

as those recorded by Dr. John Fraser (BRITISH MEDICAL JOURNAL of April 12th). Dr. Fraser does not deny that joints and bones may be attacked by the human bacillus, but contends that under the age of 3 years the disease in these parts of the body is generally of bovine origin. His conclusion rests upon the belief that the tests given as to differences between the bovine and human bacilli are absolutely reliable. The greatest confidence is placed upon the difference of virulence of the bovine and human bacillus towards the rabbit. The bovine bacillus is said to kill the rabbit comparatively quickly, while the human bacillus has little effect. Apparently tubercle bacilli obtained from children under the age of 3 years much more often than not killed rabbits quickly, and on this result mainly it is concluded that the tubercle bacillus found in young children is generally bovine.

Such a conclusion ignores what may be described as the peculiarities of the human body as a culture medium. It assumes that the human body may be considered to act in a uniform way towards bovine and human bacilli at all ages, and that the only differences to be noted are those observed as the result of experiments outside the body. That is to say, although we know the human body in early life to be, in the majority of instances, a much better culture medium for the bacillus than in later life, for laboratory purposes a bacillus derived from the human body when outside the body is assumed to act in the same way whether derived from a body favourable or comparatively unfavourable to its growth. Such an assumption seems open to question. Can we assert that the tubercle bacillus during growth in the body at an early age does not acquire certain qualities in consequence of the character of the medium in which it has grown? We want to know whether tubercle bacilli obtained from babies, such as those in China, who cannot have been infected with bovine bacilli, will not kill rabbits as readily as bacilli obtained from babies in Edinburgh.

However that may be, if bovine and human bacilli possess such marked differences in virulence that one will kill a rabbit and another will not, then in a sensitive medium, such as is provided by the tissues of a baby, we ought to expect some marked differences in the behaviour of the two types of bacilli.—I am, etc.,

Sidecup, April 12th.

THEODORE FISHER.

SYPHILIS AND CANCER OF THE TONGUE.

SIR,—In your issue of the 12th inst. there is an interesting communication from Dr. Arnold Renshaw, in which he refers to a lecture of mine recently published in the BRITISH MEDICAL JOURNAL.

My point is that, as a result of investigation of cases of tongue cancer which have come under my observation, 80 per cent. have given a previous history of syphilis, and in the majority of these cases there have been marked syphilitic lesions of the tongue present.

One would therefore conclude that in the greater number of these cases a positive Wassermann reaction would be found, and such in fact has been our experience at the Cancer Hospital. I have referred the matter in Dr. Renshaw's letter to Dr. Archibald Leitch, the pathologist to the Cancer Hospital, and he writes:

In the last seven cases of tongue lesions which were operated on and which were clinically and histologically malignant, five gave a positive reaction. The method employed was that of Browning and MacKenzie, which is the most critical of all the methods used.

Every serum was tested separately with two different complements, not less than eighteen and not more than twenty-four hours old. The advantage of this duplicating of the complements was evidenced by the fact that one particular complement used on two serums tested on the same day was supersensitive, whilst the other complement was not.

I may add that I regard a positive Wassermann reaction as indicative of syphilis; but it does not exclude cancer.—I am, etc.,

London, April 22nd.

CHARLES RYALL,

SIR,—With regard to the interesting relationship between syphilis and cancer of the tongue on which you have recently thrown a good deal of light, it may be of interest to recall that Mr. Clement Lucas used to teach us that the three great causes were the three S's—syphilis, smoking, and salivation. In his opinion the stomatitis of

greater or less degree resulting from the prolonged use of mercury—needful though it was—was a factor which could not be neglected when summing up the various forces at work.—I am, etc.,

Southsea, April 18th.

M. ASTON KEY.

TUBERCULOSIS OFFICERS, SCHOOL MEDICAL OFFICERS, AND THE MEDICAL OFFICERS OF HEALTH (SUPERANNUATION) BILL.

SIR,—From all parts of England and from the North of Scotland replies to my letter in your issue of April 12th have reached me. Every one of them strongly urges the necessity of including in the bill school medical inspectors and tuberculosis officers. Widespread discontent with the remuneration at present offered, especially to school medical inspectors, is almost invariably shown in these replies. Those who have written have also brought the bill to the notice of their member of Parliament.

To the following gentlemen I have sent the appended letter: Sir Philip Magnus (presenter of the bill), Sir Henry Craik, Mr. Lough, Mr. Charles Bathurst, Sir Henry Norman, Mr. Godfrey Locker-Lampson, and Mr. Glyn-Jones, supporters of the bill.

A copy has also been sent to the Secretary of the Society of Medical Officers of Health, and to the Secretary of the British Medical Association, and to Dr. Addison.

Dear Sir,—I have the honour to request your attention to, and consideration of, the following amendment, which I hope you will see has a strong claim for insertion in the bill during the Committee stage:

Amendment.—That the words "medical officers of health" in the title and throughout the bill include "school medical inspectors and tuberculosis officers."

Reasons.—1. Medical inspectors and tuberculosis officers have salaries ranging on the average from a fourth to a half of that paid to medical officers of health.

2. Being whole-time officers, they are precluded from augmenting their salaries by engaging in other work.

3. About three out of every four medical inspectors and tuberculosis officers will not receive promotion from their present position, because their numbers are so much greater than those of medical officers of health.

4. They form the junior branches of the Public Health Service.

5. All the arguments adduced in the bill in favour of public health officers apply in the case of medical inspectors and tuberculosis officers.

—I am, etc.,

ALEXANDER GRAHAM,
School Medical Inspector, West Ham, E.

London, E., April 21st.

THE NEGLECT OF VACCINATION.

SIR,—I have to thank Dr. Killick Millard for the lucid statement of his case in his letter of April 7th. I admit that efficient infantile vaccination is by itself insufficient to check the spread of imported small-pox and to make small-pox hospitals unnecessary. In the absence of re-vaccination, and with the prospect of vaccination becoming optional and of emergency vaccination (limited by lymph supply and time and lay persuadability) being carried out, we must hope that the community may have less small-pox than can be reasonably foreboded.—I am, etc.,

Brent Knoll, April 14th.

J. W. PABILLON, M.R.C.S.

THE "MILWARD FUND."

SIR,—A fund under the above title has been started in Cardiff to assist the widow and three young children of the late Dr. Courtenay Milward, who are left practically without means.

Reference to the manner of Dr. Milward's death is made in your obituary columns, and the members of the profession in Cardiff and district feel that it is their duty to do all that they can for those he has left behind. The fund is open to all, medical and lay, and donations will be gratefully received by the undersigned.—We are, etc.,

WILLIAM SHEEN,
2, St. Andrew's Crescent, Cardiff,
Honorary Treasurer.A. L. THORNLEY,
18, Windsor Place, Cardiff,
Honorary Secretary.