

duced, and the wound dressed. After the operation the patient rallied, her symptoms having been decidedly relieved; but after a time the vomiting returned, and she gradually sank, dying in twenty-four hours.

CASE 2. *Obscure abdominal symptoms and death, caused by localised enteritis set up by a fish-bone.*—M. W.—, aged seventy-one, the subject of chronic bronchitis, was as well as usual until Feb. 5th, when she complained of indefinite pains. These becoming worse, she was first seen on the 7th. Defective articulation made it difficult for her to describe her symptoms; but she was suffering from pains in the abdomen, which region, however, was neither distended nor very tender. The temperature was 98.4°, the pulse 100, and the tongue a little furred. A calomel purge, sedative mixture, and hot fomentations were employed. On the following day the bowels were relieved, but there was slight abdominal distension, with some tenderness. The temperature was normal, but the pulse was 110. On the 9th the abdomen was more painful, vomiting set in, and she died rather suddenly, probably from syncope, ninety hours after the first onset of symptoms. On opening the abdomen post mortem, a discoloured portion of bowel eight inches in length was found at the junction of the jejunum and ileum. The central four inches of this were acutely inflamed and somewhat indurated, but not at all gangrenous. The sharp end of a small fish-bone ($\frac{3}{4}$ in.) was projecting through the wall of the bowel into the peritoneal cavity, and this had originated the mischief. The large intestine was occupied by hard faeces, and in the descending colon a large fish-bone (2½ in.) was discovered travelling safely. The small intestine contained a large quantity of a chymous fluid, which looked very much like pus, but under the microscope it showed vegetable debris—starch granules and stray phosphates. There was no fluid or lymph in the peritoneal cavity, nor other sign of peritonitis, except slight hyperæmia in the immediate neighbourhood of the inflammation.

The age of this patient and the existence of subacute bronchitis precluded the advisability of resorting to operation; but if in a similar case in a younger subject an exploratory operation were performed, the foreign body irritating the bowel might readily be detected and removed, the bowel itself dealt with, and a chance of recovery afforded. It is interesting to note that the fish-bones had escaped digestion, and that the larger bone was travelling safely in the midst of a mass of faeces, whereas the smaller one, happening to be in a portion of the bowels where the contents were fluid, was arrested by contact with the wall of the bowel, exciting local inflammation in and penetrating through it. This fact favours the administration of astringent rather than purgative medicines after the accidental swallowing of foreign bodies.

Referring to Case 1, it is reasonable to suppose that, had its nature been clearly recognised at an early stage, before the occurrence of acute peritonitis, an operation such as the one performed might have been accomplished without further injury to the peritoneum, and with a fair prospect of success; or even at the later stage, when first she came under my care, before the iliac swelling was detected, if the abdomen had been boldly opened, the pus might have been evacuated, the abdomen thoroughly cleansed, free drainage established, and recovery hopefully looked for. But, on the other hand, what would have happened had the surgical treatment been left alone? Could not life have been sustained long enough by nutrient enemata &c. until the near approach of the abscess to the surface allowed a safe incision? Cases of perityphlitis are readily recalled to mind where, after patient waiting, the swelling has made its way to the surface, and a simple incision has ended in recovery. But in these cases the peritoneal complication is usually of a milder type, and so they compare unfairly with the above.

The treatment of acute abdominal disease, now that surgery claims a part in it, is surrounded by difficulties, especially to the general practitioner. The consequence of an unsuccessful operation to him is of much importance; but still no operation must be shirked which promises to relieve suffering and prolong life, and still more should he avoid operation where such is not necessary to recovery. Modern surgery lessens the risks of these great operations, but how must the cases be decided in which it is justifiable to perform them? If an operation be delayed until after the failure of medicine the prospects of successful surgical interference are greatly minimised, whereas if a much larger proportion of the cases are treated surgically many will have

