

means, trained to observe with his hands and his senses, encouraged to think logically and critically, instructed in the use of the instruments of measurement, and equipped with a basic knowledge upon which he will continue to build for the rest of his professional life."

To do all this the teacher of undergraduates must himself be an educated person, and it would be unwise to assume that this is always the case. Teacher and taught will find a basic language of communication only if they have drunk deep of the Pierian spring, if their ears are attuned to the overtones of the civilized mind. And it was significant that many speakers in the plenary session on Monday and in the discussion on "General Education in an Age of Science" on Tuesday underlined Sir Richard Livingstone's dictum that "an education which ignores the humanities is disastrously incomplete." Once qualified the practising doctor cannot hope—and does not want—to live a life of lettered ease; but what ease he may find can be enriched if as a boy at school he has been given a glimpse of the treasures of human thought and emotion. Only if his mind is so rounded off will he be to his patient something more than an applied scientist. One sees in all this a check and balance to the laboratory, a reaction against intense specialization, a swing back to the more simple observational art of the clinician. To strike a balance between the old and the new, between the art and the science, to achieve the Greek mean of "nothing too much," to use wisely the probing weapons of modern science and technology in seeking out the causes of disorders of the body and mind calls for a combination of scientific scepticism and human compassion occasionally brought to perfection in a character such as William Osler's. And the guide to this is Sir Richard Livingstone's "philosophy of the first-rate."

It may be that the study of the classics is on the wane, and the schoolboy and schoolgirl are no longer so drilled in the grammar of Latin and Greek as their parents, or at least as their grandparents were. And if the stripling no longer learns to decline the Latin for "table" and the Greek for "youth," he is being taught that history is something more than dates and the deaths of kings and queens. The historian a thousand years hence may see civilization to-day as a phase of the Socratic era, and the specialist then in medical history may, in exploring the archives of our minute of historical time, note that in the First World Conference on Medical Education Professor John Fulton and Colonel S. M. K. Mallick expressly devoted their attention to the impact of the past upon the present, to the continuity of our uneven medical story.

A SIGHT OF GENERAL PRACTICE

In most teaching centres in Britain it is only very recently that the undergraduate curriculum has been designed to include some preparation specifically for general practice. Some still offer the student nothing, though one pioneer—namely, Edinburgh—has for many years given practical instruction in the conditions likely to be met with beyond the hospital gates. Most teaching hospitals provide at least lectures and sometimes even the opportunity to live in a general practitioner's family for a week or so, and an inquiry carried out recently by Mr. R. W. Heslop for the British Medical Students Association shows that those medical schools not yet giving instruction in general practice have a slightly hang-dog air and promise schemes soon or when they have studied the problem further. There is little doubt that some such instruction is to the student's benefit; at any rate the B.M.S.A. finds that students themselves welcome it.

When the G.M.C. forbade the employment of unqualified assistants in 1891 it brought to an end the apprenticeship as one method of gaining the requisite knowledge for qualification. Perhaps that was no great loss, for Dr. Alfred Cox, who himself entered general practice that way, has recorded¹ that many of those dispenser-assistants were grossly exploited and few of them ever qualified. With the passing of apprenticeship and the coming of recondite specialization in so many branches of medicine, however, many young doctors have felt much anxiety on first entering general practice—not only because they know little of the organization of general practice, for that is to be expected, but because they know so little even of the maladies their patients bring to them daily. Too often the disorders receive scant mention in the textbooks, examination papers, or hospital wards, and they should be among the principal subjects of such teaching as is given. Introducing the results of its survey, the B.M.S.A. states its belief "that it is desirable for a medical student to see how a general practitioner lives and works." No doubt it is, but the emphasis needs slightly changing lest students waste valuable teaching time in treating their visit to the general practitioner much as they might a visit to the Zoo. In the avoidance of this danger the important work of Edinburgh² is an example that other medical schools could study with profit. Arrange-

¹ *British Medical Journal*, 1950, 1, 77.

² Scott, R., *Lancet*, 1950, 2, 695.

³ *British Medical Journal*, 1953, 1, 36.

⁴ *Ibid.*, 1952, 2, 490.

