceding case, and left the hospital on the same date.

**Wellcome Library
for the History
and Understanding
of Medicine**

THE END.





MR. T. H. H. H. H.

1877

RECEIVED

1877



London, New Burlington Street,
March, 1857.

MR. CHURCHILL'S
Publications,
IN
MEDICINE, SURGERY,
AND
SCIENCE.



"It would be unjust to conclude this notice without saying a few words in favour of Mr. Churchill, from whom the profession is receiving, it may be truly said, the most beautiful series of Illustrated Medical Works which has ever been published."—*Lancet*.

"All the publications of Mr. Churchill are prepared with so much taste and neatness, that it is superfluous to speak of them in terms of commendation."—*Edinburgh Medical and Surgical Journal*.

"No one is more distinguished for the elegance and *recherché* style of his publications than Mr. Churchill."—*Provincial Medical Journal*.

"Mr. Churchill's publications are very handsomely got up: the engravings are remarkably well executed."—*Dublin Medical Press*.

"The typography, illustrations, and getting up are, in all Mr. Churchill's publications, most beautiful."—*Monthly Journal of Medical Science*.

"Mr. Churchill's illustrated works are among the best that emanate from the Medical Press."—*Medical Times*.

"We have before called the attention of both students and practitioners to the great advantage which Mr. Churchill has conferred on the profession, in the issue, at such a moderate cost, of works so highly creditable in point of artistic execution and scientific merit."—*Dublin Quarterly Journal*.

MR. CHURCHILL is the Publisher of the following Periodicals, offering to Authors a wide extent of Literary Announcement, and a Medium of Advertisement, addressed to all Classes of the Profession. COMMUNICATIONS, BOOKS for REVIEW, addressed to the respective Editors, are received and duly forwarded by Mr. Churchill.

**THE BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW;
OR,
QUARTERLY JOURNAL OF PRACTICAL MEDICINE.**

Price Six Shillings. Nos. 1 to 37.

**THE QUARTERLY JOURNAL OF MICROSCOPICAL
SCIENCE.**

Edited by EDWIN LANKESTER, M.D., F.R.S., F.L.S., and GEORGE BUSK, F.R.C.S.E.,
F.R.S., F.L.S. Price 4s. Nos. I. to XVIII.

THE MEDICAL TIMES AND GAZETTE.

Published Weekly, price Sevenpence, or Stamped, Eightpence.
Annual Subscription, £1. 10s., or Stamped, £1. 14s. 8d., and regularly forwarded to all parts
of the Kingdom.

The MEDICAL TIMES AND GAZETTE is favoured with an amount of Literary and Scientific support which enables it to reflect fully the progress of Medical Science, and insure for it a character, an influence, and a circulation possessed at the present time by no Medical Periodical.

**THE HALF-YEARLY ABSTRACT OF THE
MEDICAL SCIENCES.**

Being a Digest of the Contents of the principal British and Continental Medical Works; together with a Critical Report of the Progress of Medicine and the Collateral Sciences. Edited by W. H. RANKING, M.D., Cantab., and C. B. RADCLIFFE, M.D., Lond. Post 8vo. cloth, 6s. 6d. Vols. 1 to 24.

**THE JOURNAL OF PSYCHOLOGICAL MEDICINE
AND MENTAL PATHOLOGY.**

Being a Quarterly Review of Medical Jurisprudence and Insanity. Edited by FORBES WINSLOW, M.D. Price 3s. 6d. Nos. I. to V. *New Series.*

THE PHARMACEUTICAL JOURNAL.

EDITED BY JACOB BELL, F.L.S., M.R.I.

Published Monthly, price One Shilling.

* * Vols. 1 to 15, bound in cloth, price 12s. 6d. each.

THE DUBLIN MEDICAL PRESS.

Published Weekly, Stamped, price Sixpence, free to any part of the Empire.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORY.

Published Annually. 12mo. cloth, 8s. 6d.

DR. ACLAND.

MEMOIR ON THE CHOLERA AT OXFORD IN THE YEAR
1854; with Considerations suggested by the Epidemic. 4to. cloth, with Maps, 12s.

MR. ACTON, M.R.C.S.

A PRACTICAL TREATISE ON DISEASES OF THE URINARY
AND GENERATIVE ORGANS OF BOTH SEXES, INCLUDING SYPHILIS.
Second Edition. 8vo. cloth, 20s.

DR. ADDISON.

ON THE CONSTITUTIONAL AND LOCAL EFFECTS OF
DISEASE OF THE SUPRA-RENAL CAPSULES. 4to. cloth. Coloured Plates, 21s.

DR. WILLIAM ADDISON, F.R.S.

I.

CELL THERAPEUTICS. 8vo. cloth, 4s.

II.

ON HEALTHY AND DISEASED STRUCTURE, AND THE TRUE
PRINCIPLES OF TREATMENT FOR THE CURE OF DISEASE, ESPECIALLY CONSUMPTION
AND SCROFULA, founded on MICROSCOPICAL ANALYSIS. 8vo. cloth, 12s.

MR. ANDERSON, F.R.C.S.

I.

HYSTERICAL, HYPOCHONDRIACAL, EPILEPTIC, AND
OTHER NERVOUS AFFECTIONS; their Causes, Symptoms, and Treatment.
8vo. cloth, 5s.

II.

THE SYMPTOMS AND TREATMENT OF THE DISEASES OF
PREGNANCY. Post 8vo. 4s. 6d.

III.

THE ANATOMICAL REMEMBRANCER; OR, COMPLETE
POCKET ANATOMIST. Fifth Edition, carefully Revised. 32mo. cloth, 3s. 6d.

DR. JAMES ARNOTT.

I.

ON THE REMEDIAL AGENCY OF A LOCAL ANÆSTHETIC
OR BENUMBING TEMPERATURE, in various painful and inflammatory Diseases.
8vo. cloth, 4s. 6d.

II.

ON INDIGESTION; its Pathology and its Treatment, by the Local
Application of Uniform and Continuous Heat and Moisture. With an Account of an
improved Mode of applying Heat and Moisture in Irritative and Inflammatory Diseases.
With a Plate. 8vo. 5s.

III.

PRACTICAL ILLUSTRATIONS OF THE TREATMENT OF
OBSTRUCTIONS IN THE URETHRA, AND OTHER CANALS, BY THE
DILATATION OF FLUID PRESSURE. 8vo. boards, 3s.

MR. CHURCHILL'S PUBLICATIONS.

MR. F. A. ABEL, F.C.S., & MR. C. L. BLOXAM.

HANDBOOK OF CHEMISTRY: THEORETICAL, PRACTICAL,
AND TECHNICAL. 8vo. cloth, 15s.

MR. T. J. ASHTON.

ON THE DISEASES, INJURIES, AND MALFORMATIONS
OF THE RECTUM AND ANUS. 8vo. cloth, 8s.

MR. ATKINSON.

MEDICAL BIBLIOGRAPHY. Vol. I. Royal 8vo. 16s.

DR. WILLIAM BALY, F.R.S., & DR. WILLIAM W. GULL.

REPORTS ON EPIDEMIC CHOLERA; its Cause and Mode of
Diffusion, Morbid Anatomy, Pathology and Treatment. Drawn up at the desire of the
Cholera Committee of the Royal College of Physicians. With Maps, 8vo. cloth, 16s.

DR. BARLOW.

A MANUAL OF THE PRACTICE OF MEDICINE. Fcap. 8vo.
cloth, 12s. 6d.

MR. RICHARD BARWELL, F.R.C.S.

ASIATIC CHOLERA; its Symptoms, Pathology, and Treatment. Post
8vo. cloth, 4s. 6d.

DR. BASCOMBE.

A HISTORY OF EPIDEMIC PESTILENCES, FROM THE
EARLIEST AGES. 8vo. cloth, 8s.

MR. BATEMAN.

MAGNACOPIA: A Practical Library of Profitable Knowledge, commu-
nicating the general Minutiæ of Chemical and Pharmaceutic Routine, together with the
generality of Secret Forms of Preparations; including Concentrated Solutions of Camphor
and Copaiba in Water, Mineral Succedaneum, Marmoratum, Silicia, Terro-Metallicum,
Pharmaceutic Condensations, Prismatic Crystallization, Crystallized Aromatic Salt of Vine-
gar, Spa Waters; newly-invented Writing Fluids; Etching on Steel or Iron; with an
extensive Variety of *et cætera*. Third Edition. 18mo. 6s.

DR. BEALE.

I.

THE MICROSCOPE, AND ITS APPLICATION TO CLINICAL
MEDICINE. With 232 Engravings on Wood. Post 8vo. cloth, 10s. 6d.

II.

ON THE ANATOMY OF THE LIVER. Illustrated with 66 Pho-
tographs of the Author's Drawings. 8vo. cloth, 6s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

MR. LIONEL J. BEALE, M.R.C.S.

I.
THE LAWS OF HEALTH IN THEIR RELATIONS TO MIND
AND BODY. A Series of Letters from an Old Practitioner to a Patient. Post 8vo.
cloth, 7s. 6d.

II.
HEALTH AND DISEASE, IN CONNECTION WITH THE
GENERAL PRINCIPLES OF HYGIENE. Fcap. 8vo., 2s. 6d.

MR. BEASLEY.

I.
THE BOOK OF PRESCRIPTIONS; containing 2900 Prescriptions.
Collected from the Practice of the most eminent Physicians and Surgeons, English
and Foreign. 24mo. cloth, 6s.

