epidemic, especially as regards bronchitis, and we are now armed with a powerful weapon to ward off these complications. The supply is scarce, and every chance should be taken to supplement it. It would seem that the best time to take the blood is two weeks after the temperature has fallen. Most fever hospitals will supply collecting outfits and carry out any necessary tests on the blood when received, and they welcome any addition to their stock.

Summary

1. An epidemic is described with an attack rate of 100 per cent.
2. Attenuation was obtained by 5 c.cm. of convalescent serum in twenty-one cases, and an entire absence of cough and toxæmia resulted.
3. Appendicitis and albuminuria occurred as complications in the non-protected cases.

NEEDLES IN FEET

A METHOD OF REMOVAL IN DIFFICULT CASES

BY

ERIC I. LLOYD, M.B., B.Ch., F.R.C.S.

ORTHOPAEDIC SURGEON TO THE ROYAL NORTHERN HOSPITAL ; SURGEON
TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET

Attempts to remove a needle from a foot or hand have humbled many a young surgeon who light-heartedly embarked on this procedure in the casualty department without a tourniquet or a general anaesthetic, but with a

wires. An incision is then made which will give the best approach. The wires are left in position until the foreign body has been extracted and they are then removed.

Case I (Fig. 1)

A man of 73 (referred to me by Dr. M. Coburn) had run a needle into the heel of his left foot forty years previously. There had been no serious trouble from it until three weeks before I saw him, but during those three weeks he had so much pain that he walked on his toes to spare the heel. At operation the fragment, half a centimetre long, was easily found by the aid of two Kirschner wires and radiography. It was partially embedded in the under surface of the os calcis, and the projecting end had been the source of the pain.

Case II (Fig. 2)

A youth aged 18 had run a needle into his right heel three months previously, and had undergone two unsuccessful operations for removal. By means of two Kirschner wires and x -ray control a fragment of needle, two and a half centimetres in length, was found and removed.

Case III (Figs. 3 and 4)

A boy of 14 had run a needle into his foot, and an unsuccessful attempt had been made to remove the fragment. Six weeks later it was easily located and removed by the two-Kirschner-wire method under x -ray control.

The following points should be noted:

1. Reopening a recent operation wound is a frequent cause of sepsis in these cases. It is probably wiser to work through a fresh clean incision or to wait some weeks after the last operation, or both.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

F.B. = Needle fragment. W1 = Kirschner wire in sagittal plane. W2 = Kirschner wire in coronal plane.

little novocain and a lot of hope. The author, when a house-surgeon, soon learned that it was wiser to admit these patients to the ward in the expectation of somebody else having to do the operation. Nowadays a shock-proof portable x -ray apparatus ought to be available in every theatre, and it is partly in the hope of speeding on the millennium that these three cases are recorded.

In each instance there had been at least one previous attempt at removal of the fragment, and in Case I it had been undisturbed for forty years and was partly embedded in the os calcis. By the simple method about to be described, however, the three cases were each dealt with at one sitting and the fragment successfully extracted.

The operation is performed under general anaesthesia and a tourniquet. Two fine Kirschner wires are passed through the foot at right angles to one another and in such a way that they cross close to the foreign body. Next an x -ray photograph is taken in two planes, and the foreign body thus localized in relation to the two

2. A Michel's clip should be placed on one Kirschner wire near the skin to facilitate interpretation of the skiagram.

3. Although x -ray photography takes a little longer than screening, it is probably the better method in these cases.

The tenth Congress of the German Society of Tropical Medicine will be held on June 2nd and 3rd in the Institut für Schiffs- und Tropenhygiene, Hamburg. The main subjects for discussion will be sequels of malaria in the war, amoebic dysentery and its sequels, yellow fever, and the present position and future prospects of research. Notifications of papers to be read should reach Professor Nocht, Bernhard Nochtstrasse 74, Hamburg 4, before May 1st. The monthly organ of this society entered its fortieth year on January 1st, and will be entitled henceforth the *Archiv für Schiffs- und Tropenhygiene*. Professor Nocht contributes a preface to the first issue of the new volume, indicating the new developments which are contemplated.