⁵ *The Training of a Doctor*. Report of the Medical Curriculum Committee of the B.M.A. London. 1948.

ments that had existed for over 100 years for teaching in dispensaries were replaced in 1948, as a consequence of the Health Service starting, by a teaching general practice. The emphasis here is on teaching. The student learns much about the ailments often to be met with in general practice, what patients first complain of, and what they have to contend with if they remain at home instead of going into hospital, and they also learn about the special agencies, such as those run by the local authority, for helping the sick, the pregnant, the destitute, and so on. The Americans seem to have gone beyond even such a considerable scheme as this with their home care programme at Richmond, Virginia, and their home medical service at Boston, described respectively by Professor Kinloch Nelson and Dr. James M. Faulkner at the First World Conference on Medical Education this week. Both schemes operate in large indigent populations without family doctors, and the main feature of both is that the medical students go out to the homes in response to calls received at a centre. They remain in touch with their hospital readily enough in case of emergency—in one scheme by wireless—and are well supervised at a distance. These arrangements are thus very similar to those by which students in Britain often learn their midwifery, though the lack of large doctorless populations here precludes our developing anything quite like them.

The College of General Practitioners has rightly said³ that “an insight into the nature of general practice, and some first-hand experience of it, form an essential part of the basic training of all doctors, whatever their future may be.” And of interest here is the Edinburgh insistence that the students least likely to end up in general practice are those who above all receive special instruction in it. Some acquaintance with the best type of general practice—and Barber⁴ has emphasized that this first vivid impression must be of the highest quality—will moreover do something to offset the dependence on intricate mechanical equipment that the student almost inevitably acquires in his long peregrination through wards, theatres, and laboratories—from which perhaps he will ultimately emerge only to practise in a small private house on the outskirts of a market town. His medicine need not be the less scientific there, but it probably will be if his medical school did not teach him something about applying scientific principles in the kind of practice he will experience.

General practice nowadays demands “appropriate postgraduate study”⁵ such as in an assistantship, and no amount of undergraduate instruction can of itself fit a man for it any more than it can for other kinds of practice. Indeed, it would be undesirable to design a curriculum aimed at producing a certain kind of

doctor. The introduction of the intern year and of the trainee assistant scheme in the National Health Service is a recognition of the need for practical experience after qualification but before the assumption of full clinical responsibility. Consequently advocates for teaching undergraduates about general practice may, without tempering their enthusiasm, at least moderate their demands on the curriculum. A helpful view is the B.M.A. Committee's⁶ that “the undergraduate medical course should be primarily concerned with the training in those basic principles of medicine which are a necessary foundation for all forms of medical practice.” Certain basic principles are exemplified particularly in general practice. Being on the alert for the early diagnosis of many diseases—pneumonia, for instance—is one. And to continue trying to teach these principles entirely from hospitals is to put an unnecessary strain both on the curriculum and on the student's imagination.

INDUSTRIAL HEALTH AND THE UNIVERSITIES

The first university department of industrial medicine in Great Britain was set up in Birmingham in 1935 and closed down after four years. Undeterred by this experience the Nuffield Foundation later established chairs of industrial health in Manchester and Newcastle, and a subdepartment under the professor of public health in Glasgow. The grants, which were to be spread over ten years, are beginning to run out, and the universities will soon have to decide what the future of these departments is to be.

The generous contributions of the Nuffield Foundation and the formation of a Social Medicine Research Unit by the Medical Research Council and of chairs of social medicine in the universities of Oxford, Edinburgh, Birmingham, and Sheffield were all signs of a progressive policy, inspired by the war, to promote research and teaching in social and industrial medicine. But the outlook to-day is not so bright as it was. The public health services are now in the doldrums and the expected development of industrial health services has not taken place. Consequently fewer doctors are taking the D.P.H. with the prospect of practising in this country, and the D.I.H. courses have ceased at Glasgow, Edinburgh, and Manchester. In fact very few university departments of social and industrial medicine can at present be justified by their postgraduate teaching, and with the need for economies in university expenditure on medical teaching and research these new departments may be the first to feel the knife. The Institute of Social Medicine at Oxford has already had its scope considerably reduced.