

Medical Service and from the medical services of the armed Forces. One of the most important functions of the school was to act as a focal point for medical people all over the world. It was felt to be important that the school staff should so far as possible be familiar with the countries from which the students came, and it was hoped to send more and more of the staff overseas during vacations so that the teaching would not be academic but would have a strong practical bias. The facilities for clinical tropical medicine in London were still inadequate—a surprising position in a country with such great colonial and maritime connexions—but a new unit of 68 beds for clinical teaching and research was almost ready for occupation and would be opened on May 24.

## DOCTORS AS PAINTERS

### MEDICAL ART SOCIETY'S EXHIBITION

The Medical Arts Society was founded in 1935 and has over 100 members, many of whom are showing something in this year's exhibition of nearly 150 works at Walker's Galleries in Bond Street, which continues till April 14. The vast majority of the exhibits are landscapes, watercolours and oils being equally represented, and the level of technical achievement is high. Indeed, for the most part one has no feeling that these are amateurs, though the use of green defeats one or two painters, and closer examination occasionally betrays a poverty of colours or a weakness of form. Among the more successful No. 56, *Barbizon*, and No. 73, *Italian Monastery*, were particularly pleasing, and A. C. Dalzell's *Okapis* (No. 66) has imagination. With the possible exception of No. 70, *Anatomy Demonstration*, there is nothing in the whole exhibition to indicate that the painters are also medical men, unless it be the complete absence of nudes; and the scarcity of portraits is surprising. Many of these Sunday painters are intending chiefly to record their holidays, but there are a few who attempt something more (e.g., No. 69, *Riverside*) and deserve praise accordingly. One or two painters betray the influence of the New English Art Club—for instance, A. B. Hewlett (Nos. 53 and 65)—but most remain in the Constable tradition. In sum, if there is nothing here tremendously exciting—and who expects even a London consultant to astound the world of art?—there is nevertheless some good work and interest enough to justify a visit.

## Reports of Societies

### PATHOLOGY IN UNDERGRADUATE EDUCATION

At the annual general meeting of the Section of Pathology of the Royal Society of Medicine on March 20 the symposium on "The Place of Pathology in Undergraduate Medical Education" was opened by Professors W. G. Barnard, L. P. Garrod, and Clifford Wilson.

Professor W. G. BARNARD said the place of pathology was in the clinical period and throughout it. He defined in broad terms what he understood by pathology, including all the recently recognized divisions of the subject: it was a science with its own particular outlook on medicine. To try to teach too much in detail—for example, the appearances of all the kinds of tumours—was wrong; emphasis on general principles and the laws determining structural changes was wanted, and active processes as well as structure should be discussed, with the help of biophysicists and others. The introductory course now given in London at the beginning of the clinical period required a minimum of six months, and he advocated during the final clinical year a course of three months which, at St. Thomas's Hospital, was a voluntary clerkship occupying two afternoons in the week. This

course had been very successful. Medical education had to provide a basis upon which prospective practitioners could build.

Professor L. P. GARROD discussed the place bacteriology should occupy. Ideally it should occur twice—in the pre-clinical course, and again later; but there was no time to teach it as a pure science, and of necessity it was studied in its applications. Should the bacteriologist or the teacher of public health tell students how bacteria spread in communities? He thought it was the bacteriologist's job. The principles of immunity and the methods of attaining immunization must be taught. England contained more objectors to immunization than any other country, and therefore the student should be taught the arguments in favour of it. It was important also to teach diagnostic methods, including the collection of specimens, and to give an idea of the time necessary to prepare a report. For practical work the student should be given genuine material (cultures of pathogenic bacteria) upon which to work, and he might then be able to carry out simple investigations himself in later life when skilled help was not available. He would be interested only if he made his own preparations, however imperfect these might be.

Lectures should enable the student to read his books intelligently. With more time and opportunity there might be improvements in teaching—for example, with the help of the cinema. He would like to use films extensively. This would also enable students to see material that they might otherwise never encounter. Such subjects as chemotherapy should be taught in co-operation with those in other branches of medicine.

