were short of hands, he was occasionally accepted as a volunteer assistant at the surgical dressings. All seemed to be going on well till the seventh week from admission, when he complained of inability to put on his coat, which he ascribed to rheumatism. A day or two later, his gait was dragging, and the grasping power of both hands enfeebled. For ten days longer, he was able to move about the ward; but, during all that time, his locomotive power was daily diminishing. At last, he had to keep his bed, after which time the paralysis advanced so rapidly that soon he was unable to get out of bed for necessary purposes. There was paralysis of the external oblique muscle of the left eye for a week or ten days, and, on several occasions, there was atony of the bladder, requiring the use of the catheter. Notwithstanding the many disadvantageous circumstances incident to the siege, this man made a complete recovery. For several months, he remained under my treatment. At the close of the Second Siege, when the Government regained possession of Paris, he was sent to a military convalescent station in the country, whence he ultimately returned in robust health. During a great part of his residence at my hospital, the diet, from siege exigencies, was scant and bad, but supplemented largely by good red wine, which fortunately we could command in abundance. The internal treatment of this man, from the time the paralysis showed itself till it ceased, consisted in his taking fully two *litres* of excellent claret daily, and twenty drops three times a day of the tincture of the chloride of iron of the *British Pharmacopœia*. The external treatment consisted in the application of a succession of small blisters to the legs and arms.

It is worthy of remark, that the urine was albuminous immediately before and during the first ten days of the paralytic symptoms.

[To be continued.]

THE TREATMENT OF SYPHILIS BY MOIST MERCURIAL FUMIGATION.

By JOHN ST. S. WILDERS, M.R.C.S., Surgeon to the Queen's Hospital, Birmingham.

As a pupil, and afterwards the friend and colleague, of the late Mr. Langston Parker of Birmingham, I must ask to be allowed space to reply to the following extract from a lecture delivered by Mr. Lane, on the modern treatment of syphilis, which appeared in the *JOURNAL* of December 12th ult. "Inunction is, perhaps, on the whole, to be preferred, especially for hospital patients; but it is troublesome and dirty, and, therefore, it is often undesirable to resort to it in private practice. The same objection applies to fumigation, with the addition that it is as a rule more debilitating, for the nightly vapour bath has a decidedly depressing influence."

With Mr. Lane's remarks on inunction, I quite agree; but I venture to take very serious exception to those on fumigation. To what method of fumigation he alludes (whether moist or dry) the writer does not explain; but I presume the well-known moist mercurial vapour-bath, first used by the late Mr. Langston Parker, about 1849, is the one called in question. Now, notwithstanding the fact of Mr. Lane's twenty-three years' experience as surgeon to the Lock Hospital, I affirm with the utmost confidence that the treatment of syphilis by moist fumigation is neither troublesome nor dirty, nor has it a decidedly depressing influence on the patient, but, on the contrary, that it is a cleanly, rapid, and most manageable method, and the most powerful therapeutic agent in the removal of disease, and the least hurtful to the constitution of the patient. This latter will, of course, depend upon the care which is taken in watching the effect of the baths, and by properly timing the intervals between them. Even the administration of Mr. Lane's favourite blue pill would require similar precautions. This method of treating syphilis was employed by the late Mr. Langston Parker in thousands of cases, both in private practice and in the wards of the Queen's Hospital; and its astonishing effects were witnessed and appreciated by practitioners and students alike, and led to the deservedly great reputation which Mr. Parker enjoyed, not only in this country but on the Continent, and even in America, whence patients frequently came to place themselves under his care. Ninety-one fully reported cases are to be found in his book on *Syphilitic Diseases*. Many of these I had the pleasure of reporting for Mr. Parker; and I can most fearlessly affirm that they are a trustworthy record of the marvellous efficacy of this treatment, which was always open to the scrutiny of the profession.

As to what is thought of it in America, I would refer Mr. Lane to Gross's *System of Surgery*, vol. i, page 505, where he will find the following: "Another method of employing mercury is by a combination

of fumigation with steam, constituting what Mr. L. Parker of Birmingham terms the mercurial vapour-bath. I can testify from considerable experience to the beneficial effect of this method of mercurialisation, having effected some very extraordinary cures with it after all other modes of treatment had failed." And, again, "My opinion is that this method of treatment is not sufficiently appreciated; it certainly deserves the highest encomiums." Such is the opinion of this distinguished American surgeon, in contradistinction to that of Mr. Lane.

