mottled appearance. Exfoliation is going on all over the surface; the epidermic lamellæ are large, but excessively thin; they are renewed as fast as they are shed. The arms and hands are rose-coloured, with slight mottling here and there, and very abundant exfoliation of small branny scales. On the palms, the cuticle is thick, and comes off in larger pieces; the colour of the underlying skin, too, is deeper. The lower extremities resemble the upper ones in colour (the vivid redness having subsided); the legs and feet are oedematous, and rather tender. On the thighs, the cuticle is coming off in large, very thin squames. On the feet, the lamellæ are tough and coherent; one foot, indeed, looks as if its epidermic covering could be stripped off in a single piece, like a sock.

"The nails look healthy; but the proximal third of every nail is softer than usual. The eruption is everywhere quite dry; no cracking or weeping in any of the flexures. It is interesting to note that she continues to perspire most profusely; she has always perspired readily in hot weather; and the universal eruption from which she is now suffering does not appear to have interfered in the very least with the activity of her sudoriparous glands. Since the skin grew red, she has suffered much from burning and itching, which kept her awake at night. No scratch-marks are to be detected anywhere. Her throat has been a little sore. The fauces are slightly injected, and the gums are here and there studded with white patches. These are easily removed, leaving the mucous membrane slightly rough—like ground glass—but otherwise unaltered. On microscopic examination, the white matter is seen to consist of a felt-like aggregate of long slender *bacilli*, enclosing nest-like spaces filled with a gleea containing innumerable spheroidal particles (*micrococci*?), unaffected by liquor potassæ. She has been very thirsty, has lost her appetite, and has grown much thinner during the last fortnight. The urine is clear and pale, containing neither sugar nor albumen."

By August 10th, the skin had almost regained its normal hue. Furfuraceous desquamation was still profuse and universal; on the palms and soles, the cuticle peeled off in large thick flakes. Her hair was falling off. Her appetite was improving.

During September, she was confined to her bed with an attack of acute articular rheumatism, and was unable to visit the hospital. She told me that she had suffered severely from rheumatic fever at the age of twelve.

On November 1st, I saw her again. With the exception of a little rosy mottling on the face, the skin was everywhere healthy. There was no desquamation. Hair was still being shed, but fresh hair was coming up to take its place. Some of the nails had dropped off; others were soft, rough, and fibrous at their bases.

In the foregoing case, the very profuse sweating, and the rapid loss of flesh and strength during the process of exfoliation, are worthy of note. The occurrence of acute rheumatism, moreover, is not unfrequently observed in the subjects of general dermatitis; whether the association is more than accidental cannot at present be determined.

[To be continued.]

ON THE TREATMENT OF SYPHILIS WITHOUT MERCURY.*

By J. P. H. BOILEAU, B.A., M.D., F.R.C.S.I., Surgeon-Major,
Assistant-Professor of Pathology, Army Medical School, Netley.

It is, I can assure you, with some reluctance that I have undertaken to lay before the British Medical Association the results of my experience in the treatment of syphilis without mercury, knowing that by so doing I must expose myself to a good deal of hostile criticism; and, indeed, it is with considerable diffidence that I venture to address, on any professional subject, such an assembly as this. I am here, however, in obedience to the conviction that it is my duty to record my experience, and to subject my inferences to the judgment of more competent and more practised observers than myself.

It is believed by not a few, that no wise man would attempt to dispute the efficacy of mercury as an antidote to syphilis. Many hold that the disease cannot be eradicated from the system without the use of the mineral. With my experience, I cannot but hesitate to accept such views.

My position is briefly this. In May 1865, I was gazetted to a regiment about to proceed abroad. I served with it in the Mediterranean, in Canada, and in the West Indies, and at home; and left it in October 1876. For ten years of that period, I was most closely associated with the regiment, and had many facilities for prosecuting inquiries into the results of the treatment of disease, and, by observations, continued year

after year, for satisfying myself as to the state of my patients, long after they had been the subjects of my treatment; and so I am in a position to-day to bring to your notice, not only cases of syphilis treated without mercury, but, I believe, cases of syphilis cured (by natural processes, or otherwise) without mercury.