to submit to an operation which would have recovered without. Every week cases of acute abdominal disease come under notice—some mild, others most severe, and the larger proportion by far recover. Even the most violent case is not without hope. That being so, the responsibility of advising an exploratory operation is indeed very great, and the practitioner at present looks in vain for some standard rules to guide him. More accurate and detailed observation of the course and symptoms of these diseases, and the cultivation of the art of more minute diagnosis, must eventually make it possible to differentiate between those cases which will yield to medicine alone and those which demand the assistance of surgery. Meanwhile, it might be a good rule for guidance to imagine ourselves to be the patient, and to operate accordingly. It is hoped that the above cases may be of use to those who are working at the subject.

Manchester.

NOTES ON ENTERIC AND TYPHO-MALARIAL FEVER.

By SURGEON-MAJOR H. JAGOE, M.S.

THE discussion at the Medical and Chirurgical Society on enteric fever at Suakim, reported in THE LANCET of Feb. 13th, 1886, induces me to forward this communication, with the hope that it may prove interesting.

The cases and necropsies which I give are from notes taken in Zululand, Afghanistan, and India, and the temperature charts attached to elucidate the cases are two out of a very large number that I took to try to clear up the distinction between enteric and what is called typho-malarial fever. I agree with Dr. Squire that the large majority are as clear and distinct cases of enteric fever as those seen in this country, but I doubt very much the advantage of the term "typho-malarial" to express a fever which, to my thinking, is far more fairly expressed by the name "bilious-remittent." As Dr. Broadbent stated, there is nothing typhoid about it, "nothing in common with enteric fever, if we except the fact of a protracted high fever with some intermissions." There is a protracted fever of about forty-six days, with an interval of eleven days, during which there is a total absence of any rise of temperature; or in its course there may be two intermissions. It has been suggested that these are mild cases of typhoid with relapses, but there is not a single symptom of enteric fever about them; on the contrary, they seem to be more of a bilious-remittent type. There is frequently yellow tinging of the skin and conjunctivæ, often vomiting, and the tongue pale, clean, sometimes coated with a yellow fur, and frequently large and indented by the teeth; at no time is there any degree of the red³ irritable, and contracted tongue of enteric fever, or any other mild characteristic symptom of the disease. These are the class of cases that I understand it is proposed to call, or have been called, "typho-malarial." I have never seen a death caused by them, if I except one patient who died during the last march into Candahar on Sept. 18th, 1879. Chart 1 shows the last nine days of the fever; the previous eight days had been spent under the care of the regimental surgeon. The patient was very much in the condition described above when admitted into the field hospital. There was diarrhoea; the upper surfaces of the conjunctivæ were slightly jaundiced; there had been some vomiting; and the pulse was small and weak (about 86); the tongue was moist, large, and indented by the teeth. The man was perfectly sensible and intelligent up to half an hour before his death. In Candahar I could only make a very hurried necropsy, but I found the lower part of the ileum perfectly healthy, not even congested; the liver and spleen were enlarged, but I had no means of weighing them.

The cases above referred to are very different from that shown in Chart 2, which may appropriately be termed "typho-malarial," or, without using this compound, is fully accounted for by Trousseau when he states that enteric fever in its early stage may simulate malarial fever. Here, at all events, was a case of enteric fever in which the morning temperature was normal on the ninth, tenth, and eleventh days of the disease, while in the second week the variation between the morning and evening temperature ran from three to four degrees. The stools were not considered to be like those of typhoid, but on the fifteenth day spots, both rose and blue,

were noticed; the tongue was dry, brown, and cracked, and the nervous stage was well developed; on the twenty-fifth day the man died from intestinal hæmorrhage. The necropsy, contrary to what one might expect from Surgeon-Major Meyer's suggestion, showed Peyer's patches and solitary glands ulcerated for a distance of six feet above the valve; the hæmorrhage came from a patch a few inches above the valve. But I presume this last type of case is not the kind that is called "typho-malarial"; it seems to me that one

climates, are: (1) That enteric fever is in the very large majority of cases as readily recognised abroad as at home. That some cases of enteric fever are masked by malaria, chiefly at the onset, but that some enteric fever symptoms will become prominent at some stage of the disease, and when death occurs the character of the gut lesion will, I believe, disappoint those who expect it to differ from that in the most easily recognised case. I have notes of a case that was not returned as enteric fever, though to my

CHART 1.