I will reply to Mr. Lane's allegations, by a short account of a case which has lately been under my care in the Queen's Hospital, and which is of such recent date that it will be in the recollection of many of our Birmingham readers.

E. O., aged 23, contracted a chancre about four years ago, for which he was treated by mercury, in the form of pills. Secondary symptoms soon appeared, taking the form of eruptions on the skin, and very severe sore throat. In due course, he suffered from an attack of rupia, the scars of which are plainly to be seen. He had also had syphilitic orchitis, which assumed such a form that his surgeon removed the affected testicle. He had taken mercury by the mouth in various forms, iodide of potassium, iron, and sarsaparilla. His medical adviser—one of the most able surgeons in this town—had given his case more than ordinary attention, as he took a deep interest in the young man. The treatment adopted appeared to relieve the symptoms for the time, with the exception of the ulcerations of the throat, which were never completely cured; but relapses took place as soon as the treatment was omitted. On coming under my care, he was in a most emaciated condition, and so weak that he ascended the hospital stairs with great difficulty. The uvula was completely destroyed, and there were deep excavated ulcers in the remnants of the tonsils; the pharynx was in a sloughing ulcerated condition, some of the ulcers being very deep. He could only swallow liquids with great difficulty; solids he had not been able to take for some time. The cervical glands were affected. His own impression was that he could not possibly recover. Up to the time of his admission into the Queen's Hospital, he had been taking mercury by the mouth in various forms, iodide of potassium, and opium; and he had had good and sufficient food as long as he could take it. I, at once, ordered him a nightly moist mercurial vapour-bath, containing hydrargyri bisulph., 3ij; hydrargyri oxidi cinerei 3i; and a spray of black wash to the throat. He was directed to inhale the moist vapour while in the bath. A grain of opium was administered every night, to ease pain and procure sleep. The gums were touched after nine successive baths, and were kept spongy for nearly two months, the baths being given at varying intervals. The result of the treatment was, that the ulcers rapidly healed, and the patient gained twenty-eight pounds in weight in three months, notwithstanding "the depressing influence of the baths". He left the hospital looking fat and well, and feeling stronger and more vigorous than he had done since he had contracted the disease. The patient, who was a highly intelligent young man, watched the treatment with much interest, and I had some difficulty in restraining him from having too many baths, as he said they made him feel so comfortable and did him so much good. He has since remained quite free from a relapse, and has been doing twenty miles a day on the Devonshire moors.

This is no solitary case, but only one out of many which I hope, at no distant date, to lay before the profession in a more extended form.

CLINICAL RECORD OF CASES ILLUSTRATING THE TREATMENT OF ACUTE RHEUMATISM BY THE PACKING PROCESS.*

By THOMAS STRETCH DOWSE, M.D., F.R.C.P. Edin.,
Medical Superintendent Central London Sick Asylum.

CASE I. *Acute Rheumatism, with Pericarditis*.—S. G., aged 33, was seized, on February 27th, with general malaise, shivering, and headache. On February 28th, the symptoms and signs of acute rheumatism were well marked; every joint was swollen and painful. The breathing was oppressed and hurried. There was also pericarditis. Temperature, 101.4 deg. On March 1st, the patient was packed for six hours, and sweated profusely. She was allowed to drink freely of warm milk and water. The temperature during the pack rose to 103.6 deg. Pulse, 132; respirations, 30. The urine was acid, of specific gravity 1028. After being packed, she was quite free from pain. On March 2nd, she was packed for four hours. The pain in the joints had returned, but in a much milder form. The sweat still had the rheu-

* See BRITISH MEDICAL JOURNAL for January 9th, page 39.

matic odour. Frictional pericardial sounds were less marked. The temperature during the pack was 102.4 deg.; pulse, 126; respirations, 24. The urine was acid, 1028. After the pack, she was quite free from pain. On March 3rd, the patient was absolutely free from pain. She complained of stiffness in the limbs, but could move them in any direction. The pericardial murmur had quite disappeared as well as the acid odour of the sweat. Temperature, 100.4 deg.; pulse, 118; respirations, 24. On March 4th, she sat up in bed, and moved the limbs freely in any direction; she was quite free from pain. Temperature, 99.6 deg.; pulse, 109; respirations, 20. Urine acid, 1020. On March 6th, she was convalescent. The heart-sounds were quite normal. No medicine or stimulant was given in this case from first to last.