The principle which in the main guided me in the treatment of syphilis, was the principle of avoiding mercury as much as possible; and, in carrying out this principle, I treated most of the cases without prescribing any form of that remedy. Rarely did I resort to fumigation or inunction; and I now believe that it would have been better had I discarded all local remedies having mercury in their composition. As a rule, I did not use such applications. I tried the internal administration of mercury in some cases, without being at all satisfied concerning its alleged antidotal or curative powers.

My general principle is well attested by a gentleman (now a commissioned officer, and occupying one of the most responsible positions in connection with the Army Hospital Corps) who for eight years as hospital sergeant and compounder carried out my instructions. In reply to questions which I have sent him, he writes: "As regards your treatment of syphilis, I know you were always averse to ordering mercury for the disease; indeed, I am quite certain of this, as you invariably marked the venereal register—NO MERCURY." And he adds: "As well as I can recollect now, all the men treated by you for the disease made good recoveries. And I don't remember a single man who was invalided, excepting L."

Such are the indisputable facts of the case. For several years, I treated syphilis, in the majority of cases, without the use of mercury internally or externally; and in all such cases, without any exception, the ulterior results were most highly satisfactory; even the man L., who was invalided, returned to his duty in good health, and served for some years afterwards.

The following cases illustrate the general mode of treatment, and its results.

CASE I.—A. M., aged 32, had a solitary sore in grizzly induration. The occipital and inguinal glands were much enlarged. He had roseola and rheumatoid pains. He was treated in September 1867, locally, by fuming nitric acid, and water-dressing. The chancre healed in twenty-three days. Internally, he had iodide of potassium, nitrate of potash, compound ipecacuanha powder, and liquor opii sedativus. In February 1868, he was looking well, and at duty. In March 1871, he was in excellent health; and he continued so until he was discharged the service.

CASE II.—B. T., aged 20, had an indurated sore, roseolar and papular rash, psoriasis of the arms, and very severe ulceration of the tonsils. He was treated October 1867, locally, by nitrate of silver and sulphate of copper. Internally, he had iodide of potassium, cinchona, and compound ipecacuanha powder. In May 1868, he was in excellent health, and remained in good health until transferred to another regiment in February 1873. I heard in 1877 that he was in good health.

CASE III.—C. J., aged 25, had an indurated sore, indurated glands in both groins, and roseolar and papular eruption, very marked and widely spread. He was treated in December 1867. He was in very good health when he took his discharge in 1871, and also by accounts lately received. The only local application was cold water; and the chancre healed readily, although the induration was very persistent. Iodide of potassium was administered in decoctum cinchonæ, and he had the usual hot baths.

I must state that all my cases of syphilis were treated by hot baths. Whatever variety there may have been in the use of other remedies, there was none in this. *Hot baths was the standing order for all cases of syphilis.* And, for the most part, the men were strictly confined to bed, often notwithstanding their entreaties to be allowed to get up. The most scrupulous attention was paid to the cleanliness of their linen.

CASE IV.—D. W., aged 25, seven weeks previously to his admission for true Hunterian chancre, was under treatment for phagedenic ulceration of the prepuce. With the hard sore, he had indurated inguinal glands. The initiatory fever of secondaries soon appeared, and with it a dusky purplish papular rash, having a pustular tendency. The nates became covered with condylomata, and the scrotum before long looked like a piece of raw beef, dotted with little patches of oyster-shell. He was treated in December 1867, locally, by sulphate of copper. Internally, he had iodide of potassium, cinchona, and Dover's powder. In May 1868, his temperature was 98°, tongue clean, skin perfectly clear; there was not a trace of any rash, pimple, or sore. The scrotum was perfectly healthy looking. He was in robust health, and he continued so until he deserted some years afterwards.

CASE V.—E. D., aged 25, had a circular indurated ulcer, enlarged and indurated glands in the right groin, roseola, and a papular rash. He was treated in July 1868, locally, with cold water only by day; and by

* Read before the Bath meeting of the British Medical Association, 1878.

night, unguentum simplex. Internally, he took chlorate of potash, quinine, and Dover's powder. In October 1868, he was in good health. In March 1871, he was in excellent health. In 1878, he was in good health, and still in the service.