### Need for Integration

Professor CLIFFORD WILSON accepted that pathology was the basis of clinical medicine, and a fundamental discipline. The subject had grown enormously and was no longer in the student's view synonymous with morbid anatomy. Psychopathology and social pathology had appeared recently; Sir Thomas Lewis taught that pathology was the study of the manifestations of disease in the living body, and integrated the subject with clinical medicine. The integration of the teaching of pathology was desirable along three lines: with the clinician, the patient, and the student; in the lecture-room, the museum, and the post-mortem room. He would like to see the pathologists in the wards and clinicians demonstrating together with pathologists at a necropsy. Clinical medicine and pathology should not be taught as separate systems.

A patient's symptoms should be interpreted in terms of disordered function. Environmental factors and psychopathological considerations should be insisted upon in the instruction of students in disease processes—for example, in tuberculosis. In the teaching of morbid anatomy more attention should be directed to aetiological factors, with less emphasis on the terminal results. A more dynamic approach was needed.

The mental burden of the student should be lightened by selecting carefully what to teach and considering what its application might be. Four main points to bear in mind were:

Should there be a clinical as well as a preclinical course in pathology?

Should there be continuous teaching in pathology in the clinical period?

How much specialized pathology should be taught?

Who should determine the nature of the final examination in pathology?

Argument was strong for a preclinical course so that the student could get a concrete conception of the subject. He had to learn terminology, and also the normal was more clearly grasped if learnt in conjunction with the abnormal. He disagreed with Professor Barnard and thought it would be possible to give preclinical pathology to London University students by pruning the present preclinical curriculum.

Continuous teaching should be arranged in the museum and post-mortem room for all clinical years. In addition a *special course*, preferably for three months, was invaluable at a later stage. Then the various aspects of pathology could be linked with social pathology and psychopathology. This would aid understanding of aetiological factors.

#### Subsequent Discussion

Dr. J. M. ALSTON agreed with Professor Barnard that we had to prepare students for their role as doctors later. Tolstoy, in *War and Peace*, said the need of the sick man for the doctor was the need for his reassurance that something was being done, rather than for his medicine. Those responsible for teaching should form a committee and thrash out the synthesis of the curriculum among themselves. The essential position of pathology was guaranteed by common consent, as in the B.M.A. report, *The Training of the Doctor*. An early course in psychopathology would teach students how to approach and understand the patient's mind.

Dr. L. F. HEWITT said integration had been much talked of, but one was faced with the problem of examinations, and any change had to take into account the necessity for passing the final examination.

Professor R. CRUICKSHANK pleaded for the necessity of giving the student only what he needed for his future work and not unnecessary details. A team of teachers might undertake the integration of different aspects of disease—for example, by discussing pneumonia in a group before students. Preventive medicine had been badly taught in some centres, and should be approached through its epidemiological aspects. Also teachers should be taught how to teach—as by a course of training. In answer to the president, Professor Cruickshank said he felt this was a problem that had to be met individually.

Professor G. PAYLING WRIGHT favoured a course of pathology before any ward-work, as practised at the older universities, and continuous instruction throughout the clinical years.

Professor R. HARE discussed the difficulty of this continuous instruction. Clinical pathological conferences went some way to meeting the need. Instruction in antibiotics could be integrated with pharmacological teaching. Hygiene, public health, and preventive medicine also needed to be harmonized with bacteriological teaching. He questioned whether a separate department of preventive medicine was necessary.

Professor G. R. CAMERON said that with increasing experience he personally felt that lecturing was futile compared with rag-classes. He suggested that if lectures must be given they should be delegated to the clinicians.

Dr. F. O. MACCALLUM wanted emphasis on the practical aspects of pathology in teaching. The correct procedure for the collection of blood in syringes for serological tests provided an example. In his experience this was often done badly, so that the requisite investigations could not be made.