CASE II. *Acute Rheumatism associated with Old-standing Mitral Disease*.—R. C., aged 35, came under treatment on the fourth day of the attack with signs and symptoms well marked. On March 10th, packing was applied for six hours. The patient drank freely of warm milk and water with six ounces of brandy. The temperature before packing was 102 deg.; during packing, 104.4 deg.; pulse, 120; respirations, 28. On March 11th, the patient was almost completely free from pain, and complained mostly of stiffness in all the limbs. The dyspnoea, which on the previous day was at times urgent, had become less. The patient was packed for four hours. Four ounces of brandy were given, and warm milk and water. Temperature before packing, 101.2 deg.; during the pack, 102.8 deg.; pulse, 122; respirations, 28. On March 12th, the patient was much better in every way. All the joints were free from pain, except the right elbow and wrist. The pack was applied for two hours. Temperature before packing, 100.6 deg.; during the pack, 101.6 deg.; pulse, 112; respirations, 24. On March 13th, the patient could sit up in bed, and move the limbs freely in any direction. There was scarcely a trace of dyspnoea. The acid odour of the sweat had disappeared. The urine was acid and loaded with lithates. Tongue furred; temperature, 100.4 deg.; pulse, 98; respirations, 20. From this date, the pain did not return. Bark with ammonia was ordered; and the patient was convalescent in a week.

CASE III. *Acute Rheumatism, with Endocarditis*.—Nurse C., a young woman of dark complexion, not of typical rheumatic diathesis, was seized on April 24th with rigors, and, on the following day, presented all the signs and symptoms of acute rheumatism. The tongue was thickly furred, and, in the median dorsal line, was dry and of a mahogany colour. The joints of the lower limbs were acutely painful, and distended with fluid. On April 25th, she was packed for six hours. She drank freely of warm milk and water, with six ounces of brandy. Temperature before packing, 101.4 deg.; during the pack, 105.2 deg.; pulse, 110; respirations, 20. Thirty-six ounces of urine were voided in the twenty-four hours; it was acid, of specific gravity 1018. On April 26th, after the packing, the pain had subsided; but to-day there was a tendency to its return. She was packed for four hours. Four ounces of brandy were given. In the evening, the breathing was hurried, and the heart's first sound at the apex was obscured. Temperature before packing, 101.8 deg.; during the pack, 105.2 deg.; pulse, 110; respirations, 20. The urine voided in twenty-four hours was thirty-five ounces, of specific gravity 1017, acid. On April 27th, the patient was quite free from pain and from acid sweating. She was ordered to take five grains of blue-pill at bedtime, and a saline purge the following morning. She was packed for two hours. Two ounces of brandy were taken. Temperature before packing, 101.6 deg.; during the pack, 102.6 deg.; pulse, 122; respirations, 20. The urine voided in twenty-four hours amounted to fifty ounces, of specific gravity 1017, and acid. On April 28th, there was complete absence of pain. The heart-sounds were normal. She could move her limbs freely. Temperature, 100.2 deg.; pulse, 100; respirations, 30. Fifty-seven ounces of urine were passed in the twenty-four hours; it was of specific gravity 1026, and acid. On May 1st, she was convalescent. Temperature, 99.2 deg.; pulse, 70; respirations, 15. The urine passed in the twenty-four hours was sixty ounces, of specific gravity 1012, and acid. From May 1874 to the present date, the patient has been under constant observation. There has been no return of the rheumatism, and no cardiac mischief.