II.
THE DRUGGISTS' GENERAL RECEIPT-BOOK: comprising a
copious Veterinary Formulary and Table of Veterinary Materia Medica; Patent and
Proprietary Medicines, Druggists' Nostrums, &c.; Perfumery, Skin Cosmetics, Hair
Cosmetics, and Teeth Cosmetics; Beverages, Dietetic Articles, and Condiments; Trade
Chemicals, Miscellaneous Preparations and Compounds used in the Arts, &c.; with
useful Memoranda and Tables. Third Edition. 24mo. cloth, 6s.

III.
THE POCKET FORMULARY AND SYNOPSIS OF THE
BRITISH AND FOREIGN PHARMACOPŒIAS; comprising standard and
approved Formulæ for the Preparations and Compounds employed in Medical Practice.
Sixth Edition, corrected and enlarged. 24mo. cloth, 6s.

DR. O'B. BELLINGHAM.

ON ANEURISM, AND ITS TREATMENT BY COMPRESSION.
12mo. cloth, 4s.

DR. HENRY BENNET.

I.
A PRACTICAL TREATISE ON INFLAMMATION AND
OTHER DISEASES OF THE UTERUS. Third Edition, revised, with Additions.
8vo. cloth, 12s. 6d.

II.
A REVIEW OF THE PRESENT STATE OF UTERINE
PATHOLOGY. 8vo. cloth, 4s.

MR. HENRY HEATHER BIGG.

ARTIFICIAL LIMBS; THEIR CONSTRUCTION AND APPLI-
CATION. With Engravings on Wood. 8vo. cloth, 3s.

DR. BILLING, F.R.S.

I.
ON DISEASES OF THE LUNGS AND HEART. 8vo. cloth, 6s.

II.
FIRST PRINCIPLES OF MEDICINE. Fifth Edition, Revised and
Improved. 8vo. 10s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

MR. P. HINCKES BIRD, F.R.C.S.

PRACTICAL TREATISE ON THE DISEASES OF CHILDREN
AND INFANTS AT THE BREAST. Translated from the French of M. BOUCHUT,
with Notes and Additions. 8vo. cloth. 20s.

DR. GOLDING BIRD, F.R.S.

I.
URINARY DEPOSITS; THEIR DIAGNOSIS, PATHOLOGY,
AND THERAPEUTICAL INDICATIONS. With Engravings on Wood. Fourth
Edition. Post 8vo. cloth, 10s. 6d.

II.
ELEMENTS OF NATURAL PHILOSOPHY; being an Experimental
Introduction to the Study of the Physical Sciences. Illustrated with numerous Engrav-
ings on Wood. Fourth Edition. By GOLDING BIRD, M.D., F.R.S., and CHARLES
BROOKE, M.B. Cantab., F.R.S. Fcap. 8vo. cloth, 12s. 6d.

MR. BISHOP, F.R.S.

I.
ON DEFORMITIES OF THE HUMAN BODY, their Pathology
and Treatment. With Engravings on Wood. 8vo. cloth, 10s.

II.
ON ARTICULATE SOUNDS, AND ON THE CAUSES AND
CURE OF IMPEDIMENTS OF SPEECH. 8vo. cloth, 4s.

III.
LETT SOMIAN LECTURES ON THE PHYSICAL CONSTI-
TUTION, DISEASES AND FRACTURES OF BONES. Post 8vo., 2s. 6d.

DR. BLAKISTON, F.R.S.

PRACTICAL OBSERVATIONS ON CERTAIN DISEASES OF
THE CHEST; and on the Principles of Auscultation. 8vo. cloth, 12s.

DR. JOHN W. F. BLUNDELL.

MEDICINA MECHANICA; or, the Theory and Practice of Active and
Passive Exercises and Manipulations in the Cure of Chronic Disease. Post 8vo. cloth, 6s.

MR. WALTER BLUNDELL.

PAINLESS TOOTH-EXTRACTION WITHOUT CHLOROFORM;
with Observations on Local Anaesthesia by Congelation in General Surgery. Second
Edition, 2s. 6d. cloth. Illustrated on Wood and Stone.

MR. JOHN E. BOWMAN.

I.
PRACTICAL CHEMISTRY, including Analysis. With numerous Illus-
trations on Wood. Second Edition. Foolscap 8vo. cloth, 6s. 6d.

II.
MEDICAL CHEMISTRY; with Illustrations on Wood. Third Edition.
Fcap. 8vo. cloth, 6s. 6d.

DR. BRINTON.

THE SYMPTOMS, PATHOLOGY, AND TREATMENT OF
ULCER OF THE STOMACH. Post 8vo. cloth, 5s.

MR. CHURCHILL'S PUBLICATIONS.

DR. JAMES BRIGHT.

ON DISEASES OF THE CHEST AND AIR PASSAGES;
with a Review of the several Climates recommended in these Affections. Second Edition. Post 8vo. cloth, 7s. 6d.

MR. ISAAC BAKER BROWN, F.R.C.S.

I.
ON SOME DISEASES OF WOMEN ADMITTING OF SUR-
GICAL TREATMENT. With Plates, 8vo. cloth, 10s. 6d.

II.
ON SCARLATINA: its Nature and Treatment. Second Edition. Fcap.
8vo. cloth, 3s.

MR. BERNARD E. BRODHURST.

I.
ON LATERAL CURVATURE OF THE SPINE: its Pathology and
Treatment. Post 8vo. cloth, with Plates, 3s.

II.
ON THE NATURE AND TREATMENT OF CLUBFOOT AND
ANALOGOUS DISTORTIONS involving the TIBIO-TARSAL ARTICULATION.
With Engravings on Wood. 8vo. cloth, 4s. 6d.

DR. BUDD, F.R.S.

I.
ON DISEASES OF THE LIVER.
Illustrated with Coloured Plates and Engravings on Wood. Third Edition. *Preparing.*

II.
ON THE ORGANIC DISEASES AND FUNCTIONAL DIS-
ORDERS OF THE STOMACH. 8vo. cloth, 9s.

DR. BURNETT.

I.
THE PHILOSOPHY OF SPIRITS IN RELATION TO MATTER.
8vo. cloth, 9s.

II.
INSANITY TESTED BY SCIENCE. 8vo. cloth, 5s.

DR. WILLOUGHBY BURSLEM.

PULMONARY CONSUMPTION AND ITS TREATMENT. Post
8vo. cloth, 5s.

MR. ROBERT B. CARTER, M.R.C.S.

I.
ON THE INFLUENCE OF EDUCATION AND TRAINING
IN PREVENTING DISEASES OF THE NERVOUS SYSTEM. Fcap. 8vo., 6s.

II.
THE PATHOLOGY AND TREATMENT OF HYSTERIA. Post
8vo. cloth, 4s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. CARPENTER, F.R.S.

I.

PRINCIPLES OF HUMAN PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Fifth Edition. 8vo. cloth, 26s.

II.

PRINCIPLES OF COMPARATIVE PHYSIOLOGY. Illustrated with 300 Engravings on Wood. Fourth Edition. 8vo. cloth, 24s.

III.

A MANUAL OF PHYSIOLOGY. With numerous Illustrations on Steel and Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

IV.

THE MICROSCOPE AND ITS REVELATIONS. With numerous Engravings on Wood. Fcap. 8vo. cloth, 12s. 6d.

DR. CHAMBERS.

DIGESTION AND ITS DERANGEMENTS. Post 8vo. cloth, 10s. 6d.

MR. H. T. CHAPMAN, F.R.C.S.

I.

THE TREATMENT OF OBSTINATE ULCERS AND CUTANEOUS ERUPTIONS OF THE LEG WITHOUT CONFINEMENT. Second Edition. Post 8vo. cloth, 3s. 6d.

II.

VARICOSE VEINS: their Nature, Consequences, and Treatment, Palliative and Curative. Post 8vo. cloth, 3s. 6d.

DR. G. C. CHILD.

ON INDIGESTION, AND CERTAIN BILIOUS DISORDERS OFTEN CONJOINED WITH IT. Second Edition. 8vo. cloth, 6s.

MR. J. PATERSON CLARK, M.A.

THE ODONTALGIST; OR, HOW TO PRESERVE THE TEETH, CURE TOOTHACHE, AND REGULATE DENTITION FROM INFANCY TO AGE. With plates. Post 8vo. cloth, 5s.

DR. CONOLLY.

THE CONSTRUCTION AND GOVERNMENT OF LUNATIC ASYLUMS AND HOSPITALS FOR THE INSANE. With Plans. Post 8vo. cloth, 6s.

LEWIS CORNARO.

SURE METHODS OF ATTAINING A LONG AND HEALTHFUL LIFE. Thirty-eighth Edition. 18mo., 1s.

MR. CHURCHILL'S PUBLICATIONS.

MR. COOLEY.

COMPREHENSIVE SUPPLEMENT TO THE PHARMACOPŒIAS.

THE CYCLOPŒDIA OF PRACTICAL RECEIPTS, AND COL-
LATERAL INFORMATION IN THE ARTS, PROFESSIONS, MANU-
FACTURES, AND TRADES, INCLUDING MEDICINE, PHARMACY, AND
DOMESTIC ECONOMY; designed as a Compendious Book of Reference for the
Manufacturer, Tradesman, Amateur, and Heads of Families. Third and greatly
enlarged Edition, 8vo. cloth, 26s.

MR. BRANSBY B. COOPER, F.R.S.

