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