CASE IV. *Acute Rheumatism complicated with Old-standing Valvular Murmurs and Recent Pericarditis*.—E. R. was admitted with a fourth attack. The countenance was livid, and the breathing hurried. There was marked pericarditis, and a systolic murmur both at base and at apex. Almost every joint was swollen and painful. There was no orthopnoea. On June 11th, the patient was packed for six hours. She drank freely of warm milk and water, with six ounces of brandy. Temperature before the packing, 101.8 deg.; during the pack, 103.2 deg.; pulse, 120; respirations, 36. On June 12th, the patient was quite free from pain, except in the finger-joints and muscles of the

back. The pericardial murmur was less marked, and the profuse sweating had completely subsided. She was packed for four hours. Four ounces of brandy were given. Temperature before the pack, 100.6 deg.; during the pack, 101.4 deg. On June 13th, she was markedly improved. The pericardial friction-sound had quite disappeared. There was no effusion. She was packed for two hours. Three ounces of brandy were given. Temperature before the pack, 99.8 deg.; during the pack, 100.4 deg.; pulse, 96; respirations, 32. On June 14th, she was quite free from pain, and could sit up in bed and move the limbs freely in any direction. There was considerable hypertrophy, with dilatation of the heart. The apex reached the seventh rib. There was a systolic murmur heard over both the aortic and the mitral valves. The livid appearance of countenance and the dyspnoea had both disappeared. Temperature, 99.2 deg.; pulse, 84; respirations, 32. On June 15th, she was comparatively convalescent. It will be seen that the ratio of respiration to pulse was in excess of what it ought to be; but the breathing was not urgent or laboured. She was ordered a mixture of quinine, digitalis, and steel. Pulse, 76; respirations, 32. On June 16th, she was quite convalescent from the rheumatic attack. She was, however, weak, and moving hurriedly increased the action of the heart, and gave rise to dyspnoea.

CASE V. *Acute Rheumatism complicated with Endocarditis, Mitral Systolic Murmur, and Basic Pneumonia*.—W. C., aged 16, was seized with rigors on May 16th, and came under my care on May 22nd. There was acute pain in every joint, with general myalgia. Pneumonic crepitation was heard at the bases of both lungs posteriorly. The breathing was dry and harsh, with coarse crepitant rhonchus. There was distinct pleuritic rubbing over the left lung anteriorly (lower lobe). There was a confused intraventricular murmur, as well as a fine systolic whiff, at the heart's apex. On May 22nd, the patient was packed for six hours. He drank freely of warm milk and water, with three ounces of brandy. Temperature before the pack, 102.2 deg.; during the pack, 104.2 deg. Pulse, 140; respirations, 40. On May 23rd, he was quite free from pain. The dyspnoea continued urgent. He complained of feeling stiff all over. Sour sweating still continued. He was packed for four hours, and drank three ounces of brandy, with warm milk and water. Temperature before packing, 101.8 deg.; during the pack, 103.6 deg. Pulse, 132; respirations, 40. On May 24th, he had markedly improved. The anxious expression of countenance was quite gone; and there was much less dyspnoea. A clear mitral systolic murmur was heard at the apex of the heart. He could move his limbs freely in any direction. He was packed for the third time for two hours. Two ounces of brandy were given with warm milk and water. Temperature before packing, 100.6 deg.; during the pack, 102.4 deg. Pulse, 120; respirations, 32. May 25th.—Pulse, 100; respirations, 32. On May 26th, the rheumatic poison was quite eliminated. Temperature, 100; pulse, 94; respirations, 28. On May 27th, he was nearly convalescent. He was ordered to have three ounces of brandy daily, in order to lessen the formation of urea. Temperature, 99.2 deg.; pulse, 100; respirations, 22. On May 28th, he was convalescent. The temperature, respirations, and pulse were normal. This patient has been constantly under my observation until the present time. The mitral systolic murmur is still persistent.

CASE VI.—*Acute Rheumatism: no Complications*.—J. R. was admitted with all the signs and symptoms of acute rheumatism. Every joint was acutely painful, and on this account she was unable to move a limb. There was an endocardial murmur, not confined to any especial set of valves. Respiration was dry, harsh, and hurried. On May 18th, she was packed for six hours, and drank freely of warm milk and water. No stimulant was given. Temperature before packing, 101.6 deg.; during the pack, 103.4 deg. Pulse, 118. On May 19th, she passed a comfortable night; but had flying pains about the joints. The sour rheumatic smell was very marked. She was packed for four hours. No stimulant was given. Temperature before the pack, 100.8 deg.; during the pack, 102.2 deg. Pulse, 120. On May 20th, she was improving. Although the freedom from pain was absolute, yet the other symptoms of the rheumatic state were well marked. The tongue was furred; the urine scanty, high-coloured, and loaded with lithate. She was packed for two hours. Four ounces of brandy were given. Temperature, 100.4 deg.; pulse, 116. On May 21st, the brandy, with the packing of the previous day, had had a good effect. The patient was cheerful; could sit up in bed, and move her limbs with freedom. The urine was more copious. There was no profuse sweating or sour smell. Temperature, 99.4 deg.; pulse, 100. On May 23rd, the rheumatic poison had been completely eliminated. The respirations and heart-sounds were normal. No other medicine was given in this case than a saline purge. Temperature, 98.2 deg.; pulse, 78.

