

improving under treatment); but if tubercle bacilli are found in the sputum it is still active. If they are not found the test is inconclusive, and one must decide the question of activity on other evidence. Is this the view of most tuberculosis physicians? Please let us have a generally accepted definition of activity before the word has lost all meaning!—I am, etc.,

Westminster, S.W.1, July 28.

LAWRENCE ROBERTS.

Carriers of Tuberculosis

SIR,—Dr. E. Fraenkel in his letter (June 21, p. 946) does not like the term "tuberculosis carrier" as advocated by Dr. James Maxwell in his paper (May 3, p. 665). To my mind the term is admirable. It may not be correct pathologically, but from a public health standpoint it has tremendous propaganda value, and the detection of tuberculosis could do with some propaganda.

I would go further than Dr. Maxwell and include in his unsuspected carriers all those undiagnosed adult men and women who have very chronic cavities in their lungs and daily expectorate tubercle bacilli in their homes and factories. These people—apart from a productive cough which they call "bronchitis" or "catarrh" or a "smoker's cough"—seldom complain of anything else and rarely seek medical advice. After many years, and if the disease progresses, other symptoms appear and they are eventually diagnosed, or maybe haemoptysis brings the disease to light. But in the meantime these people have infected one or more members of their families, and perhaps other home or work associates.

Tell the public that a person can "carry" tuberculosis without feeling ill, and that he can infect and kill others (with poor resistance) and go on living himself. The fear of what an x-ray examination will show prevents many people from being x-rayed. I think they would readily submit to x-ray examination which might show them to be "carriers" (with the possibility of future breakdown) and not a "real" consumptive, like So-and-so, who has died of the disease. Having prepared the ground thus, the examination of contacts of young persons with tuberculosis (of probable human origin) must not rest with x-ray examination of other young persons in the home. Parents and other adult members of the family must be x-rayed, and, where there is a productive cough, sputum be investigated. If the results are negative, then the carrier should be sought at school, workshop, office, church, etc. The carrier does not necessarily require institutional treatment, especially in these days of limited accommodation. Tuition on the prevention of infecting others can be taught at the dispensary. Work can be continued if the only symptoms are cough and sputum, and the evening temperature and B.S.R. are normal. Serial x-ray films will decide when and if other treatment is necessary.

Spot the carrier of tuberculosis now and do not wait for bigger schemes of mass radiography to do it.—I am, etc.,

The Liverpool Sanatorium, Frodsham, Aug. 4.

R. WRIGHT.

Classification of Cases of Albuminuria

SIR,—Dr. Alexander Lyall, in his article on the classification of cases of albuminuria (July 26, p. 113), again raises the rather vexed question of so-called orthostatic albuminuria. While agreeing with all the hypothetical causes he suggests (they at least cannot be disproved) I should like to suggest one more possibility. Often in routine examinations for insurance, etc., I have come upon this phenomenon and have almost always elicited a history of masturbation. To prove this as the cause of the albuminuria is simple: it is only necessary to get two specimens from the patient—one immediately or soon after masturbation and one where the bladder has been emptied between masturbating and obtaining the specimen. As the patients are usually told to bring a morning specimen a trace of albumin is often found in it. Incidentally, orthostatic albuminuria is usually found in the morning specimen, and just as often represents the net result of the nocturnal eroticism.—I am, etc.,

Darwen, Aug. 3.

J. FERGUSON.

Burns from Penetrating Bomb Fragments

SIR,—I suggest that the explanation of the delayed discharge of intestinal contents from a retroperitoneal wound of the colon, in the article by Mr. Geoffrey E. Parker (July 26, p. 119), is to be found in the observation that there was "some tissue necrosis from burning." Bomb fragments at close range are always hot

enough to produce burns. In a patient of mine who recovered from six penetrating wounds of the jejunum the fragment had come to rest in the coelomic cavity. An adjacent unperforated loop of ileum showed a white burn with charred centre, which I dealt with by infolding. Its appearance strongly suggested that had it been left it would have perforated some days later. A retroperitoneal burn of large intestine would present a different problem. It should not be infolded, but free drainage would be necessary. The site of bomb fragments in limbs is frequently indicated far from the wound of entry by the skin burn which they produce over them, and clothing carried in by fragments is often scorched so that it crumbles to dust during attempts to lift it out of a wound.

Mr. Parker suggests that his patient was lucky that he did not develop a spreading peritonitis. He would have been in greater danger of this had the peritoneum been opened. Wide drainage of retroperitoneal wounds of the large intestine is essential. The patient's life was probably saved by the early extraction of the foreign body packed in by the surgeon after he had removed the metallic foreign body.—I am, etc.,

FRANK STABLER,

Surgeon Commander, R.N.V.R.

Aug. 2.

The Envelope Treatment of Burns

SIR,—Those who tried the Carrel-Dakin method of treating wounds in the last war will remember that occasionally from about the fifth to the twelfth day the patient would suffer from malaise and become tinged lemon yellow. Both skin and conjunctivae were affected. The urine was normal. There was frequently a rise of temperature to 101° F., and the liver was sometimes tender. The signs subsided in two to three days on discontinuing the hypochlorite. Whether this condition will occur when electrolytic or a stabilized hypochlorite is used, or only with that produced by ordinary chemical means, is not known to me, but it seems opportune to draw attention to the matter.—I am, etc.,

London, W.1, July 31.

G. H. COLT.

The Darning of Hernias

SIR,—I was interested to read Mr. G. Stafford Mayer's letter (August 2, p. 176) on the darning of hernias. I am sure the majority of surgeons are now agreed that Bassini's operation and its many modifications leave much to be desired, and that "darning" with some suitable material gives much better late results. I feel, however, that some of the objections which Mr. Mayer raises to Gallie's operation are totally unfounded—in my experience at least.

There is no need to make a long wound in the thigh or to stitch the edges of the fascia together after taking the required number of strips, nor, in my experience, are fasciotomes "most tricky instruments to use," as Mr. Mayer suggests. During the last year I have performed Gallie's operation in ninety-five cases, and never once has the fasciotome given any trouble, nor have I had to employ a tenotome to free the end of the strip. The fasciotome I always employ is that designed by Moseley, and the fascia is obtained by making a transverse incision on the outer aspect of the right thigh (the instrument being easier to use on the right side) about two inches above the upper border of the patella; the incision need never be longer than three inches. The fascia lata is cleaned with a swab soaked in saline, and is then incised transversely in the line of the skin incision. The fascial strips are then taken by means of the fasciotome, and with care six or even seven strips each 1/4 inch wide can be obtained from one thigh, and not a "maximum of four," as Mr. Mayer states. It is very seldom that one requires more than three strips for even a direct hernia, so that it is possible to obtain sufficient fascia from one thigh to do a bilateral repair in the average case.

As regards the danger of a haematoma in the thigh after using the fasciotome, I can honestly say that I have never once seen one. If one is worried about the possibility of a haematoma, a firm elastoplast bandage applied round the thigh at the conclusion of the operation will obliterate the potential space to which Mr. Mayer refers. Personally, I take the fascia before exposing the hernia, but leave the sewing up of the leg wound until the very end of the operation. This gives me the opportunity to "strip" the thigh downwards and remove any extravasated blood before finally stitching up the thigh and applying the elastoplast.