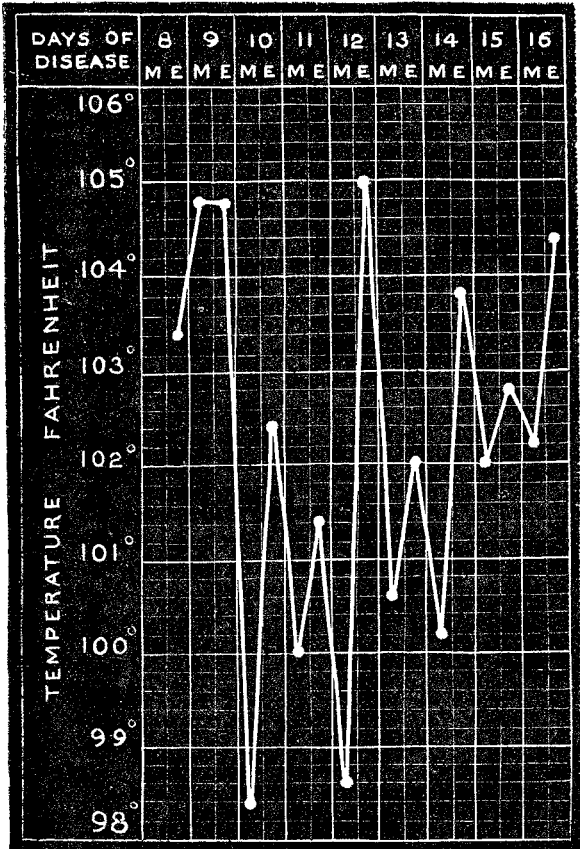
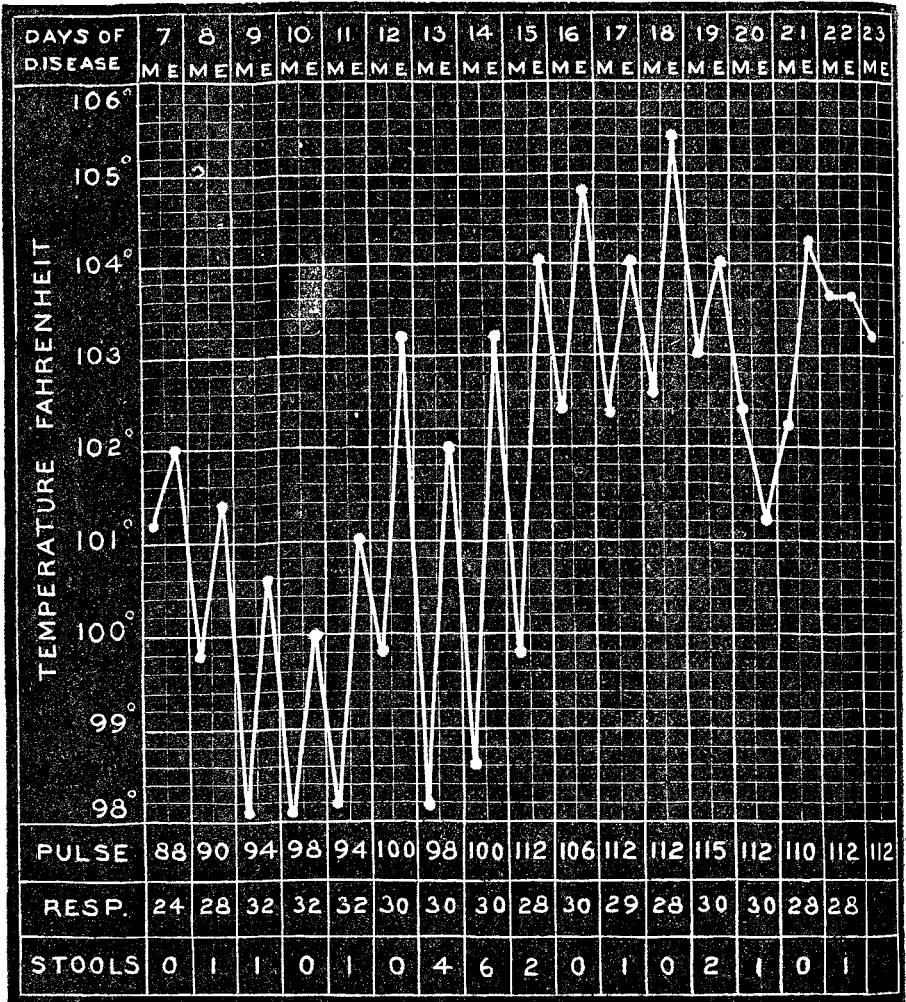


