

plans are difficult it is as well to aim at the complete one, and I plead for his help and that of his party.

Mr. Webb frankly recognizes the need for "the full and cordial co-operation of the independent medical practitioner," and states that the Labour party are basing their scheme on "a more effective representation in the counsels of the nation of the medical profession itself; meaning by this the opinion of the general practitioner even more than that of the consultant, the official expert, or the professor of the medical college." Again we entirely agree, and our scheme attempts to secure this in three ways—(1) by a completely independent department for medical research and statistics; (2) by "an Advisory Medical Council attached to the Ministry of Health without executive powers, but authorized to report to the public, uncensored by the Government, upon anything done or undone in the realm of public health"; (3) by a local medical committee elected by all members of the profession in each area exercising locally powers similar to those which the Advisory Council exercises centrally. Mr. Webb does not refer to the first of these, but there is no reason to suppose that it is objected to. The other two, of vital importance to the profession, he somewhat emphatically adopts. The second I have described in his own words; the third he implies is a suggestion of his party's, going beyond our own, but I invite his attention to the fact that it is set out quite clearly in our scheme, and that we are in agreement as to its value and importance.

Where so much that is basic is agreed upon we need not despair of carrying Mr. Webb and the Labour party with us the whole way, and so securing among all political parties a general agreement that will be sufficient to overcome the smaller interests and jealousies that are bound to be in opposition.—I am, etc.,

London, N., Aug. 18th.

HENRY B. BRACKENBURY.

SIR,—Mr. Sidney Webb's letter in the BRITISH MEDICAL JOURNAL of August 17th should prove of great interest, whatever the political views we hold. Mr. Webb voices, if he does not dictate, the ideals in health measures of an important section of what is called "Labour." From his letter it appears that most of us have hitherto misunderstood these ideals. And he desires a "more effective representation in the counsels of the nation of the medical profession itself." In fact, Mr. Webb would concede to the doctor an extremely important position in the State.

Without discussing in detail the aims stated by Mr. Webb, I would like to indicate briefly the specific matters which, in my opinion, need consideration forthwith by all those who are interested in "reconstruction" so far as it affects the medical profession, whether they are members of the lay community, or of the medical profession, or of the State services. It seems to me that without due consideration and right decision on these matters no sound foundations for a Ministry of Health can be laid. First, there is the better education of the medical man, whether as a student or when qualified. With regard to the education of the student, there is much food for thought in Sir George Newman's *Notes on Medical Education in England*. For the continued education of the qualified practitioner—an even more difficult matter—it is worth considering how far a closer linking up of the general practitioner and the consultant or specialist can be effected. Such linking might lead to better continuity of treatment and to a physiological division of labour, as well as having an educational value for all concerned. In order not to interfere with the student-teaching functions of the larger hospitals, use should be made of such institutions as special hospitals, Poor Law infirmaries, and fever hospitals, which might be thrown open to the general practitioner.

Secondly, so far as the industrial population is concerned, more time would seem to be required for diagnosis and treatment. This may mean that a larger number of entrants to the profession of medicine is needed; and if so, the nature of greater inducements which should be held out, and their development, must be considered.

Thirdly, methods of providing greater facilities for special methods of investigation in the treatment and diagnosis of disease must be found.

Finally, on these foundations it may be possible to build a Ministry of Health from which real benefit might accrue. As to the form which that Ministry should assume opinions still seem divided. May it not be possible that greater

results will be obtained from a super-department engaged in scientific research into the principles upon which public health should be based, rather than from a conglomeration of the present departments concerned with public health engaged in attempting to administer an unwieldy machine?—I am, etc.,

London, W., Aug. 20th.

CHARLES BUTTAR.

VANGHETTI'S OPERATION.

SIR,—My attention has been drawn to a letter in your issue of August 3rd signed by Colonel Openshaw and Colonel Lynn Thomas. I wish to state that the operation which they criticize was only performed after the case had been seen in consultation according to the invariable rule of the hospital. And, in fact, it was at the express wish of the surgeon in charge that I did the amputation.—I am, etc.,

London, W., Aug. 14th.

ERIC PEARCE GOULD.

THE MENINGOCOCCUS OF WEICHELBAUM.

SIR,—The article by Dr. Edward C. Hort in the BRITISH MEDICAL JOURNAL of September 22nd, 1917, on the Meningococcus of Weichselbaum is somewhat difficult to understand, but the main point seems to be that Meningococcus is regarded as the spore of an ascomycetous fungus. Further, the "filterable meningococcal virus" of an earlier paper of the author "probably represents a stage in the life-cycle of the ascomycetic organism." I cannot claim anything but a superficial acquaintance with Meningococcus, and do not wish to criticize Dr. Hort's statements on the genus as such; but, particularly in view of the exploded theories of many early nineteenth century biologists—such, for example, as that of Béchamp, who, about 1870, held that certain bacteria were capable of transforming into yeasts, and of the well-known pleomorphic extravagances of a few years earlier, when Hallier and his school placed *Mucor*, *Empusa*, *Saprolegnia*, and *Saccharomyces* in the same life-cycle—it is essential that we should have the strongest possible scientific evidence before regarding a diplococcus and a filterable virus as stages in the life-history of an Ascomycete.

It is on the mycological side that I would wish to point out certain criteria which are necessary before the organism described in the paper can be regarded as an Ascomycete. (There is little or no evidence given that it is even a fungus.)

The organism is described and drawn as spherical, with the power of budding. Within the body endospores are formed varying in number from two to eight, and, judging from the figures, the number of spores in the same ascus increases with age—for example, from three to eight in Culture 3. These endospores the author regards as the meningococcus of Weichselbaum.

To make clear to those who profess no knowledge of mycology the criticisms I have to offer, it may be well to emphasize the essential characters of an ascus, the organ which gives its name to one of the main groups of fungi.

An ascus is a sac containing, in the vast majority of cases, eight spores. It is generally subglobose in the lower forms such as *Endomyces*, *Eurotium*, etc., and club-shaped in the more evolved forms such as the ordinary cup fungi (*Discomycetes*). The spores arise by free-cell formation. There is a single nucleus in the ascus at its origin which, in those genera possessing ascogenous hyphae, arises from the fusion of two nuclei in the penultimate cell which gives rise to the ascus. The nucleus divides; a second and third division follow, and thus eight nuclei are formed. Part of the protoplasm accumulates around each of the nuclei, and these portions are delimited by a spore wall which is usually formed by astral rays from the nucleus. The remainder of the protoplasm (periplasm) is gradually absorbed by the growing spores. Although eight is the almost invariable number of spores in the ascus, variations occur. In some cases certain of the nuclei degenerate, and one, two, or four spores result, as the case may be; or further divisions of the original eight nuclei may take place (*Rhyparobius* spp.), and 16, 32, 64, etc., spores be formed; or, very rarely, the spores may bud inside the ascus (*Exoascaceae*). Yeasts are Ascomycetes, but the number of spores contained in the ascus is variable, ranging from one to twelve. In the most variable species—as, for example, those used in industry—the number, however, shows a certain fixity: thus *Saccharomyces cerevisiae*, in which the number of spores varies from one to five, has most frequently four. In *Phycomycetes*—for example, *Mucor*—the sporangium, which likewise contains internal spores though almost without exception indefinite in number, is multinucleate from its inception, and the spores are formed by the segmentation of the protoplasm, none of which remains over as periplasm.