LECTURES ON THE PRINCIPLES AND PRACTICE OF SUR-
GERY. 8vo. cloth, 21s.

MR. W. WHITE COOPER.

ON NEAR SIGHT, AGED SIGHT, IMPAIRED VISION,
AND THE MEANS OF ASSISTING SIGHT. With 31 Illustrations on Wood.
Second Edition. Fcap. 8vo. cloth, 7s. 6d.

MR. COOPER.

A DICTIONARY OF PRACTICAL SURGERY; comprehending all
the most interesting Improvements, from the Earliest Times down to the Present Period.
Seventh Edition. One very thick volume, 8vo., 11. 10s.

SIR ASTLEY COOPER, BART., F.R.S.

ON THE STRUCTURE AND DISEASES OF THE TESTIS.

Illustrated with 24 highly finished Coloured Plates. Second Edition. Royal 4to.

Reduced from £3. 3s. to £1. 10s.

MR. HOLMES COOTE, F.R.C.S.

A REPORT ON SOME IMPORTANT POINTS IN THE
TREATMENT OF SYPHILIS. 8vo. cloth, 5s.

DR. COPEMAN.

RECORDS OF OBSTETRIC CONSULTATION PRACTICE;
and a TRANSLATION of BUSCH and MOSER on UTERINE HÆMORRHAGE;
with Notes and Cases. Post 8vo. cloth, 5s.

DR. COTTLE.

A MANUAL OF HUMAN PHYSIOLOGY FOR STUDENTS;
being a Condensation of the Subject, a Conservation of the Matter, and a Record of
Facts and Principles up to the present Day. Fcap. 8vo., 5s.

DR. COTTON.

I.
ON CONSUMPTION: Its Nature, Symptoms, and Treatment. To
which Essay was awarded the Fothergillian Gold Medal of the Medical Society of
London. 8vo. cloth, 8s.

II.
PHTHISIS AND THE STETHOSCOPE: a concise Practical Guide
to the Physical Diagnosis of Consumption. Foolscap 8vo. cloth, 3s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

MR. COULSON.

I.

ON DISEASES OF THE BLADDER AND PROSTATE GLAND.

The Fifth Edition, revised and enlarged. 8vo. cloth, 10s. 6d.

II.

ON LITHOTRITY AND LITHOTOMY; with Engravings on Wood.

8vo. cloth, 8s.

III.

ON DISEASES OF THE JOINTS. 8vo. *In the Press.*

DR. JOHN GREEN CROSSE, F.R.S.

CASES IN MIDWIFERY, arranged, with an Introduction and Remarks
by EDWARD COPEMAN, M.D., F.R.C.S. 8vo. cloth, 7s. 6d.

MR. CURLING, F.R.S.

I.

OBSERVATIONS ON DISEASES OF THE RECTUM. Second
Edition. 8vo. cloth, 5s.

II.

A PRACTICAL TREATISE ON DISEASES OF THE TESTIS,
SPERMATIC CORD, AND SCROTUM. Second Edition, with Additions. 8vo.
cloth, 14s.

MR. JOHN DALRYMPLE, F.R.S., F.R.C.S.

PATHOLOGY OF THE HUMAN EYE. Complete in Nine Fasciculi:
imperial 4to., 20s. each; half-bound morocco, gilt tops, 9l. 15s.

DR. DAVEY.

ON THE NATURE AND PROXIMATE CAUSE OF IN-
SANITY. Post 8vo. cloth, 3s.

DR. HERBERT DAVIES.

ON THE PHYSICAL DIAGNOSIS OF DISEASES OF THE
LUNGS AND HEART. Second Edition. Post 8vo. cloth, 8s.

MR. DIXON.

A GUIDE TO THE PRACTICAL STUDY OF DISEASES OF
THE EYE. Post 8vo. cloth, 8s. 6d.

DR. TOOGOOD DOWNING.

NEURALGIA: its various Forms, Pathology, and Treatment. THE
JACKSONIAN PRIZE ESSAY FOR 1850. 8vo. cloth, 10s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. DRUITT, F.R.C.S.

THE SURGEON'S VADE-MECUM; with numerous Engravings on Wood. Seventh Edition. Foolscap 8vo. cloth, 12s. 6d.

DR. JOHN C. EGAN.

SYPHILITIC DISEASES: THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT: including Experimental Researches on Inoculation, as a Differential Agent in Testing the Character of these Affections. 8vo. cloth, 9s.

SIR JAMES EYRE, M.D.

I.

THE STOMACH AND ITS DIFFICULTIES. Fourth Edition. Fcap. 8vo. cloth, 2s. 6d.

II.

PRACTICAL REMARKS ON SOME EXHAUSTING DISEASES. Second Edition. Post 8vo. cloth, 4s. 6d.

MR. FERGUSSON, F.R.S.

A SYSTEM OF PRACTICAL SURGERY; with numerous Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

SIR JOHN FORBES, M.D., D.C.L. (OXON.), F.R.S.

NATURE AND ART IN THE CURE OF DISEASE. Post 8vo. cloth, 6s.

DR. D. J. T. FRANCIS.

CHANGE OF CLIMATE; considered as a Remedy in Dyspeptic, Pulmonary, and other Chronic Affections; with an Account of the most Eligible Places of Residence for Invalids in Spain, Portugal, Algeria, &c., at different Seasons of the Year; and an Appendix on the Mineral Springs of the Pyrenees, Vichy, and Aix les Bains. Post 8vo. cloth, 8s. 6d.

C. REMIGIUS FRESENIUS.

ELEMENTARY INSTRUCTION IN CHEMICAL ANALYSIS, AS PRACTISED IN THE LABORATORY OF GIESSEN. Edited by LLOYD BULLOCK, late Student at Giessen.

QUALITATIVE; Fourth Edition. 8vo. cloth, 9s.

QUANTITATIVE. Second Edition. 8vo. cloth, 15s.

MR. FRENCH, F.R.C.S.

THE NATURE OF CHOLERA INVESTIGATED. Second Edition. 8vo. cloth, 4s.

MR. CHURCHILL'S PUBLICATIONS.

MR. FOWNES, PH.D., F.R.S.

I.
A MANUAL OF CHEMISTRY; with numerous Illustrations on Wood.
Sixth Edition. Fcap. 8vo. cloth, 12s. 6d.

Edited by H. BENICE JONES, M.D., F.R.S., and A. W. HOFMANN, PH.D., F.R.S.

II.
CHEMISTRY, AS EXEMPLIFYING THE WISDOM AND
BENEFICENCE OF GOD. Second Edition. Fcap. 8vo. cloth, 4s. 6d.

III.
INTRODUCTION TO QUALITATIVE ANALYSIS. Post 8vo. cloth, 2s.

IV.
CHEMICAL TABLES. Folio, price 2s. 6d.

DR. FULLER.

ON RHEUMATISM, RHEUMATIC GOUT, AND SCIATICA:
their Pathology, Symptoms, and Treatment. Second Edition. 8vo. cloth, 12s. 6d.

DR. GAIRDNER.

ON GOUT; its History, its Causes, and its Cure. Third Edition. Post
8vo. cloth, 8s. 6d.

MR. GALLOWAY.

I.
THE FIRST STEP IN CHEMISTRY. Second Edition. Fcap. 8vo.
cloth, 5s.

II.
CHEMICAL DIAGRAMS. On Four large Sheets, for School and
Lecture Rooms. 5s. 6d. the Set.

MR. ROBERT GARNER, F.L.S.

EUTHERAPEIA; or, AN EXAMINATION OF THE PRINCIPLES
OF MEDICAL SCIENCE, including Researches on the Nervous System. Illustrated
with 9 Engravings on Copper, and Engravings on Wood. 8vo. cloth, 8s.

DR. GARRETT.

ON EAST AND NORTH-EAST WINDS; the Nature, Treatment, and
Prevention of their Suffocating Effects. Fcap. 8vo. cloth, 4s. 6d.

MR. GAY, F.R.C.S.E.

I.
FEMORAL RUPTURE: ITS ANATOMY, PATHOLOGY, AND
SURGERY. With a New Mode of Operating. 4to., Plates, 10s. 6d.

II.
A MEMOIR ON INDOLENT ULCERS. Post 8vo. cloth, 3s. 6d.

DR. GLOVER.

ON THE PATHOLOGY AND TREATMENT OF SCROFULA;
being the Forthergillian Prize Essay for 1846. With Plates. 8vo. cloth, 10s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. GRANVILLE, F.R.S.

ON SUDDEN DEATH. Post 8vo., 2s. 6d.

MR. GRAY, M.R.C.S.

PRESERVATION OF THE TEETH indispensable to Comfort and Appearance, Health, and Longevity. 18mo. cloth, 3s.

MR. GRIFFITHS.

CHEMISTRY OF THE FOUR SEASONS—Spring, Summer, Autumn, Winter. Illustrated with Engravings on Wood. Second Edition. Foolsap 8vo. cloth, 7s. 6d.

DR. GULLY.

I.

THE WATER CURE IN CHRONIC DISEASE: an Exposition of the Causes, Progress, and Terminations of various Chronic Diseases of the Viscera, Nervous System, and Limbs, and of their Treatment by Water and other Hygienic Means. Fifth Edition. Foolsap 8vo. sewed, 2s. 6d.

II.

THE SIMPLE TREATMENT OF DISEASE; deduced from the Methods of Expectancy and Revulsion. 18mo. cloth, 4s.

