# Correspondence.

## THE HOSPITAL PROBLEM.

Sir,—I have read with great interest Mr. Griffiths's suggested solution of the hospital problem; I am quite sure that if it were brought before a representative meeting of general practitioners and members of the honorary medical staffs of our hospitals it would meet with a great deal of destructive criticism and opposition. In any case, such a scheme as he suggests would take a year or two before it could be brought into being. In the meantime many of our hospitals have been compelled in the last two or three years to sell out the greater portion of their invested capital or have borrowed money from their bankers on the security of such capital. This means that in the course of a very short time all their capital will be expended, they will no longer be able to borrow from their bankers, and they will be compelled to carry on as best they can with the amount they receive in the form of bequests, donations, and subscriptions from generous donors. This must mean the closing of wards and diminishing the number of beds; in other words, the curtailment of the excellent work they are now doing.

Now, Sir, the hospital with which I have been connected for nearly forty years finds itself in precisely this condition. The committee of management have clearly seen that in the course of a few months we shall have used up all our available assets and shall not be able to obtain any further loans from the bank. We have been taking stock as to what we should do, and have decided, guided by the experience of Leicester, to appeal to the working classes. The Leicester Hospital, we understand, is in the happy position of obtaining from £30,000 to £40,000 each year from the working classes, and so are free from any financial problem. Leicester is a large manufacturing district, and the difficulty of collecting 2d. a week from each working man through the employers by the consent of the workers is not great. The difficulty of collecting money from agricultural labourers and their wives in scattered villages is much greater, but we are by good organization overcoming this difficulty. We have published two leaflets, one showing how it is that the hospital is in so critical a condition, and why the workers should come to the help of their hospital and how they can help.

Our second leaflet shows how the villages should be organized to help the hospital. We have appointed a paid collector, who arranges the village meetings and attends the meetings himself. We send as far as possible a speaker who is fully acquainted with the work of the hospital, who can tell the people what the hospital has done for them in the past, and how it can help them in the future if they help to keep it going. In the smaller towns and in Oxford itself the trade unions are giving the scheme their whole-hearted support. We commenced active work on September 1st, and the success we have already attained has altogether exceeded our expectation. Now, Sir, if our hospitals can be financed, first, by the generous donors who have so liberally subscribed in the past, and second, by the working men and women of England, who are much better able to help now than they have ever been, it is surely better to keep them on a voluntary basis than accept any State scheme which brings them under State control.—I am, etc.,

Oxford, Nov. 6th. William Collier.

*** The leaflet on organization recommends that after the other leaflet (on finance) has been distributed, a meeting of parishioners should be called by the clergyman of the parish, the minister of the chapel, the schoolmaster, the local trade union secretary, or the benefit society secretary, of all those who use and benefit by the hospital. At this meeting a Hospital Aid Committee would be elected, its members undertaking to collect and receive small sums from 1d. a week upwards from such wage-earners as agree to contribute. The scheme has been well received, and has received whole-hearted support in every village at which a meeting has so far been held.

## BRADFORD MUNICIPAL HOSPITAL.

Sir,—In your issue of October 30th, on p. 676 (Parliamentary Notes), the following words appear:

"In proof that he was not going against the opinion of medical men in what he was doing, Dr. Addison said that he had obtained the views of the Bradford Division of the British Medical Association, and they agreed with the principles of the proposal as regards Bradford, with some modifications."

In the name of the Executive Committee of the Bradford Division of the British Medical Association, I beg to state that this is quite erroneous. The Division was never asked for its opinions upon the principles of the proposal, but after the medical profession in Bradford had through various channels made several unsuccessful applications for information, on September 30th, 1920, six months after the hospital had been taken over from the guardians by the health authorities, a lengthy document, entitled Municipal General Hospital, St. Luke's, Report by the Medical Officer of Health, was sent to the Executive Committee of the Division, and they were asked in a covering note "Whether your Executive Committee have any observations to make thereon." The Committee carefully considered the detailed report, and made several observations thereon, some of which were in the form of questions, but they certainly did not express any agreement with the principles of the proposal, nor were they asked to do so.

Over three months before this, on June 15th, a strong protest had been sent to the Health Committee in the form of a resolution worded as follows:

"That in the interests of the public it is advisable and necessary that no arrangements should be made for the work of the Municipal Hospital, as far as concerns the medical profession, without free consultation with the profession of the district."

