What we want to get rid of is "the intolerance and limitation of outlook" against which Sir German Sims Woodhead has so eloquently protested. After all, this "intolerance" is not found amongst those who have really counted in the study of tuberculosis in recent times. If we glance at the volumes and articles that have attracted universal attention within, say, the last year, we find that the points of general agreement are much more numerous than the points of difference. Calmette, Borel, Fishberg, Bushnell, Sergeant—what marked unanimity they show on essential points.

If we can only keep to the fundamentals, concentrate on principles rather than details, show that the ward, the laboratory, and the statistical bureau are complementary to each other rather than separate or antagonistic, we may kindle, even during a short course of study, the flame of enthusiastic curiosity that should inspire a life of observation and research.

THE CARE OF TUBERCULOUS CRIPPLES : A PROPOSED SCHEME.

By T. HARTLEY MARTIN,

M.B., CH.B.,

Senior Medical Officer, Hospital for Surgical Tuberculosis in Children, Leasowe,
Cheshire; Author of "Liverpool Hospital for Children, Leasowe :
Its Work and Progress."

SEVEN years' experience of the cases sent for admission to the Liverpool Hospital for Children, Leasowe, leads one to realize that there are many obstacles to be removed before the principles of the scheme for the treatment of crippling defects in children, as outlined by the Chief Medical Officer to the Board of Education, can be brought to fruition.¹ The following are the essential points enumerated by Sir George Newman: (1) That the child should be brought under treatment as early as possible. (2) That treatment should be prolonged sufficiently to obtain the best cure. (3) That after-care must be provided to guard against relapse—a provision most readily effected by arrangement with the School Medical Officer. (4) That suitable educational provision must be provided to stimulate recovery and prevent mental stagnation. It is my intention to discuss some of these points in reference to the existing mechanism for dealing with non-pulmonary tuberculosis, and to suggest a scheme which would overcome the majority of the difficulties.

To ensure that the child is brought under treatment as early as

¹ See Report for 1919, paragraph 164.

possible, it is essential that a knowledge of the disease be possessed by those responsible for making an early diagnosis. This involves, not only a knowledge of the aetiology and general pathology of the disease in its glandular, cutaneous, visceral, osseous, and articular manifestations, but also a grasp of the essential principles of orthopædic practice, for in the osseous and articular lesions it is this knowledge by which alone diagnosis can be made. The spheres of activity of the medical practitioner and the School Medical Officer are the ones in which lie the greatest opportunities and at the same time the greatest responsibilities for recognizing the early signs and symptoms of the disease. Yet it cannot be said with any degree of accuracy that the necessary knowledge is possessed by the majority of those working in these fields. Again, it may be doubted whether this knowledge is possessed by the majority of Tuberculosis Officers in whose hands most often lies the selection of cases for treatment. I do not think that a knowledge of non-pulmonary tuberculosis is ever demanded of candidates for the post of Tuberculosis Officer, and yet about one in five of all cases of tuberculosis notified is a case of non-pulmonary disease. It therefore follows that to ensure early diagnosis teaching must be introduced. It should be included in the curriculum of the medical school, and opportunities given to the student to visit the wards of the special hospital where these cases are treated; also similar facilities for post-graduate study should be offered to the qualified medical practitioner. Moreover, if the duties of the Tuberculosis Officer are to include the care of and selection of the cases for treatment, a knowledge of non-pulmonary tuberculosis and its treatment ought to be possessed by candidates for such posts. The inauguration of a diploma in tuberculosis has been advocated for some time by Sir Henry Gauvain and other writers,¹ the possession of which would be an officially recognized guarantee of efficiency in tuberculosis work.

It would be a forward step if the large cities, boroughs, and county boroughs were to follow the example set by Sheffield and appoint a special officer, the Surgical Tuberculosis Officer or Non-pulmonary Tuberculosis Officer, responsible to the Medical Officer of Health or Chief Tuberculosis Officer for all such cases occurring in his area. His duties should be (1) to see all cases notified at conveniently situated dispensaries, to which dispensary the general practitioner and the School Medical Officer should have free access. (2) His next duty would be to classify the cases according to the treatment required. The classification which suggests itself is as follows: (a) Cases requiring treatment in open-air hospital schools. These are *a priori* the cases of osseous and articular disease requiring prolonged treatment

¹ See articles in *British Journal of Tuberculosis* for January and April of the present year.

in the recumbent position, and the more severe cases of glandular and visceral disease which are confined to bed. (b) Cases requiring treatment in residential open-air schools. These are the less severe cases of glandular, cutaneous, and visceral disease, which require to be kept under medical care, but not being bed cases, do not demand the skilled nursing of those in the former group. Such a school would be much cheaper to run than the hospital school, and its existence would prevent the misuse of the hospital beds. But it would be advantageous to have the two schools on the same estate, in order that cases might be interchanged the one from the other. (c) Cases which may attend open-air day schools situated within a convenient distance from their homes. These are the mild cases of non-pulmonary tuberculosis, which only require periodic medical supervision. (3) According to the claims of administrative duties upon his time, he should have either charge of or access to the hospital and open-air schools. (4) The after-care of all non-pulmonary cases should be his duty, and his alone. I would lay great stress on this, because I have learnt that unless one person is responsible for this very important duty it is apt to be neglected. These cases have to be kept under supervision; they will not voluntarily remain under it, and unless satisfactory after-care results can be shown the work of the Non-pulmonary Tuberculosis Officer should not escape criticism. It is the only guarantee that the money expended on the treatment of this disease is being profitably spent.

In the event of the work of a city, borough, or county borough not being sufficient for a whole-time officer, I would propose that his duties should include the supervision of the care of all other crippling defects in children, since his knowledge of orthopædic principles would qualify him to take charge of this work.

As a result of my experience, I would urge the following points: (1) The introduction of special teaching in the medical schools and facilities for post-graduate study. (2) The inauguration of a diploma in tuberculosis in order that specially trained officers may be available for the work. (3) The centralization of the work for non-pulmonary tuberculosis under one head—namely, the Medical Officer of Health and his Surgical Tuberculosis Officer—as against the multiplication of responsibilities which now exists. (4) The treatment of these cases in special hospital schools and residential open-air schools, as against their reception into the wards of the general hospitals and the convalescent homes. (5) The establishing of after-care clinics and the necessary machinery for following up cases which have undergone treatment, in order that the results obtained from the treatment of this disease may be most effectively checked.