DR. GUY.

HOOVER'S PHYSICIAN'S VADE-MECUM; OR, MANUAL OF THE PRINCIPLES AND PRACTICE OF PHYSIC. New Edition, considerably enlarged, and rewritten. Foolsap 8vo. cloth, 12s. 6d.

GUY'S HOSPITAL REPORTS. Third Series. Vols. I. and II., 8vo., 7s. 6d. each.

DR. MARSHALL HALL, F.R.S.

PRACTICAL OBSERVATIONS AND SUGGESTIONS IN MEDICINE. Post 8vo. cloth, 8s. 6d.

DITTO. Second Series. Post 8vo. cloth, 8s. 6d.

MR. HARDWICH.

A MANUAL OF PHOTOGRAPHIC CHEMISTRY. Third Edition. Foolsap 8vo. cloth, 6s. 6d.

MR. HARE, M.R.C.S.

PRACTICAL OBSERVATIONS ON THE PREVENTION, CAUSES, AND TREATMENT OF CURVATURES OF THE SPINE; with Engravings. Third Edition. 8vo. cloth, 6s.

MR. CHURCHILL'S PUBLICATIONS.

MR. HARRISON, F.R.C.S.

THE PATHOLOGY AND TREATMENT OF STRICTURE OF
THE URETHRA. 8vo. cloth, 7s. 6d.

MR. JAMES B. HARRISON, F.R.C.S.

ON THE CONTAMINATION OF WATER BY THE POISON
OF LEAD, and its Effects on the Human Body. Foolscap 8vo. cloth, 3s. 6d.

DR. HARTWIG.

I.

ON SEA BATHING AND SEA AIR. Fcap. 8vo., 2s. 6d.

II.

ON THE PHYSICAL EDUCATION OF CHILDREN. Fcap.
8vo., 2s. 6d.

MR. ALFRED HAVILAND, M.R.C.S.

CLIMATE, WEATHER, AND DISEASE; being a Sketch of the
Opinions of the most celebrated Ancient and Modern Writers with regard to the Influence
of Climate and Weather in producing Disease. With Four coloured Engravings. 8vo.
cloth, 7s.

DR. HEADLAND.

ON THE ACTION OF MEDICINES IN THE SYSTEM.

Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for 1852. Second Edition. 8vo. cloth, 10s.

MR. HIGGINBOTTOM, F.R.S., F.R.C.S.

I.

ADDITIONAL OBSERVATIONS ON THE NITRATE OF SIL-
VER; with full Directions for its Use as a Therapeutic Agent. 8vo., 2s. 6d.

II.

AN ESSAY ON THE USE OF THE NITRATE OF SILVER
IN THE CURE OF INFLAMMATION, WOUNDS, AND ULCERS. Second
Edition. Price 5s.

MR. JOHN HILTON, F.R.S.

ON THE DEVELOPMENT AND DESIGN OF CERTAIN POR-
TIONS OF THE CRANIUM. Illustrated with Plates in Lithography. 8vo. cloth, 6s.

MR. CHURCHILL'S PUBLICATIONS.

DR. HINDS.

THE HARMONIES OF PHYSICAL SCIENCE IN RELATION
TO THE HIGHER SENTIMENTS; with Observations on Medical Studies, and on
the Moral and Scientific Relations of Medical Life. Post 8vo., cloth, 5s.

DR. DECIMUS HODGSON.

THE PROSTATE GLAND, AND ITS ENLARGEMENT IN
OLD AGE. With 12 Plates. Royal 8vo., cloth, 6s.

MR. LUTHER HOLDEN, F.R.C.S.

HUMAN OSTEOLOGY: with Plates, showing the Attachments of the
Muscles. 8vo. cloth, 16s.

DR. G. CALVERT HOLLAND.

THE CONSTITUTION OF THE ANIMAL CREATION, expressed
in Structural Appendages, as Hair, Horns, Tusks, and Fat. 8vo. cloth, 10s. 6d.

MR. C. HOLTHOUSE.

LECTURES ON STRABISMUS, delivered at the Westminster Hospital.
8vo. cloth, 4s.

DR. W. CHARLES HOOD.

SUGGESTIONS FOR THE FUTURE PROVISION OF CRIMI-
NAL LUNATICS. 8vo. cloth, 5s. 6d.

DR. HOOPER.

THE MEDICAL DICTIONARY; containing an Explanation of the
Terms used in Medicine and the Collateral Sciences. Eighth Edition. Edited by
KLEIN GRANT, M.D. 8vo. cloth, 30s.

MR. JOHN HORSLEY.

A CATECHISM OF CHEMICAL PHILOSOPHY; being a Familiar
Exposition of the Principles of Chemistry and Physics. With Engravings on Wood.
Designed for the Use of Schools and Private Teachers. Post 8vo. cloth, 6s. 6d.

DR. HUFELAND.

THE ART OF PROLONGING LIFE. A New Edition. Edited
by ERASMUS WILSON, F.R.S. Foolscep 8vo., 2s. 6d.

DR. HENRY HUNT.

ON HEARTBURN AND INDIGESTION. 8vo. cloth, 5s.

MR. THOMAS HUNT, M.R.C.S.

THE PATHOLOGY AND TREATMENT OF CERTAIN DIS-
EASES OF THE SKIN, generally pronounced Intractable. Illustrated by upwards
of Forty Cases. 8vo. cloth, 6s.

MR. CHURCHILL'S PUBLICATIONS.

DR. ARTHUR JACOB, F.R.C.S.

A TREATISE ON THE INFLAMMATIONS OF THE EYE-BALL.
Foolscap 8vo. cloth, 5s.

DR. JAMES JAGO, A.B., CANTAB.; M.B., OXON.

OCULAR SPECTRES AND STRUCTURES AS MUTUAL EXPONENTS. Illustrated with Engravings on Wood. 8vo. cloth, 5s.

DR. HANDFIELD JONES, F.R.S.

PATHOLOGICAL AND CLINICAL OBSERVATIONS RESPECTING MORBID CONDITIONS OF THE STOMACH. Coloured Plates, 8vo. cloth, 9s.

DR. HANDFIELD JONES, F.R.S., & DR. EDWARD H. SIEVEKING.

A MANUAL OF PATHOLOGICAL ANATOMY. Illustrated with numerous Engravings on Wood. Foolscap 8vo. cloth, 12s. 6d.

MR. WHARTON JONES, F.R.S.

I.

A MANUAL OF THE PRINCIPLES AND PRACTICE OF OPHTHALMIC MEDICINE AND SURGERY; illustrated with Engravings, plain and coloured. Second Edition. Foolscap 8vo. cloth, 12s. 6d.

II.

THE WISDOM AND BENEFICENCE OF THE ALMIGHTY, AS DISPLAYED IN THE SENSE OF VISION; being the Actonian Prize Essay for 1851. With Illustrations on Steel and Wood. Foolscap 8vo. cloth, 4s. 6d.

III.

DEFECTS OF SIGHT: their Nature, Causes, Prevention, and General Management. Fcap. 8vo. 2s. 6d.

DR. BENCE JONES, F.R.S.

ON ANIMAL CHEMISTRY, in its relation to STOMACH and RENAL DISEASES. 8vo. cloth, 6s.

MR. KNAGGS.

UN SOUNDNESS OF MIND CONSIDERED IN RELATION TO THE QUESTION OF RESPONSIBILITY IN CRIMINAL CASES. 8vo. cloth, 4s. 6d.

DR. LAENNEC.

A MANUAL OF AUSCULTATION AND PERCUSSION. Translated and Edited by J. B. SHARPE, M.R.C.S. 3s.

MR. CHURCHILL'S PUBLICATIONS.

DR. SIBSON, F.R.S.

MEDICAL ANATOMY. With coloured Plates. Imperial folio. Fasci-
culi I. to V. 5s. each.

MR. SKEY, F.R.S.

OPERATIVE SURGERY; with Illustrations engraved on Wood. 8vo.
cloth, 12s. 6d.

DR. SMELLIE.

OBSTETRIC PLATES: being a Selection from the more Important and
Practical Illustrations contained in the Original Work. With Anatomical and Practical
Directions. 8vo. cloth, 5s.

DR. W. TYLER SMITH.

I.

THE PATHOLOGY AND TREATMENT OF LEUCORRHOEA.

With Engravings on Wood. 8vo. cloth, 7s.

II.

THE PERIODOSCOPE, a new Instrument for determining the Date of
Labour, and other Obstetric Calculations, with an Explanation of its Uses, and an Essay
on the Periodic Phenomena attending Pregnancy and Parturition. 8vo. cloth, 4s.

DR. SNOW.

ON THE MODE OF COMMUNICATION OF CHOLERA.

Second Edition, much Enlarged, and Illustrated with Maps. 8vo. cloth, 7s.

DR. STANHOPE TEMPLEMAN SPEER.

PATHOLOGICAL CHEMISTRY, IN ITS APPLICATION TO
THE PRACTICE OF MEDICINE. Translated from the French of MM. BEQUEREL
and RODIER. 8vo. cloth, 12s.

DR. SPURGIN.

LECTURES ON MATERIA MEDICA, AND ITS RELATIONS
TO THE ANIMAL ECONOMY. Delivered before the Royal College of Physicians.
8vo. cloth, 5s. 6d.

MR. SQUIRE.