No notice was taken of this beyond a formal acknowledgement of receipt.—I am, etc.,

W. N. West Watson.
Honorary Secretary, Bradford Division, British Medical Association.

November 5th.

## MUNICIPALIZATION OF HOSPITALS.

Sir,—I regret that there has been no answer to my letter in the Journal of October 23rd, in which I asked whether the bill being brought in by Dr. Addison to enable an extension of the municipalization of hospitals was in accordance with the views of the Consultative Council.

The bill is now under discussion in the House of Commons with considerable alteration, I understand, in Clause 11. Therefore I should like to repeat my question, as, until it is answered, the suggestion—perhaps unwarranted—inevitably arises that the body supposed to safeguard the interests of the profession has neither been called into consultation, nor has initiated representations on its own account.—I am, etc.,

London, W., Nov. 6th. F. C. Martley.

## THE THEORY OF VISION.

Sir,—In your leader in the British Medical Journal of October 30th there is no mention of the complete refutation of Mr. Parsons's arguments in my reply in the *British Journal of Ophthalmology*. These arguments are mostly based on errors. The two chief may be given here, but I must refer the reader who is interested in the subject to my replies and to my book on the *Physiology of Vision*.

The first is that there are certain animals, as, for instance, the tortoise, which have only cones and others which possess only rods. Has any reader seen a retina of this kind? I have examined a very large number of specimens and quite failed to find one. For instance, in the tortoise the rods and cones are as definitely marked and distinct from each other as in man. The most conclusive fact against the duplicity theory is that when a colourless spectrum has been obtained, with further dark adaptation colour reappears; in fact, Burch stated that with complete dark adaptation there was no photochromatic interval. Spectral coloured light appeared as coloured immediately it was visible as light.—I am, etc.,

London, N.W., Nov. 5th. F. W. Edridge-Green.

## TUBERCULOUS MILK.

Sir,—The conflicting opinions expressed in the letters on this subject illustrate the confusion which exists in the medical profession on the subject of the prevention of tuberculosis. The public has been repeatedly told that tuberculosis is a preventable disease, and that we have all the knowledge necessary to eliminate the disease in a

certain number of years. Dr. Galbraith, in his letter of October 16th, terms it "the most readily preventable of infectious diseases," although in a later letter his statement that he is waiting for guidance as to the most effective measures to adopt seems to imply some doubt. "If preventable, why not prevented?" has become a shibboleth. Apparently those who hold the view that tuberculosis is easily prevented aim at the prevention of infection by tubercle bacilli.

It is true that it would not be impossible to prevent infection by bovine bacilli, and Dr. Bishop shows that a large measure of success has been obtained in Guernsey, where the conditions are ideal for the experiment. But the elimination of bovine infection would only prevent some 6 or 7 per cent. of the deaths from tuberculosis, a desirable consummation, but one that leaves the big problem of the prevention of tuberculosis almost untouched. In order to eliminate infection from human sources there are some who plan a widespread segregation of all consumptives. Apart from the fact that it is impossible to discover when the tuberculous patient becomes infectious and that errors of diagnosis are common, so that many non-tuberculous persons are sent to sanatoriums and many infectious patients are missed, is it conceivable that the nation would agree to so great a loss of freedom or so cruel a punishment of an unfortunate and large section of itself? I see very little hope in methods aiming only at the prevention of infection. On the contrary, the evidence we have points to the increasing urbanization of countries and the consequent greater tuberculization of the people as a main factor in the decreasing mortality from tuberculosis. "The wider spread is tuberculosis in a community the smaller the case mortality." Dr. Ivatts and Dr. Galbraith would deny this, and are agreed that "there is no positive evidence of immunization in tuberculosis at all." They ignore all the experimental proofs now confirmed by many workers in various countries. One would like to know how they explain the great difference in the course of tuberculosis in the virgin soil of young infants or savage races, and that in the adult of civilized countries. Chronic phthisis of the adult is unknown in early childhood or among the lower animals, and it is difficult to resist the view formulated by Romer that it is a manifestation of immunity against tuberculosis which has been acquired by an infection during early childhood. Again, there is good evidence that the result of the infection which practically everybody passes through during childhood depends in large measure upon the dose and virulence of the bacilli first gaining entrance.