These are six fair average cases from among many (at least thirty) which I have submitted to the packing method; and, with the

exception of one case, none failed of success. I hope the treatment may be tried at the various hospitals, as I feel sure that the statements contained in my paper will thus be verified. I can well remember the time when acute rheumatism was said to be of six weeks' duration under any treatment. And it comes to be a question whether the type of this disease has not altered within the last twenty years. Of this I am certain: that the constitution or age of the patient does not so much influence the duration of the disease, as the season of the year and state of the atmosphere. I have repeatedly observed that, if a patient with acute rheumatism in one ward have a relapse, it invariably follows that patients in other wards are similarly influenced.

To carry out the treatment without failure, the prescribed regulations must be strictly adhered to. For instance, to pack a patient at first for two or three hours has been found, in my experience, to be worse than useless. Revulsion must be started; the skin must be made to act freely, and the temperature must be raised. When this is done, the inhibition of the vaso-motor centres will be relieved, the impeded action of the secretory glands will be removed, malassimilation will be remedied, and morbid material will be eliminated. My treatment is, in fact, a mode of assisting nature.

REMARKS ON TROPICAL FEVERS.

By W. T. BLACK, F.R.C.S.Ed., Surgeon-Major, Edinburgh.

WHEN stationed at Hong-Kong, a few years ago, I witnessed an epidemic of tropical fever, accompanied with cholera, dysentery, and hepatitis; there was a great sickness and mortality amongst the troops there in consequence.

Enlarged spleens were found common in nearly all fatal cases of intermittent fever, sunstroke, and other diseases; and enlargement of the liver was nearly as frequent, especially in remittent fevers and dysentery. These two organs seemed, therefore, to act as banks in the body, in which were stored up deposits of malaria and miasmata, which increased till the accumulation seemed, as it were, to reach an explosive tension. Then some exciting cause permitted the stored up poison to inundate the system, producing fever probably from the efflux from the spleen, and dysentery from that of the liver.

The remains left in the organs, after a recovery from an attack of fever, may probably make another attempt to break forth into the system, when a relapse of fever would be likely to be the result. Hence it might be conjectured that relapses would be liable to recur, till the spleen and liver had finally got rid of all their malarial and miasmatic contents.

It may be considered very likely that the infection of tropical fevers may be conveyed into the system, as much by the stomach imbibing bad water, as by the lungs inhaling bad air. This may be inferred from the much greater frequency of affections of the liver and spleen, than of the lungs and heart, and their consequent reactionary effect on the large and small intestines.

Regarding the medical treatment at the time of invasion, quinine seemed to be of more value in intermittent fevers than in remittent, where calomel and arsenic proved of better use.

In the after constitutional treatment, at home, of invalids from tropical countries, I am inclined to recommend a course of the warm mineral baths of Bath, where there is first-class accommodation and appliances, both for the wealthy as well as for the lower classes. I am much surprised that the excellent Mineral Water Hospital there has not been utilised more for the benefit of soldiers, marines, and sailors, who have suffered from the sequelæ of diseases contracted in tropical climates. These waters, from their containing iron, do not debilitate, but rather strengthen, the skin, when used for warm bathing; and the gases which they contain in combination render them, with their warmth, light and exhilarating to drink.

The German Government have established at Wiesbaden a fine mineral-water-hospital for the use of the invalids of the Imperial Army, free for private soldiers, and officers paying their messing, which I have had the privilege of visiting; and it appeared to be furnished in the best of modern comfort, and to be fitted up with the newest appliances for treatment.

The physical causes of tropical fevers continue to exist as effective as formerly at Hong-Kong; for, if the marshes be drained, the mud still remains to evolve malaria when called upon, and, in addition, there is an immense increase in the deposit of sewage on the hill-sides from the increase of the Chinese population, to generate miasmata.

