to compete for patients and fees under the roofs of the magnificent buildings which Sir Bertrand Dawson pictures as health centres in every locality. Just as teachers coöperate to secure well-educated children, so must doctors coöperate in the future to secure healthy individuals, remembering that "competition and coöperation cannot go hand-in-hand," and that any effort to promote a partnership between the State and medicine based on a compromise between competition and coöperation is bound to fail.

In conclusion, may I heartily welcome Dr. Lauriston Shaw's suggestion of a national medical council acting as a professional parliament on the lines of the Whitley Report. Such a council would, I believe, be an efficient means of safeguarding the interests both of the public and the medical profession, and would remove many of the objections to a public medical service. Its success, however, would greatly depend on the profession having a clean-cut idea of its functions and duties towards the community as a whole as represented by the State on the one hand, and on the other hand towards individuals as patients.

I am, Sir, yours faithfully,

London, W., July 22nd, 1918.

CHARLES A. PARKER.

MUCOID FORMS OF PARATYPHOID BACILLI.

To the Editor of THE LANCET.

SIR,—Captain W. Fletcher's paper in your issue for July 27th calls to my mind some observations I have made when working with Congo-red as a background stain which might be of use to him or to others working on similar lines. He describes a fine stippling of the background in making films of the mucoid colonies. A definite stippling results from mixing an emulsion of mucilage of tragacanth with Congo-red and spreading a film in the usual way. The size of the granules seems to vary in proportion to the strength of the mucilage emulsion; the granules are very coarse where a thick emulsion is used.

As regards the demonstration of mucoid bacterial capsules with Congo-red, working with an organism which had the characteristics of *B. mucosus capsulatus* I used the following method with a fair degree of success. A small amount of the gelatinous growth is placed at one end of a glass slide; this is then spread along with the end of another slide, using considerable pressure and a side-to-side movement. The slide is dried in the air and lightly, and not too thickly, overspread with Congo-red solution, dried, and treated with acid alcohol in the usual way. In certain parts of the film, usually at the margins and extreme end, the microscope will show the bacilli lying each in an oval dark blue area. At the margins of the film these are often seen lying like large shadows thrown in the direction in which the film was dragged and conforming exactly in contour to the bacillus from which they were clearly derived. Apparently the capsule is a definite envelope, and this being ruptured or in some way injured the dye is able to enter, and the intact bacillus is clearly outlined inside the capsule, which latter is much more deeply stained than the surrounding background.

Such appearances were not obtained with non-mucoid growths of bacilli, but I have found them in films made from mucoid colonies of *B. coli*, such as one frequently seen on MacConkey plates.

I am, Sir, yours faithfully,

T. H. C. BENIANS.

Addington Park War Hospital, Croydon, July 30th, 1918.

MUCOID FORMS OF BACTERIA: LOUIS JENNER'S WORK.

To the Editor of THE LANCET.

SIR,—In relation to the paper by Dr. W. Fletcher on Capsulate Mucoid Forms of Paratyphoid and Dysentery Bacilli I should like to call attention to some old observations of the late Dr. Louis Jenner, the originator of Jenner's stain. When director of the clinical laboratory at St. Thomas's Hospital he was in possession of capsulated and non-capsulated strains of *B. coli* which he had isolated. The characters of these strains were constant under constant conditions but could be modified, and a capsulated strain converted into a non-capsulated and vice versa. So far as my memory serves, this change was effected by passage through animals. Jenner made the important observation

that the capsulated strain was much more virulent than the non-capsulated. Whether these observations were ever published or not I am ignorant. Owing to Jenner's dislike to the publication of incomplete work and his untimely death much that was of value has been lost.

I am, Sir, yours faithfully,

St. George's Hospital, July 30th, 1918.

CHAS. SLATER.

ACUTE LYMPHOCYTHÆMIA.

To the Editor of THE LANCET.

SIR,—I was interested to read of Captain J. C. Tull's case of Acute Lymphoid Leukæmia in *THE LANCET* of June 8th, also your annotation of June 29th on a similar case of a French soldier. Perhaps, therefore, this note of the same condition in a sailor may be of interest:—

An A.B., aged 20, was admitted to R.N. Hospital, Chatham, on Sept. 20th, 1916, as a case of tubercle. Up to six weeks previously he had been in perfect health, when the symptoms he was suffering from started gradually. These were general weakness, dyspnoea on slightest exertion, and attacks of epistaxis and hæmatemesis. On examination lymphatic glands all over body were found to be discretely enlarged and of elastic consistency, their average size being about that of a filbert. Spleen was palpable 2 inches below costal margin. There was no rash.

Blood count: Erythrocytes, 1,008,000; leucocytes, 14,200; hæmoglobin, 20 per cent.; colour index, 1; polymorphonuclear cells, 16·7 per cent.; small lymphocytes, 74·0 per cent.; other mononuclear cells, 9·3 per cent. A few normoblasts were seen, but very little alteration in size, shape, and staining characteristics of red cells was evident.

The patient died six days after admission. Post-mortem examination: Subserous hæmorrhages, fatty heart, large spleen, enlarged hæmorrhagic thoracic and abdominal lymph nodes. Slight increase in marrow of a greyish colour in sternum and tibia. Microscopically, heart, liver, and kidney showed fatty changes and leucocytic infiltration.

I was surprised to see it stated that a low leucocyte count was rare in this condition. Pantón, Tidy, and Pearson state that in six out of eight cases of acute lymphatic leukaemia the leucocyte count was within normal limits.¹ The above case is rather curious as it was one of three cases of leukaemia to be admitted within two months, whereas in the previous 10 years I had not seen a case in the Navy.

I am, Sir, yours faithfully,

S. F. DUDLEY,

One of H.M. Hospital Ships, July 18th, 1918. Staff Surgeon, R.N.

SKIN-GRAFTING.

To the Editor of THE LANCET.

SIR,—An article appears in *THE LANCET* of July 7th, 1917, on skin-grafting by Captain S. R. Douglas, Captain L. Colebrook, and Mr. A. Fleming. During 12 years' surgical practice in India I have used skin-grafts for a variety of cases, particularly burns, elephantoid tumours, chronic ulcers, &c., and I have always employed Thiersch's method, slightly modified. The results have been good in the great majority of cases, and I am not at all convinced that the operation advocated by the authors is a better one, and the special apparatus, &c., complicate an otherwise simple procedure. Skin-grafts have seldom become dislodged and most of the scars have been good. The raw surface from which the grafts have been taken heals very rapidly and I have never known it to go septic if dressed with gauze soaked in picric acid lotion. It may be that the authors have employed Thiersch's grafts cut too thin, for it is important that part of the dermis should be taken with the skin-grafts.

It has always been my experience that the weakest parts of the scar after skin-grafting are the skinned-over gaps between individual grafts, and in the authors' method these are multiplied. Moreover, the operation is more tedious and may not be completed at one time, and healing of the wound is therefore delayed.

Suppuration is a serious factor to consider in skin-grafting, but the destruction of grafts by tryptic ferments can generally be prevented by making small holes in the large grafts opposite the small pockets or depressions in the granulating area, and by applying suitable dressings on the lines described by the authors. In India green oiled-silk with small perforations is used as a covering, and over this

¹ Quarterly Journal of Medicine, July, 1914.