CASE VI.—F. G., aged 26, was twenty-six days in hospital for primary sore, with inflamed glands, which did not suppurate. He had a papular eruption over the whole body, and ulceration of the tonsils. He lost all the hair on his head and face. He was treated in September 1868. In May 1869, there was no trace whatever of the disease. He was in good health when discharged the service in 1871; his hair had all grown again. Chlorate of potash and Dover's powder were the remedies employed.

CASE VII.—G. C., aged 20, had Hunterian chancre, with indurated glands on both sides, and roseolar and papular rash. He was treated, in August 1868, for phimosis, complicated to such an extent that circumcision was necessitated. Alum and carbolic acid were used locally, and iodide of potassium and Dover's powder internally. In December 1868, his health was good. In June 1869, he had not a trace of the disease about him. In March 1871, he was in excellent health. There was a very fine white cicatricial line on the prepuce.

CASE VIII.—H. C., aged 26, was treated in November 1869. He was in good health in Jamaica in 1871. In 1878, I was informed that he was married and the father of two healthy children.

CASE IX.—I. J., aged 22, was treated in December 1869. In January 1871, his health was fair. In May 1871, his health was good. In 1878, he was in good health, and the father of two healthy children.

CASE X.—J. R., aged 19, was treated in January 1869. In January 1870, his health was good. In March 1871, he was in good health, and was so when discharged the service.

The above are examples of cases treated without any mercury. Many others of a similar character passed through my hands; but it is my desire that not only such, but examples of a number in which mercury was locally applied, should be given; because my position is sustained not only by several individual cases such as those narrated, but by the very satisfactory eventual results of all the cases treated by me between 1865 and 1876; and, in order that I may be justified in bringing forward this *tout ensemble* of my practice as a proof of the curability of syphilis without mercury, I am bound to give examples of those cases in which the mineral was locally applied.

CASE XI.—N. G., aged 26, had extensive ulceration in, and surrounded by, cartilaginous induration. The inguinal glands were enlarged. He had roseola and pharyngeal ulceration. Lotio nigra was used in this case. He was treated in October 1868. In March 1869, he was in good health. In April 1870, he had remittent fever, but was discharged in good health in May. In March 1871, he was in excellent health; and in 1877 was still in the service and in good health.

CASE XII.—O. C., aged 23, had a circular solitary indurated ulcer, enlarged inguinal glands, roseolar and papular rash over the whole body, and mucous tubercles on the inside of the thighs; the scrotum was covered by an eruption of papules. On several parts of the body, small gangrenous ulcers appeared; and he had pharyngeal ulceration. The only mercurial preparation used was lotio nigra, and that only for a period not exceeding seven days. He was treated in October 1867. In March 1868, he was in fair health. In May 1868, he looked well and felt so. Not a trace of disease was manifest, excepting some slight coppery patches on the inside of the thighs. In May 1871, he was in excellent health, and was in good health when discharged in 1874.

CASE XIII.—P. M., aged 25, had indurated sores, indurated glands in the right groin, and roseola. Lotio nigra was used for a few days, and the only other drug employed was spirit of nitrous ether in camphor mixture. He was treated in February 1866. In May 1866, he had scarcely a trace of disease about him. He was in good health when he deserted in 1869.

CASE XIV.—Q. L., aged 26, had an excavated hard chancre, four enlarged glands in the left groin, a roseolar and papular eruption, and condylomata of the nates. Lotio nigra was used for a few days, when water-dressing was substituted. He was treated in April 1868, and made a rapid recovery. In June 1869, he was in vigorous health, with no evidence whatever of disease about him. In March 1871, he was in excellent health. In 1878, he was in the service and in good health.

CASE XV.—R. F., aged 23, had a chancre in great cartilaginous induration; the inguinal glands on both sides were enlarged and hard. He had an eruption over the whole body of a roseolar, papular, and squamous character; and tonsillar ulceration. Lotio nigra was used for a few days. He was treated in February 1870. In June 1870, he was in good health. In September 1871, he was in very good health. He was in good health when discharged the service in 1876.