THE PHARMACOPŒIA, (LONDON, EDINBURGH, AND
DUBLIN,) arranged in a convenient TABULAR FORM, both to suit the Prescriber for
comparison, and the Dispenser for compounding the formulæ; with Notes, Tests, and
Tables. 8vo. cloth, 12s.

DR. SWAYNE.

OBSTETRIC APHORISMS FOR THE USE OF STUDENTS
COMMENCING MIDWIFERY PRACTICE. With Engravings on Wood. Fcap.
8vo. cloth, 3s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. STEGGALL.

STUDENTS' BOOKS FOR EXAMINATION.

I.

A MEDICAL MANUAL FOR APOTHECARIES' HALL AND OTHER MEDICAL BOARDS. Eleventh Edition. 12mo. cloth, 10s.

II.

A MANUAL FOR THE COLLEGE OF SURGEONS; intended for the Use of Candidates for Examination and Practitioners. Second Edition. 12mo. cloth, 10s.

III.

GREGORY'S CONSPECTUS MEDICINÆ THEORETICÆ. The First Part, containing the Original Text, with an Ordo Verborum, and Literal Translation. 12mo. cloth, 10s.

IV.

THE FIRST FOUR BOOKS OF CELSUS; containing the Text, Ordo Verborum, and Translation. Second Edition. 12mo. cloth, 8s.

V.

A TEXT-BOOK OF MATERIA-MEDICA AND THERAPEUTICS. 12mo. cloth, 7s.

VI.

FIRST LINES FOR CHEMISTS AND DRUGGISTS PREPARING FOR EXAMINATION AT THE PHARMACEUTICAL SOCIETY. Second Edition. 18mo. cloth, 3s. 6d.

MR. STOWE, M.R.C.S.

A TOXICOLOGICAL CHART, exhibiting at one view the Symptoms, Treatment, and Mode of Detecting the various Poisons, Mineral, Vegetable, and Animal. To which are added, concise Directions for the Treatment of Suspended Animation. Eleventh Edition. On Sheet, 2s.; mounted on Roller, 5s.

DR. ALFRED S. TAYLOR, F.R.S.

I.

A MANUAL OF MEDICAL JURISPRUDENCE. Fifth Edition. Fcap. 8vo. cloth, 12s. 6d.

II.

ON POISONS, in relation to MEDICAL JURISPRUDENCE AND MEDICINE. Fcap. 8vo. cloth, 12s. 6d.

DR. THEOPHILUS THOMPSON, F.R.S.

I.

CLINICAL LECTURES ON PULMONARY CONSUMPTION. With Plates. 8vo. cloth, 7s. 6d.

II.

LETT SOMIAN LECTURES ON PULMONARY CONSUMPTION; with Remarks on Microscopical Indications, and on Cocoa-nut Oil. Post 8vo., 2s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

MR. TAMPLIN, F.R.C.S.E.

LATERAL CURVATURE OF THE SPINE: its Causes, Nature, and Treatment. 8vo. cloth, 4s.

DR. THOMAS.

THE MODERN PRACTICE OF PHYSIC; exhibiting the Symptoms, Causes, Morbid Appearances, and Treatment of the Diseases of all Climates. Eleventh Edition. Revised by ALGERNON FRAMPTON, M.D. 2 vols. 8vo. cloth, 28s.

HENRY THOMPSON, M.B. LOND., F.R.C.S.

STRICTURE OF THE URETHRA; its Pathology and Treatment. The last Jacksonian Treatise of the Royal College of Surgeons. With Plates. 8vo. cloth, 10s.

DR. TILT.

I.

ON DISEASES OF WOMEN AND OVARIAN INFLAMMATION IN RELATION TO MORBID MENSTRUATION, STERILITY, PELVIC TUMOURS, AND AFFECTIONS OF THE WOMB. Second Edition. 8vo. cloth, 9s.

II.

THE CHANGE OF LIFE IN HEALTH AND DISEASE: a Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. Second Edition. 8vo. cloth, 6s.

MR. TOD, M.R.C.S.

A DISQUISITION ON CERTAIN PARTS AND PROPERTIES of the BLOOD. With Illustrative Woodcuts. 8vo., 10s. 6d.

DR. ROBERT B. TODD, F.R.S.

I.

CLINICAL LECTURES ON PARALYSIS, DISEASES OF THE BRAIN, and other AFFECTIONS of the NERVOUS SYSTEM. Second Edition. Foolscep 8vo. cloth, 6s.

II.

CLINICAL LECTURES ON CERTAIN DISEASES OF THE URINARY ORGANS, AND ON DROPSIES. Fcap. 8vo. cloth, 6s.

MR. SAMUEL TUKE.

DR. JACOBI ON THE CONSTRUCTION AND MANAGEMENT OF HOSPITALS FOR THE INSANE. Translated from the German. With Introductory Observations by the Editor. With Plates. 8vo. cloth, 9s.

MR. CHURCHILL'S PUBLICATIONS.

DR. DANIEL H. TUKE.

THE PRIZE ESSAY ON THE PROGRESSIVE CHANGES
WHICH HAVE TAKEN PLACE, SINCE THE TIME OF PINEL, IN THE
MORAL MANAGEMENT OF THE INSANE. 8vo. cloth, 2s. 6d.

DR. TURNBULL.

A PRACTICAL TREATISE ON DISORDERS OF THE STOMACH
with FERMENTATION; and on the Causes and Treatment of Indigestion, &c. 8vo.
cloth, 6s.

DR. UNDERWOOD.

TREATISE ON THE DISEASES OF CHILDREN. Tenth Edition,
with Additions and Corrections by HENRY DAVIES, M.D. 8vo. cloth, 15s.

VESTIGES OF THE NATURAL HISTORY OF CREATION.
Tenth Edition. Illustrated with 100 Engravings on Wood. 8vo. cloth, 12s. 6d.

BY THE SAME AUTHOR.

EXPLANATIONS: A SEQUEL TO "VESTIGES."

Second Edition. Post 8vo. cloth, 5s.

DR. UNGER.

BOTANICAL LETTERS. Translated by Dr. B. PAUL. Numerous
Woodcuts. Post 8vo., 5s.

DR. VAN OVEN.

ON THE DECLINE OF LIFE IN HEALTH AND DISEASE;
being an Attempt to Investigate the Causes of LONGEVITY, and the Best Means of
Attaining a Healthful Old Age. 8vo. cloth, 10s. 6d.

MR. WADE, F.R.C.S.

STRICTURE OF THE URETHRA; its Complications and Effects.
With Practical Observations on its Causes, Symptoms, and Treatment; and on a Safe
and Efficient Mode of Treating its more Intractable Forms. 8vo. cloth, 5s.

MR. CHURCHILL'S PUBLICATIONS.

DR. WAGSTAFF.

ON DISEASES OF THE MUCOUS MEMBRANE OF THE
THROAT, and their Treatment by Topical Medication. Post 8vo. cloth, 4s. 6d.

MR. HAYNES WALTON, F.R.C.S.

OPERATIVE OPHTHALMIC SURGERY. With Engravings on
Wood. 8vo. cloth, 18s.

DR. WARDROP.

ON DISEASES OF THE HEART. 8vo. cloth, 12s.

DR. EBEN. WATSON, A.M.

ON THE TOPICAL MEDICATION OF THE LARYNX IN
CERTAIN DISEASES OF THE RESPIRATORY AND VOCAL ORGANS.
8vo. cloth, 5s.

DR. WEBER.

A CLINICAL HAND-BOOK OF AUSCULTATION AND PER-
CUSSION. Translated by JOHN COCKLE, M.D. 5s.

DR. WEGG.

OBSERVATIONS RELATING TO THE SCIENCE AND ART
OF MEDICINE. 8vo. cloth, 8s.

MR. T. SPENCER WELLS, F.R.C.S.

PRACTICAL OBSERVATIONS ON GOUT AND ITS COMPLI-
CATIONS, and on the Treatment of Joints Stiffened by Gouty Deposits. Foolscap 8vo.
cloth, 5s.

DR. WEST.

LECTURES ON THE DISEASES OF WOMEN. 8vo. cloth, 10s. 6d.

MR. WHEELER.

HAND-BOOK OF ANATOMY FOR STUDENTS OF THE
FINE ARTS. New Edition, with Engravings on Wood. Fcap. 8vo., 2s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. WHITEHEAD, F.R.C.S.

I.

ON THE TRANSMISSION FROM PARENT TO OFFSPRING
OF SOME FORMS OF DISEASE, AND OF MORBID TAINTS AND
TENDENCIES. 8vo. cloth, 10s. 6d.

II.

THE CAUSES AND TREATMENT OF ABORTION AND
STERILITY: being the result of an extended Practical Inquiry into the Physiological
and Morbid Conditions of the Uterus, with reference especially to Leucorrhœal Affec-
tions, and the Diseases of Menstruation. 8vo. cloth, 12s.

MR. WILLIAM R. WILDE, F.R.C.S.

AURAL SURGERY, AND THE NATURE AND TREATMENT
OF DISEASES OF THE EAR. 8vo. cloth, 12s. 6d.

DR. WILLIAMS, F.R.S.

PRINCIPLES OF MEDICINE: comprehending General Pathology
and Therapeutics. The Third Edition. 8vo. cloth, 15s.

DR. JOHN CALTHROP WILLIAMS.

PRACTICAL OBSERVATIONS ON NERVOUS AND SYM-
PATHETIC PALPITATION OF THE HEART, as well as on Palpitation the
Result of Organic Disease. Second Edition, 8vo. cloth, 6s.