Whilst the medical officer of health is concerned with prevention on a large scale and should welcome the Milk and Dairies Bill, the practical physician is concerned with the prevention of tuberculous disease in individuals and must take into account not an ideal state of affairs but things as they are at present. What advice is he to give to parents who ask whether their children should have raw milk? It is inevitable that the children will be infected sooner or later, and the future will depend upon the nature of their first experience with tubercle bacilli—the type of bacillus, the size of dose, the state of health of the children at the time of inoculation. Are we to leave the matter to blind chance and risk a massive infection, or should we endeavour with the means we have at hand, crude as they are, to control the first inoculation? Until bovine infection is eliminated I agree with Riviere, Cobbett, and others, that we can make use of it to control the first infection. By giving graduated doses of raw milk from the well mixed collection from a large herd of cows we should avoid the danger of a massive first infection of bovine bacilli and get the infant safely through its first inoculation. The fact that inoculation has occurred can be shown by a positive von Pirquet reaction. In well-cared-for homes the danger from human infection is not great, and it is surely better that the first infection should be with bovine bacilli than with the more dangerous human type. In poorer homes, however, there is grave danger of a first infection with human bacilli, often in massive doses. Modern methods of prevention act on the assumption that the infectious consumptive is equally dangerous to adults as to children, but all the evidence shows that the danger is much less to adults than to children, and that the key to the prevention of tuberculosis lies in the care of the children, the avoidance of massive infection in infancy, and a healthy environment in later life. It might be wiser and easier to remove the infant for a few years from the infected home, see him safely through his first infection in healthy surroundings, than to remove the consumptive parent from the home for the whole period of his infectiousness.

Whilst the physician, recognizing the inevitability of infection, avails himself of the prevalence of bovine infection as the only means at hand to control the first infections of childhood, he must recognize that this is only a passing phase, and he should encourage every effort made by medical officers of health in their larger problem.

We cannot say what will be the effect of the total elimination of bovine infection. Other things being equal, it is possible that if there is a decline in the prevalence of tuberculosis there may be an increased susceptibility. But when that time arrives we hope that the improvement in social and economic conditions of the working classes, in housing and hygienic knowledge, will reduce the chances of massive infection. It is also possible that an attenuated living virus may be discovered and substituted for the cruder method which alone is possible now. Cow-pox protected against small-pox and led to the discovery of a virus which has stamped out the disease. History may repeat itself, and the knowledge that cow tuberculosis gives a measure of protection against human tuberculosis may lead to successful vaccination against tuberculosis.—I am, etc.,

Birmingham, Nov. 7th. W. H. Wynn.

## CELL EVOLUTION.

Sir,—In your admirable review of Morley Roberts's book *Warfare in the Human Body*, in the Journal for October 23rd, you remark that the conception of the human organism as a vast colony of erstwhile protozoa, banded together for their mutual advantage, has lost its vogue. This was never better exemplified than in the discussion on "the present position of cancer research" at the British Medical Association meeting at Cambridge, reported in the Journal of October 30th. Immense expenditure of energy and intelligence has been applied to the elucidation of this problem, but eyes have been glued throughout to microscopes, and broader perspectives seem to have been ignored. For example, the individual cells of the human body must be themselves subject to the laws of evolution in the same way as the members of any other community. In studying the behaviour of the human cell surely a beginning should be made with the protozoal ancestor. Do successive generations of amoebae, for instance, present new characters as the result of specific irritations, chemical or otherwise?

We are accustomed to regard evolution as a process, the successive steps in which are measured in thousands of years. But the unit of time in evolution is the generation, and an organism multiplying many times in an hour can show evidence of evolution in days or weeks, as in the acquiring of enhanced virulence by bacteria during epidemics, and the diminishing virulence of bacteria growing on culture media.

Can we not explain all the phenomena of malignancy by attributing the acquired characteristics of the cancer cell to a process of cell evolution, proceeding in a particular group of cells exposed to a constant irritation or condition of stress? Under these conditions, in a tissue where cell proliferation is normally rapid, as in the breast, the uterus, etc., the individual cells, faced by a threat to their existence, undergo evolution in the direction of coarseness and hardihood, and develop their powers of reproduction to the highest degree. In the same way, the rate of reproduction throughout the animal world bears a direct ratio to the dangers to which each species is subjected.

It has been objected to me that this theory gives no practical help, and leads nowhere. But it might help to divert the volume of research into more fruitful channels, and thus economize grey matter, of which, like many other commodities in these times, there is no surplus.—I am, etc.,

Ashton-under-Lyne; Nov. 1st. J. V. Fiddian, M.B.