CASE XVI.—S. N., aged 22, had a circular hard sore, indurated glands, and macular rash. Lotio nigra was used. He was treated in

October 1871. In 1876, he was in good health, married, and a father of one healthy child.

CASE XVII.—T. J., aged 21, had solitary sore, enlarged glands, roseola, pharyngeal ulceration, and condylomata of the nates, scrotum, and thighs. The only mercurial preparation used was the milder ointment of nitrate of mercury occasionally at night. He was treated in January 1868. In May 1868, he was much improved in health. In August 1868, he had not a trace of disease about him. In March 1871, he was in excellent health. In 1877, he had no trace of disease; his health was good.

Such local applications as black wash, calomel, red precipitate, or citrine ointment do not in the least degree, in my opinion, diminish the value of the cases in establishing the fact that syphilis can be cured without the specific action of mercury. In my cases, the actual amount of mercury imbibed by the system must have been very small indeed; the remedies were not at all pushed, quite the contrary; and any one who could attribute to their use the good results which followed must be a believer in the Hahnemannian doctrine of infinitesimal doses. It must be remembered that advocates of mercury contend that, without approaching the direful effects of salivation, a cure can only be effected by introducing a considerable quantity of the mercury into the system, and by protracting its use over a long period.

Those cases of syphilis in which I have used mercurial preparations locally have, with great complacency, been quoted against me, as mere illustrations of cases cured by diaphoretics, alteratives, and small doses of mercury. I admit nothing of the kind. When I reflect on the composition of these local applications, and on the quantity likely to have been absorbed into the system, I say it is a perversion of the facts to attribute the recoveries in such cases to small doses of mercury. I have, however, treated too many cases of syphilis without any mercurial preparation whatever to doubt that the disease may be cured without them. My sheet-anchor has in all cases been the frequent employment of hot-water baths; the patients being a good deal confined to bed, the most scrupulous attention being paid to personal and surrounding cleanliness, full hospital diet always allowed, and, with some exceptions, a pint bottle of the best ale daily. Iodide of potassium took second place in the treatment, and other salts of the same alkali were freely used at times.

The majority of the patients were young men, and when they contracted the disease were in good health.

During their treatment, they were the subjects of rigorous discipline.

For the purpose of illustration, I have chosen from the hundreds of cases of venereal disease which I have treated only examples of those in which characteristic secondary manifestations followed indurated chancres without suppurating buboes. I thus silence those who might contend that perhaps my cases were not cases of syphilis at all.

I would beg of those who hold that the specific action of mercury is absolutely necessary for the eradication of syphilis from the organism to consult the works of Hughes Bennett, Lancereaux, etc., for a list of observers, committees, or councils that have declared in favour of the simple treatment of syphilis.

My experience as an army medical officer of fifteen years' service, ten of which were passed with one regiment, compels me to believe that syphilis is as curable without mercury as is small-pox or typhoid fever. And until I have some better proof than a mere *ipse dixit* that all the patients that I have treated without mercury are still under the influence of the syphilitic poison, I certainly cannot admit it. To the logic, however, of well sustained facts, I am quite vulnerable.

A PATIENT'S HISTORY OF STRAIN OF THE VALVES OF HIS HEART.

By JAMES RUSSELL, M.D., F.R.C.P.,
Physician to the General Hospital, Birmingham.

THE following particulars, gathered from the patient's account of himself, apply with equal force to a large number of cases of valvular disease in the aortic system. They are not often, however, so clearly conceived by the patient. It will be observed that the tissues exposed to strain were also the subject of any impairment that syphilis and ale-drinking were capable of inflicting upon them.

P. B., aged 45, a powerfully built, magnificently developed Irish labourer, has been in the habit of carrying his hod of bricks, often nearly a hundred weight, up buildings four storeys in height. From the strength of his muscles, he was often picked out when any extra exertion was called for. In the recklessness of energy, it was his practice to run up the ladder rapidly, deposit his load at the top, and drop down again,