DR. JOSEPH WILLIAMS.

INSANITY: its Causes, Prevention, and Cure; including Apoplexy,
Epilepsy, and Congestion of the Brain. Second Edition. Post 8vo. cloth, 10s. 6d.

DR. J. HUME WILLIAMS.

UN SOUNDNESS OF MIND, IN ITS MEDICAL AND LEGAL
CONSIDERATIONS. 8vo. cloth, 7s. 6d.

DR. JAMES WILSON.

THE PRINCIPLES AND PRACTICE OF THE WATER CURE,
and HOUSEHOLD MEDICAL SCIENCE, in Conversations on Physiology, on
Pathology, or the Nature of Disease, and on Digestion, Nutrition, Regimen, and Diet.
Second Edition. 8vo. cloth, 7s.

DR. HENRY G. WRIGHT.

HEADACHES; their Causes and their Cure. Second Edition. Fcap. 8vo.,
2s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

MR. ERASMUS WILSON, F.R.S.

I.

THE ANATOMIST'S VADE-MECUM: A SYSTEM OF HUMAN ANATOMY. With numerous Illustrations on Wood. Sixth Edition. Foolsap 8vo. cloth, 12s. 6d.

II.

DISEASES OF THE SKIN: A Practical and Theoretical Treatise on the DIAGNOSIS, PATHOLOGY, and TREATMENT OF CUTANEOUS DISEASES. Fourth Edition. 8vo. cloth, 16s.

THE SAME WORK; illustrated with finely executed Engravings on Steel, accurately coloured. 8vo. cloth, 34s.

III.

HEALTHY SKIN: A Treatise on the Management of the Skin and Hair in relation to Health. Fifth Edition. Foolsap 8vo. 2s. 6d.

IV.

PORTRAITS OF DISEASES OF THE SKIN. Folio. Fasciculi I. to XII., completing the Work. 20s. each.

V.

ON SYPHILIS, CONSTITUTIONAL AND HEREDITARY; AND ON SYPHILITIC ERUPTIONS. With Four Coloured Plates. 8vo. cloth, 16s.

DR. FORBES WINSLOW, D.C.L. OXON.

I.

LETTSOMIAN LECTURES ON INSANITY. 8vo. cloth, 5s.

II.

A SYNOPSIS OF THE LAW OF LUNACY; as far as it relates to the Organization and Management of Private Asylums for the Care and Treatment of the Insane. In the form of a Chart, varnished, mounted on canvas and rollers, price 6s.

III.

ON THE CAUSES, SYMPTOMS, DIAGNOSIS, AND TREATMENT OF SOFTENING OF THE BRAIN, AND OTHER OBSCURE DISEASES OF THE ENCEPHALON. 8vo. With Plates. *In the Press.*

DR. G. C. WITTSTEIN.

PRACTICAL PHARMACEUTICAL CHEMISTRY: An Explanation of Chemical and Pharmaceutical Processes, with the Methods of Testing the Purity of the Preparations, deduced from Original Experiments. Translated from the Second German Edition, by STEPHEN DARBY. 18mo. cloth, 6s.

MR. YEARSLEY.

DEAFNESS PRACTICALLY ILLUSTRATED; being an Exposition of Original Views as to the Causes and Treatment of Diseases of the Ear. Fourth Edition. Foolsap 8vo., 2s. 6d.

II.

ON THE ENLARGED TONSIL AND ELONGATED UVULA, and other Morbid Conditions of the Throat. Sixth Edition. 8vo. cloth, 5s.

CHURCHILL'S SERIES OF MANUALS.

"We here give Mr. Churchill public thanks for the positive benefit conferred on the Medical Profession, by the series of beautiful and cheap Manuals which bear his imprint."—*British and Foreign Medical Review.*

AGGREGATE SALE 83,500 COPIES.

DR. BARLOW.

A MANUAL OF THE PRACTICE OF MEDICINE.

Foolscap 8vo. cloth, 12s. 6d.

DR. GOLDING BIRD, F.R.S., and CHARLES BROOKE, M.B. Cantab, F.R.S.

ELEMENTS OF NATURAL PHILOSOPHY;

Being an Experimental Introduction to the Study of the Physical Sciences. With numerous Illustrations on Wood. Fourth Edition. Fcap. 8vo. cloth, 12s. 6d.

DR. CARPENTER, F.R.S.

A MANUAL OF PHYSIOLOGY.

With numerous Illustrations on Steel and Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

BY THE SAME AUTHOR.

THE MICROSCOPE AND ITS REVELATIONS.

With numerous Engravings on Wood. Fcap. 8vo. cloth, 12s. 6d.

MR. FERGUSON, F.R.S.E.

A SYSTEM OF PRACTICAL SURGERY.

With numerous Illustrations on Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

MR. FOWNES, PH.D., F.R.S.

A MANUAL OF CHEMISTRY.

With numerous Illustrations on Wood. Sixth Edition. Fcap. 8vo. cloth, 12s. 6d.

MR. WHARTON JONES, F.R.S.

A MANUAL OF OPHTHALMIC MEDICINE & SURGERY.

With Coloured Engravings on Steel, and Illustrations on Wood.

Second Edition. Fcap. 8vo. cloth, 12s. 6d.

Dr. HANDFIELD JONES, F.R.S., & Dr. EDWARD H. SIEVEKING.

A MANUAL OF PATHOLOGICAL ANATOMY.

Illustrated with numerous Engravings on Wood. Foolscap 8vo., cloth, 12s. 6d.

DR. ROYLE, F.R.S., and DR. HEADLAND, F.L.S.

A MANUAL OF MATERIA-MEDICA.

With numerous Illustrations on Wood. Third Edition. Fcap. 8vo. cloth. 12s. 6d.

DR. ALFRED TAYLOR, F.R.S.

A MANUAL OF MEDICAL JURISPRUDENCE.

Fifth Edition. Fcap. 8vo. cloth, 12s. 6d.

BY THE SAME AUTHOR.

ON POISONS.

Fcap. 8vo. cloth. 12s. 6d.

MR. ERASMUS WILSON, F.R.S.

THE ANATOMIST'S VADE-MECUM;

A SYSTEM OF HUMAN ANATOMY. With numerous Illustrations on Wood. Sixth Edition.

Fcap. 8vo. cloth, 12s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. HUNTER LANE, F.L.S.

A COMPENDIUM OF MATERIA MEDICA AND PHARMACY;
adapted to the London Pharmacopœia, 1851, embodying all the new French, American,
and Indian Medicines, and also comprising a Summary of Practical Toxicology. Second
Edition. 24mo. cloth, 5s. 6d.

MR. LAURENCE, F.R.C.S.

THE DIAGNOSIS OF SURGICAL CANCER. The Liston Prize
Essay for 1854. Plates, 8vo. cloth, 4s. 6d.

MR. LAWRENCE, F.R.S.

A TREATISE ON RUPTURES. The Fifth Edition, considerably
enlarged. 8vo. cloth, 16s.

MR. EDWIN LEE.

I.

THE WATERING PLACES OF ENGLAND, CONSIDERED
with Reference to their Medical Topography. Third Edition. Foolscap 8vo. cloth,
5s. 6d.

II.

THE BATHS OF FRANCE, CENTRAL GERMANY, &c. Third
Edition. Post 8vo. cloth, 6s. 6d.

III.

THE BATHS OF RHENISH GERMANY. Post 8vo. 2s. 6d.

MR. HENRY LEE, F.R.C.S.

PATHOLOGICAL AND SURGICAL OBSERVATIONS; including
an Essay on the Surgical Treatment of Hemorrhoidal Tumors. 8vo. cloth, 7s. 6d.

DR. ROBERT LEE, F.R.S.

I.

CLINICAL REPORTS OF OVARIAN AND UTERINE DIS-
EASES, with Commentaries. Foolscap 8vo. cloth, 6s. 6d.

II.

CLINICAL MIDWIFERY: comprising the Histories of 545 Cases of
Difficult, Preternatural, and Complicated Labour, with Commentaries. Second Edition.
Foolscap 8vo. cloth, 5s.

III.

PRACTICAL OBSERVATIONS ON DISEASES OF THE
UTERUS. With coloured Plates. Two Parts. Imperial 4to., 7s. 6d. each Part.

MR. LISTON, F.R.S.

PRACTICAL SURGERY. Fourth Edition. 8vo. cloth, 22s.

MR. CHURCHILL'S PUBLICATIONS.

LONDON MEDICAL SOCIETY OF OBSERVATION.

WHAT TO OBSERVE AT THE BED-SIDE, AND AFTER
DEATH. Published by Authority. Second Edition. Foolscap 8vo. cloth, 4s. 6d.

MR. EDWARD F. LONSDALE.

OBSERVATIONS ON THE TREATMENT OF LATERAL CUR-
VATURE OF THE SPINE. Second Edition. 8vo. cloth, 6s.

M. LUGOL.

ON SCROFULOUS DISEASES. Translated from the French, with
Additions by W. H. RANKING, M.D., Physician to the Suffolk General Hospital.
8vo. cloth, 10s. 6d.

MR. JOSEPH MACLISE, F.R.C.S.

SURGICAL ANATOMY. A Series of Dissections, illustrating the Prin-
cipal Regions of the Human Body.
The Second Edition, complete in XIII. Fasciculi. Imperial folio, 5s. each; bound in
cloth, £3. 12s.; or bound in morocco, £4. 4s.