In reply Professor GARROD felt that much that had been advocated in terms of "integration" was completely impracticable simply because many subjects did not lend themselves to this form of treatment and staffing was inadequate. Professor BARNARD found himself in sympathy with Professor Cameron over the problem of lectures. Undoubtedly the rag-class could be of unique value as a method of teaching.

#### Summing Up

In the present reporter's view it was regrettable in this discussion that no contributions were made by chemical or clinical pathologists. It seemed largely to resolve into a conflict between the idealists, who wanted more "integration" than may at present be feasible, and those who felt that the student should be taught the practical applications of pathology at the sacrifice perhaps of a good deal of theoretical stuff.

## Nova et Vetera

### ANATOMY AT OXFORD

*A Short History of Anatomical Teaching in Oxford.* By H. M. Sinclair and A. H. T. Robb-Smith. (Pp. 81; 22 illustrations. 3s. 6d.) Oxford: At the University Press. 1950.

Oxford is a very important centre of anatomical teaching and research. Its school of anatomy has a long and, at times, honourable history. It had a brilliant period in the second half of the seventeenth century, an almost featureless gap during the eighteenth and the first half of the nineteenth centuries, when its best-endowed posts were filled by men often charitably described as "characters," and a revival about a hundred years ago from which arose the present imposing development. In 1950 Drs. Sinclair and Robb-Smith prepared at the Radcliffe Science Library a fine exhibition to illustrate the history of anatomy at Oxford. This happily overlapped the meeting of the International Anatomical Congress presided over by Professor Le Gros Clark, who appropriately writes a foreword to this beautiful booklet. A catalogue of the items displayed in the exhibition is appended.

The title-page is an adaptation of the *Syntagma Anatomicum* of Vesling (1598–1649), the last of the great Vesalian line at Padua. It represents two conspicuously robust Muses, of whom one embraces a vast tome while the other flourishes a surgeon's knife. Between them they display a dissection scene in the famous theatre at Padua where old Fabrizzi lectured while young Harvey listened. From Vesling, as the caption here tells, John Evelyn (1620–1706), of Balliol, bought the dried and mounted tables of vessels and nerves which passed from the Royal Society and then to the British Museum, and finally in 1809 to the Royal College of Surgeons, where they now are.

During the centuries the assignments of the endowments for anatomy at Oxford have so varied that it would be impossible to relate them in a short narrative. The authors have therefore set them out in tabular form. Among the brilliant names there are, for the earlier period, Harvey, Willis, Boyle, Lower, and Petty, and, for the later, George Rolleston, Burdon-Sanderson, H. W. Acland, H. N. Moseley, Arthur Thomson, and E. Ray Lankester. The pamphlet ends with a series of plates containing many striking figures. Of these perhaps the most interesting is Christopher Wren's drawing of the base of the brain, showing the "circle of Willis." The most beautiful is the portrait ascribed to Sir Peter Lely of Sir Thomas Clayton (1612–93), regius professor of medicine and reader in anatomy. He was "possessed of a timorous and effeminate humour, and could never endure the sight of a mangled or bloody body." Others of his line had other grounds for avoiding the dissecting-room. Thus the first regius professor, John Warner (died 1565), "was a great intruder into ecclesiastical benefices and dignities." In addition to his professorship he was Canon of St. Paul's, Archdeacon of Cleveland, Warden of All Souls, vice-chancellor of the university, and holder of various other sources of ecclesiastical emolument.

The real father of the modern school at Oxford was Henry W. Acland (1815–1900). He was elected to a medical fellowship at All Souls, then "a club for young men of good family who had shown or were believed to possess some aptitude for work." When asked for permission to lecture to the students he was told that he might, provided that the lectures began at 6 a.m. He came under the influence of Richard Owen, who persuaded him to leave Oxford for Edinburgh. There he studied under Allen Thompson, Goodsir, and Christison. He returned to Oxford as reader in anatomy in 1845. The importance of the medical school really dates from his appointment as regius professor of medicine in 1857. The account of the struggles and final success of this remarkable man is among the pleasantest features of this charming and beautifully produced little volume.

CHARLES SINGER.