obtained by means of x rays. We purposely did not employ x rays in our case as we wished to try the pure antimony treatment alone.

That the treatment by antimony alone may succeed is thus proved, and this is saying a great deal, as granuloma up to the present time has been a most intractable disease. In the present instance it meant much to the patient, as otherwise, apart from x rays, there was nothing left but amputation of the penis.

A judicious combination of x rays and antimony injections might be worthy of trial, and might shorten the length of the treatment, which is, of course, very prolonged, and requires a fairly long stay in a hospital. After it was seen that the injections did not cause the patient any great inconvenience, however, he was allowed up the day after the injection, and only took to bed again just before having the next.

It is, perhaps, too early to say yet that relapse may not occur in this case, but the places are so perfectly covered with new epithelium that it seems by no means likely. Workers in the tropics meeting with such cases should certainly try this new treatment, as much useless suffering can be saved, and distinct hopes of a cure can reasonably be held out, especially if the case is seen at an early stage of the disease.

LAMBLLIA INFECTIONS IN MEN WHO HAVE NEVER BEEN OUT OF ENGLAND.

BY
A. MALINS SMITH, M.A., F.L.S.,
AND
J. R. MATTHEWS, M.A. EDIN.

IN view of the prevalent idea that infections of *Lambllia intestinalis* are associated with residence abroad, it may be of interest to record the occurrence of this flagellate in two soldiers who have never been out of England. These cases were discovered by us in the routine examination of stools conducted at the Liverpool School of Tropical Medicine.

CASE I was that of a non-commissioned officer who joined the army in August, 1914. Owing to gastric trouble he proved unfit for service abroad and had ultimately to be treated in hospital for gastric ulcer. While under treatment his stool was examined and was found to contain the cysts of *Lambllia intestinalis* in fair number. The patient had previously suffered slightly from diarrhoea. Before he joined the army he was a clerk and had never been out of England. We have been unable to follow this case further, as the patient has been discharged.

CASE II was that of a man called up to join the army on June 5th, 1915. He had six weeks' training and then entered hospital to be treated for diarrhoea. Before he joined the army he was a farmer in Shropshire and had never at any time been out of England. He suffered from diarrhoea at irregular intervals for twelve years. During the more acute attacks he passed four or five or even more stools daily. This diarrhoea was very liable to follow exposure to cold. His stool was found to contain on three successive occasions while he was in hospital many *Lambllia* cysts. This case is being kept under daily examination.

CASE III.—In addition to these two cases relating to soldiers, mention may here be made of the case of a sailor whose stool contained cysts of *Lambllia intestinalis*. As this man has only been out of England for two days, which were spent in Holland, he comes almost into the same category as the two previous cases. Before the war he was a fisherman in the North Sea, and it was during this period that he spent two days in Holland. At the outbreak of war he joined the navy, and was somewhere in the North Sea. He was sent from his ship into hospital suffering from cardiac and gastric trouble. Two examinations of his stools were made. In the first, *Lambllia* cysts were found in very large numbers along with a few free *Lambllia* flagellates. In the second, cysts were still very numerous, but no free flagellates were found. The man recovered from his ailment and was discharged from hospital so that we were unable to follow the case further.

The interest of these cases lies for us in the fact that certainly in the first two and almost certainly in the third the infection of *Lambllia* was contracted in England. As to the probable date and circumstances of the infection, and as to the possible or probable connexion of the *Lambllia* infection with the attacks of diarrhoea we do not make any observations, for on these points the facts at our disposal afford no evidence. It may be observed that it is almost impossible now, and will shortly become quite

impossible, to offer any evidence as to whether *Lambllia* is indigenous in England. The presence of the very numerous cases of returned soldiers carrying *Lambllia* will make it impossible to state whether any future case is of native origin.*

We publish this note at the suggestion of Professor J. W. W. Stephens, whose interest in this work we take the opportunity of acknowledging.

A CASE OF INTRAUTERINE SCARLET FEVER.

BY
R. M. LIDDELL, M.B., CH.B. EDIN.,
AND
C. E. TANGYE, M.D. LOND., D.P.H.,
RUGBY.

DURING a recent small village outbreak of scarlet fever in the practice of one of us a case of rather unusual interest occurred under the following circumstances:

Four of the five children of Mrs. B. developed scarlet fever and were removed to the isolation hospital on May 26th. Mrs. B. was expecting to be confined at any time, and was therefore warned to keep away from the children as soon as the first suspicion arose as to the nature of their illness. No doubt, however, some contact took place prior to May 25th and especially whilst the children were in the incubation stage.

Mrs. B.'s child was born on June 6th, and after a thorough washing, which removed all traces of lanugo, was found to be desquamating freely over the whole of the trunk and limbs. The desquamation continued for several days, and the urine showed distinct traces of albumin. Apart from these two features, the child appeared perfectly healthy and is now quite normal. These features were so typical that we agreed on the desirability of notification of the case as one of scarlet fever.

Mrs. B. had been rather unwell during the last week or so of her pregnancy, and complained of a "burning pain inside." She had no sore throat or rash, and her temperature was normal. She is positive that she had a severe attack of scarlet fever when about 10 years old, and describes the desquamating stage vividly.

It would seem that the fetus was infected *in utero* some time prior to May 26th, but that the mother escaped infection through the protection of her previous attack. Presuming the fetus to have been infected from the children of the family, the period elapsing between the infection and the peeling stage must have been only about a fortnight. But as other cases of scarlet fever were present in the village previously with whom the mother may have had direct or indirect contact, one cannot definitely conclude that the course of the disease in the fetus was unusually short.

There does not appear to be a great deal of literature on intrauterine scarlet fever. Galabin states that it has been inferred that the disease may be conveyed to the fetus *in utero* because the child, at or shortly after birth, has sometimes shown desquamation of the skin or other sequelae of the disease.

Goodall says that it is extremely doubtful whether infants have been born suffering from the disease, but they may become affected within a few days or weeks of birth.

Osler's statement that sucklings are rarely attacked is borne out by our common experience. It is a usual practice when a nursing mother contracts scarlet fever and cannot be properly isolated at home, to send mother and infant to hospital. No infant so admitted locally has contracted the disease.

Whilst the rarity of the condition may be somewhat against the diagnosis in this particular case, the clinical facts were so striking that it seemed to us worthy of note.

* Fuller particulars of these and other cases of interest occurring in our investigations will be published later in the *Annals of Tropical Medicine and Parasitology*.

THE California State Board of Health is conducting, in co-operation with the University of California, a malaria mosquito survey under the supervision of Professor W. B. Herms, Consulting Parasitologist to the State Board. The work began on May 10th, and was continued through the summer. Probably three summers will be required for a complete survey of the State. Thus far endemic malaria has been found at a maximum elevation of 5,500 ft., and anopheline carriers have been located. Two or three new species of mosquitos have been found.