MR. MACILWAIN.

ON TUMOURS, THEIR GENERAL NATURE AND TREAT-
MENT. 8vo. cloth, 5s.

DR. MAYNE.

AN EXPOSITORY LEXICON OF THE TERMS, ANCIENT
AND MODERN, IN MEDICAL AND GENERAL SCIENCE, including a com-
plete MEDICAL AND MEDICO-LEGAL VOCABULARY, and presenting the
correct Pronunciation, Derivation, Definition, and Explanation of the Names, Analogues,
Synonymes, and Phrases (in English, Latin, Greek, French, and German,) employed in
Science and connected with Medicine. Parts I. to V., price 5s. each.

DR. WM. H. MADDEN.

THOUGHTS ON PULMONARY CONSUMPTION; with an Appen-
dix on the Climate of Torquay. Post 8vo. cloth, 5s.

DR. MARCET.

ON THE COMPOSITION OF FOOD, AND HOW IT IS
ADULTERATED; with Practical Directions for its Analysis. 8vo. cloth, 6s. 6d.

MR. CHURCHILL'S PUBLICATIONS.

DR. MARKHAM.

I.
DISEASES OF THE HEART: THEIR PATHOLOGY, DIAG-
NOSIS, AND TREATMENT. Post. 8vo. cloth, 6s.

II.
SKODA ON AUSCULTATION AND PERCUSSION. Post 8vo.
cloth, 6s.

DR. MARTIN.

THE UNDERCLIFF, ISLE OF WIGHT: its Climate, History,
and Natural Productions. Post 8vo. cloth, 10s. 6d.

MR. J. RANALD MARTIN, F.R.S.

THE INFLUENCE OF TROPICAL CLIMATES ON EURO-
PEAN CONSTITUTIONS. Originally by the late JAMES JOHNSON, M.D., and now
entirely rewritten; including Practical Observations on the Diseases of European Invalids
on their Return from Tropical Climates. Seventh Edition. 8vo. cloth, 16s.

DR. MASSY.

ON THE EXAMINATION OF RECRUITS; intended for the Use of
Young Medical Officers on Entering the Army. 8vo. cloth, 5s.

DR. MILLINGEN.

ON THE TREATMENT AND MANAGEMENT OF THE IN-
SANE; with Considerations on Public and Private Lunatic Asylums. 18mo. cloth,
4s. 6d.

MR. JOHN L. MILTON, M.R.C.S.

PRACTICAL OBSERVATIONS ON A NEW WAY OF
TREATING GONORRHŒA. With some Remarks on the Cure of Inveterate Cases.
8vo. cloth, 5s.

DR. MONRO.

I.
REMARKS ON INSANITY: its Nature and Treatment. 8vo. cloth, 6s.

II.
REFORM IN PRIVATE LUNATIC ASYLUMS. 8vo. cloth, 4s.

MR. CHURCHILL'S PUBLICATIONS.

DR. NOBLE.

I.

ELEMENTS OF PSYCHOLOGICAL MEDICINE: AN INTRODUCTION TO THE PRACTICAL STUDY OF INSANITY. Second Edition. 8vo. cloth, 10s.

II.

THE BRAIN AND ITS PHYSIOLOGY. Post 8vo. cloth, 6s.

DR. J. NOTTINGHAM.

PRACTICAL OBSERVATIONS ON CONICAL CORNEA, AND on the Short Sight, and other Defects of Vision connected with it. 8vo. cloth, 6s.

MR. NOURSE, M.R.C.S.

TABLES FOR STUDENTS. Price One Shilling.

1. Divisions and Classes of the Animal Kingdom.
2. Classes and Orders of the Vertebrate Sub-kingdom.
3. Classes of the Vegetable Kingdom, according to the Natural and Artificial Systems.
4. Table of the Elements, with their Chemical Equivalents and Symbols.

MR. NUNNELEY.

A TREATISE ON THE NATURE, CAUSES, AND TREATMENT OF ERYSIPELAS. 8vo. cloth, 10s. 6d.

Oxford Editions.—Edited by DR. GREENHILL.

- I. ADDRESS TO A MEDICAL STUDENT. Second Edition, 18mo. cloth, 2s. 6d.
- II. PRAYERS FOR THE USE OF THE MEDICAL PROFESSION. Second Edition, cloth, 1s. 6d.
- III. LIFE OF SIR JAMES STONHOUSE, BART., M.D. Cloth, 4s. 6d.
- IV. ANECDOTA SYDENHAMIANA. Second Edition, 18mo. 2s.
- V. LIFE OF THOMAS HARRISON BURDER, M.D. 18mo. cloth, 4s.
- VI. BURDER'S LETTERS FROM A SENIOR TO A JUNIOR PHYSICIAN, ON PROMOTING THE RELIGIOUS WELFARE OF HIS PATIENTS. 18mo. sewed, 6d.
- VII. LIFE OF GEORGE CHEYNE, M.D. 18mo. sewed, 2s. 6d.
- VIII. HUFELAND ON THE RELATIONS OF THE PHYSICIAN TO THE SICK, TO THE PUBLIC, AND TO HIS COLLEAGUES. 18mo. sewed, 9d.
- IX. GISBORNE ON THE DUTIES OF PHYSICIANS. 18mo. sewed, 1s.
- X. LIFE OF CHARLES BRANDON TRYE. 18mo. sewed, 1s.
- XI. PERCIVAL'S MEDICAL ETHICS. Third Edition, 18mo. cloth, 3s.
- XII. CODE OF ETHICS OF THE AMERICAN MEDICAL ASSOCIATION. 8d.
- XIII. WARE ON THE DUTIES AND QUALIFICATIONS OF PHYSICIANS. 8d.
- XIV. MAURICE ON THE RESPONSIBILITIES OF MEDICAL STUDENTS. 9d.
- XV. FRASER'S QUERIES IN MEDICAL ETHICS. 9d.

MR. CHURCHILL'S PUBLICATIONS.

DR. ODLING.

A COURSE OF PRACTICAL CHEMISTRY, FOR THE USE
OF MEDICAL STUDENTS. Arranged with express reference to the Three Months'
Summer Course. Post 8vo. cloth, 4s. 6d.

MR. PAGET.

A DESCRIPTIVE CATALOGUE OF THE ANATOMICAL
MUSEUM OF ST. BARTHOLOMEW'S HOSPITAL. Vol. I. Morbid Anatomy.
8vo. cloth, 5s.

DITTO. Vol. II. Natural and Congenitally Malformed Structures, and Lists of the
Models, Casts, Drawings, and Diagrams. 5s.

MR. LANGSTON PARKER.

THE MODERN TREATMENT OF SYPHILITIC DISEASES,
both Primary and Secondary; comprising the Treatment of Constitutional and Confirmed
Syphilis, by a safe and successful Method. Third Edition, 8vo. cloth, 10s.

DR. THOMAS B. PEACOCK, M.D.

ON THE INFLUENZA, OR EPIDEMIC CATARRHAL FEVER
OF 1847-8. 8vo. cloth, 5s. 6d.

DR. PEREIRA, F.R.S.

SELECTA E PRÆSCRIPTIS. Twelfth Edition. 24mo. cloth, 5s.

MR. PETTIGREW, F.R.S.

ON SUPERSTITIONS connected with the History and Practice of
Medicine and Surgery. 8vo. cloth, 7s.

MR. PIRRIE, F.R.S.E.

THE PRINCIPLES AND PRACTICE OF SURGERY. With
numerous Engravings on Wood. 8vo. cloth, 21s.

PHARMACOPŒIA COLLEGII REGALIS MEDICORUM LON-
DINENSIS. 8vo. cloth, 9s.; or 24mo. 5s.

IMPRIMATUR.

Hic liber, cui titulus, PHARMACOPŒIA COLLEGII REGALIS MEDICORUM LONDINENSIS.
Datum ex Ædibus Collegii in comitiis censoriis, Novembris Mensis 14^{to} 1850.

JOHANNES AYRTON PARIS. *Præses.*

MR. CHURCHILL'S PUBLICATIONS.

PROFESSORS PLATTNER & MUSPRATT.

THE USE OF THE BLOWPIPE IN THE EXAMINATION OF MINERALS, ORES, AND OTHER METALLIC COMBINATIONS. Illustrated by numerous Engravings on Wood. Third Edition. 8vo. cloth, 10s. 6d.

THE PRESCRIBER'S PHARMACOPŒIA; containing all the Medicines in the London Pharmacopœia, arranged in Classes according to their Action, with their Composition and Doses. By a Practising Physician. Fourth Edition. 32mo. cloth, 2s. 6d.; roan tuck (for the pocket), 3s. 6d.

DR. JOHN ROWLISON PRETTY.

AIDS DURING LABOUR, including the Administration of Chloroform, the Management of Placenta and Post-partum Hæmorrhage. Fcap. 8vo. cloth, 4s. 6d.

SIR WM. PYM, K.C.H.

OBSERVATIONS UPON YELLOW FEVER, with a Review of "A Report upon the Diseases of the African Coast, by Sir WM. BURNETT and Dr. BRYSON," proving its highly Contagious Powers. Post 8vo. 6s.

DR. RADCLIFFE.

EPILEPSY, AND OTHER AFFECTIONS OF THE NERVOUS SYSTEM which are marked by Tremor, Convulsion, or Spasm: their Pathology and Treatment. 8vo. cloth, 5s.

DR. F. H. RAMSBOTHAM.