CHART 2.



meets few of them, and the fact that they have been noted renders it almost unnecessary to introduce a new term for them. Surgeon-Major Meyer's remarks are those held by many medical officers in the Army, and are, I believe, to the effect that because some important symptom or symptoms are absent the case cannot be one of enteric fever, and the lesion after death, because it is confined to the lower six inches or so of the ileum, which is thickened and extensively ulcerated, is asserted not to be the ulceration of typhoid. I cannot explain why the ulceration should be so limited; but undoubtedly in some cases it is so, and there is nothing beyond but some degree of congestion.

The conclusions I am inclined to arrive at, after twelve years' experience and notes in tropical and subtropical

thinking some symptoms of the disease were present; during a relapse on the forty-seventh day of the disease phlegmasia dolens of the left leg occurred, which strengthened and verified the belief that it was a case of enteric fever. (2) That what is called "typho-malarial fever" would be more aptly expressed by "bilious remittent." (3) That what I understand by the affection termed "typho-malarial fever" causes almost no mortality; I never saw a death from it in nine years' Indian service.

Londonderry.

AN INQUIRY INTO THE SEVERE SYMPTOMS OCCASIONALLY FOLLOWING PUNCTURE OF HYDATID CYSTS OF THE LIVER.

By LAURENCE HUMPHRY, M.B., ASSISTANT-PHYSICIAN TO ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

It is a familiar fact that an outbreak of urticaria or an erythematous rash not uncommonly appears on the skin of patients a few hours after puncture or tapping of a hepatic hydatid cyst. This may be the only discomfort experienced, but occasionally symptoms of an urgent nature, or even fatal, occur within a few minutes after the most simple operation on these cysts. An instance in which the symptoms were very alarming, occurred in a patient lately under my care in Addenbrooke's Hospital.

G. S.—, a tailor, aged twenty-three, living at Newmarket, was admitted on July 14th, suffering from well-marked jaundice, and with a painless enlargement of the liver. The upper limit of dulness was at the fourth rib, and the lower border of the liver could be felt a hand's breadth below the ribs. In order to clear up the diagnosis, a hypodermic needle was inserted at the eighth interspace in the mid-axillary line, and half a drachm of clear hydatid fluid drawn off. The patient hardly felt the puncture, but a few minutes after he was seized with extreme faintness and dyspnoea, his face became livid and pale, and his lips blue; he vomited two or three times, and the pulse failed at the wrist; his extremities became cold, and the heart sounds were almost inaudible. Stimulants were given and a sinapism applied over the heart, but he remained in this collapsed condition for nearly half an hour. A profuse irritable urticaria then appeared on the abdomen and legs, and on the extensor aspect of the arms. The chest and face were free from eruption, but were covered with a copious sweat. The rash persisted for a few hours, then gradually subsided, and the