The debatable question concerning the origin of morbid vapours from the *laterite*, exposed in excavating for the foundations of new houses, admits of explanation, from its being so porous that it is something like

a mineral bog, which exhales, under exposure to a tropical sun, all the mephitic moisture it had already absorbed.

In regard to the chilly doctrine of Drs. Oldham and Inman, it may be remarked, that the daily range of temperature is far greater at the Cape of Good Hope, where fevers are absent, and cold nights are common, than at Hong Kong, where fevers are endemic, and sleep is nearly impossible from the heated air, in the summer months. The contrast of the climates of these two places, at that season, is remarkable; the ozoniferous south-east winds, in the summer, at the Cape, blow from the circumpolar latitudes dry and cool, whereas the south-west monsoons at Hong-Kong breathe hot and moist from the simmering China seas, laden with the distilled vapours from the coast lagoons.

A CASE OF PAROXYSMAL FEVER CAUSED BY DISTURBANCE OF THE SOIL:

WITH SOME OBSERVATIONS IN REPLY TO DR. INMAN.

By P. DIVORTY, M.B., L.R.C.P.Edin., Inverurie, Aberdeenshire, Late 11th Regiment, and Honorary Physician to the Carlisle Dispensary, etc.

IN submitting the following case, I do not propose to "stand forward"—to use an expression of Dr. Inman's—in behalf of Dr. Maclean, as that gentleman has already shown that he is quite able to defend himself; but simply to furnish a case of malarious fever of which the soil, and nothing but the soil, could have been the cause.

I may state at once that, in this case, I was not only an observer, but a sufferer; and that, unlike Dr. Inman, I have had considerable experience of malarious fevers in Hong Kong and elsewhere, although, fortunately for myself, I had escaped an attack of it until the autumn of 1872. In October of that year, I took on lease a newly-built house in Portland Square, Carlisle, where the soil had recently been disturbed, not only for building purposes, but also for making a new street along the front of the house, as well as a road and small garden at the back. I accordingly sent a maid to keep fires constantly burning in every apartment till the house was thoroughly dried; and, inasmuch as the house was one of the best in Carlisle—having been constructed under the personal supervision of an architect of at least local eminence, with all the sanitary arrangements complete—I could not have anticipated an untoward result on my taking possession in November. On the first night of my sleeping in the house, I was struck down by a severe attack of paroxysmal fever; though, properly speaking, I was not living in a malarious district, had in no way been overheated by violent exercise or otherwise, nor had been in any way chilled. The fever, which lasted nine weeks, was marked by the shortness of the cold stage, the length of the hot, and the number of paroxysms occurring in one day, as well as by the singular circumstance of the strict limitation of the malarial influence to the house and so many yards around it. So well defined was the limit of its operation, that I could at any time stop a paroxysm by going a certain distance from the house; and invariably did I feel its influence on returning within the tainted area, as a paroxysm supervened the instant I entered the house, which appeared to be the very focus of the malarial atmosphere around, from the air outside being sucked into the warm house.

My prolonged suffering was no doubt owing, in part at least, to the failure of quinine from irritability of the stomach and vomiting; but the disease yielded eventually to the administration of liquor potassæ arsenitis combined with morphia.

Such, then, having been the circumstances under which I suffered so intensely, it is incomprehensible to me how either the "chill theory" of Dr. Oldham, the "electrical conditions" of Dr. Munro, or the "hot days and cold nights" of the Indian colonel, or any combination of them, could, by any amount of straining, be made to grasp the train of symptoms I have enumerated; and therefore I ask a second time the question which caused so much merriment to Dr. Inman—the question, namely, If the soil in the above case did not cause the disease, what did?

The first thing that will naturally strike anyone who looks carefully over Dr. Inman's communication to the *BRITISH MEDICAL JOURNAL* of January 2nd, will be the meagre amount of proof, if any, which he brings forward in support of the "chill theory" of Dr. Oldham; for it will be seen that his contention is: 1. That, because Dr. Oldham tested the malarious theory by sleeping on a bed placed in a marsh, and did not get the fever in that way, but by getting chilled in a room cooled by a punkah; 2. That, because only those suffer from disturbance of the soil who work hard at digging it up under a hot sun, and who get chilled by the cold at night; 3. That, because an Indian colonel