THE PRINCIPLES AND PRACTICE OF OBSTETRIC MEDICINE AND SURGERY. Illustrated with One Hundred and Twenty Plates on Steel and Wood; forming one thick handsome volume. Fourth Edition. 8vo. cloth, 22s.

DR. RAMSBOTHAM.

PRACTICAL OBSERVATIONS ON MIDWIFERY, with a Selection of Cases. Second Edition. 8vo. cloth, 12s.

DR. RANKING & DR. RADCLIFFE.

HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES; being a Practical and Analytical Digest of the Contents of the Principal British and Continental Medical Works published in the preceding Half-Year; together with a Critical Report of the Progress of Medicine and the Collateral Sciences during the same period. Volumes I. to XXIV., 6s. 6d. each.

MR. CHURCHILL'S PUBLICATIONS.

DR. DU BOIS REYMOND.

ANIMAL ELECTRICITY; Edited by H. BENCE JONES, M.D., F.R.S.
With Fifty Engravings on Wood. Foolscap 8vo. cloth, 6s.

DR. REYNOLDS.

THE DIAGNOSIS OF DISEASES OF THE BRAIN, SPINAL
CORD, AND THEIR APPENDAGES. 8vo. cloth, 8s.

DR. EVANS RIADORE, F.R.C.S., F.L.S.

I.

ON SPINAL IRRITATION, THE SOURCE OF NERVOUS-
NESS, INDIGESTION, AND FUNCTIONAL DERANGEMENTS OF THE
PRINCIPAL ORGANS OF THE BODY. Post 8vo. cloth, 5s. 6d.

II.

THE REMEDIAL INFLUENCE OF OXYGEN, NITROUS
OXYDE, AND OTHER GASES, ELECTRICITY, AND GALVANISM. Post
8vo. cloth, 5s. 6d.

III.

ON LOCAL TREATMENT OF THE MUCOUS MEMBRANE
OF THE THROAT, for Cough and Bronchitis. Foolscap 8vo. cloth, 3s.

IV.

ON MECHANICAL SUPPORT TO THE RECTUM, FOR THE
TREATMENT OF PROLAPSUS AND HÆMORRHOIDS. Fcap. 8vo. cloth, 3s.

MR. ROBERTON.

ON THE PHYSIOLOGY AND DISEASES OF WOMEN, AND
ON PRACTICAL MIDWIFERY. 8vo. cloth, 12s.

DR. W. H. ROBERTSON.

I.

THE NATURE AND TREATMENT OF GOUT.

8vo. cloth, 10s. 6d.

II.

A TREATISE ON DIET AND REGIMEN.

Fourth Edition. 2 vols. post 8vo. cloth, 12s.

DR. ROTH.

ON MOVEMENTS. An Exposition of their Principles and Practice, for
the Correction of the Tendencies to Disease in Infancy, Childhood, and Youth, and for
the Cure of many Morbid Affections in Adults. Illustrated with numerous Engravings
on Wood. 8vo. cloth, 10s.

MR. CHURCHILL'S PUBLICATIONS.

DR. ROWE, F.S.A.

NERVOUS DISEASES, LIVER AND STOMACH COMPLAINTS, LOW SPIRITS, INDIGESTION, GOUT, ASTHMA, AND DISORDERS PRODUCED BY TROPICAL CLIMATES. With Cases. Fifteenth Edition. Fcap. 8vo. 2s. 6d.

DR. ROYLE, F.R.S.

A MANUAL OF MATERIA MEDICA AND THERAPEUTICS. With numerous Engravings on Wood. Third Edition. Fcap. 8vo. cloth, 12s. 6d.

MR. RUMSEY, F.R.C.S.

ESSAYS ON STATE MEDICINE. 8vo. cloth, 10s. 6d.

MR. SAVORY.

A COMPENDIUM OF DOMESTIC MEDICINE, AND COMPANION TO THE MEDICINE CHEST; comprising Plain Directions for the Employment of Medicines, with their Properties and Doses, and Brief Descriptions of the Symptoms and Treatment of Diseases, and of the Disorders incidental to Infants and Children, with a Selection of the most efficacious Prescriptions. Intended as a Source of Easy Reference for Clergymen, and for Families residing at a Distance from Professional Assistance. Fifth Edition. 12mo. cloth, 5s.

DR. SCHACHT.

THE MICROSCOPE, AND ITS APPLICATION TO VEGETABLE ANATOMY AND PHYSIOLOGY. Edited by FREDERICK CURREY, M.A. Fcap. 8vo. cloth, 6s.

DR. SHAPTER.

I.

THE CLIMATE OF THE SOUTH OF DEVON, AND ITS INFLUENCE UPON HEALTH. With short Accounts of Exeter, Torquay, Teignmouth, Dawlish, Exmouth, Sidmouth, &c. Illustrated with a Map geologically coloured. Post 8vo. cloth, 7s. 6d.

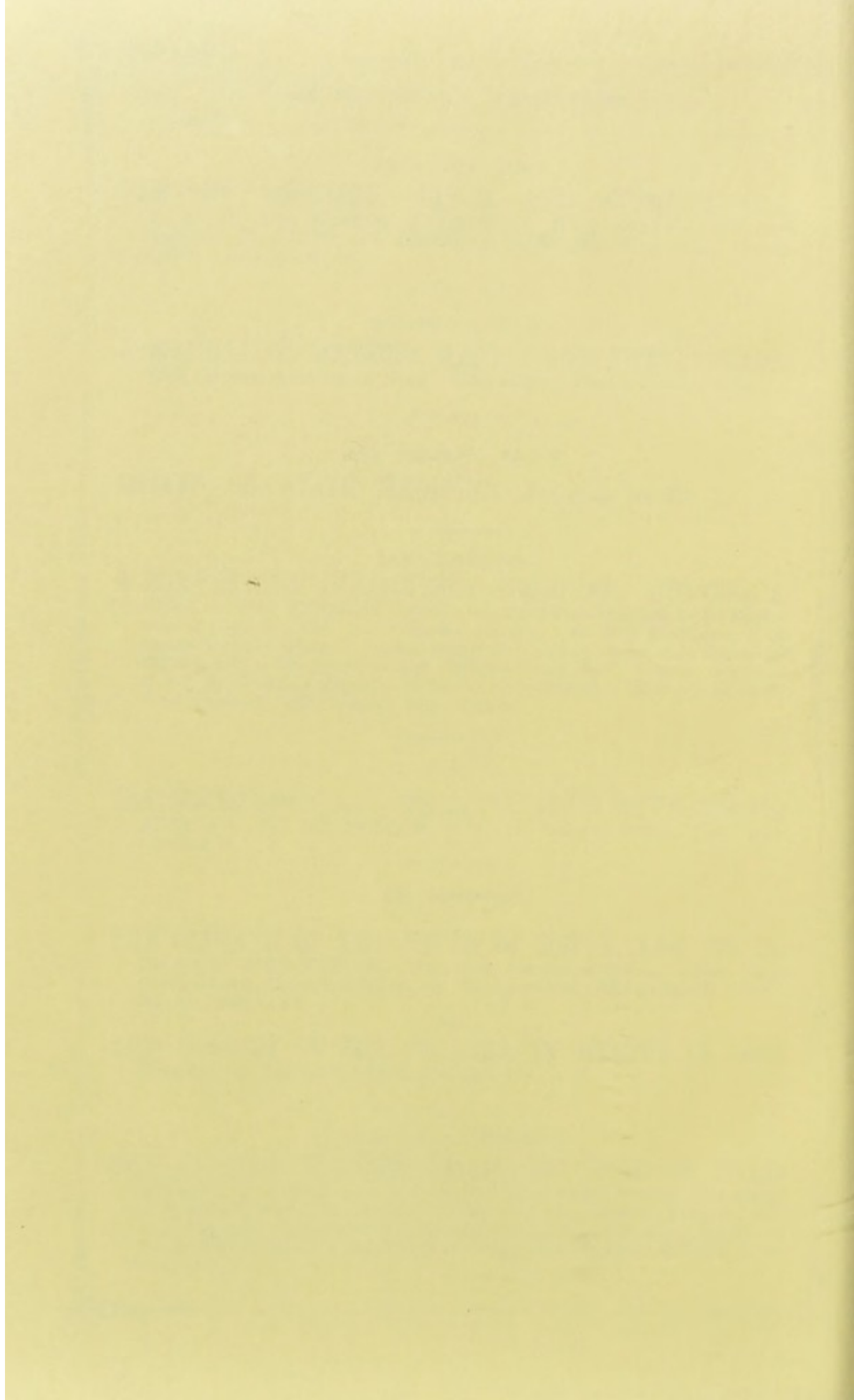
II.

THE HISTORY OF THE CHOLERA IN EXETER IN 1832. Illustrated with Map and Woodcuts. 8vo. cloth, 12s.

MR. SHAW, M.R.C.S.

THE MEDICAL REMEMBRANCER; OR, BOOK OF EMERGENCIES: in which are concisely pointed out the Immediate Remedies to be adopted in the First Moments of Danger from Poisoning, Drowning, Apoplexy, Burns, and other Accidents; with the Tests for the Principal Poisons, and other useful Information. Fourth Edition. Edited, with Additions, by JONATHAN HUTCHINSON, M.R.C.S. 32mo. cloth, 2s. 6d.







Riley Dunn & Wilson Ltd
EXPERT CONSERVATORS & BOOKBINDERS

✓

