Neurological Manifestations

The difficulties of diagnosis are most apparent when there are neurological manifestations. The mononucleosis in the blood and the formation of agglutinins are associated with the development of the glandular enlargement and not with the neurological features. If the glandular changes precede the neurological symptoms both these pathological tests may have become negative before the period of nervous manifestations: this may be so even in the presence of lymphocytosis in the cerebrospinal fluid. If the nervous symptoms come first the reactions may not have developed. This sequence is often overlooked when the Paul-Bunnell test is applied to cases of benign lymphocytic choriomeningitis. The timing of the Paul-Bunnell test is thus of great importance in interpreting the value of a negative reaction in these cases. In a recent well-authenticated case the agglutinin reaction was positive in the cerebrospinal fluid: in all previous instances it has been negative. With regard to the clinical signs, the most striking features are their bizarre nature and the rapidity with which a structure that appears to be seriously affected recovers.

Prognosis and Treatment

Recovery from glandular fever is, with very rare exceptions, always complete. Occasionally there is a long convalescent period of debility and headache which is suggestive of encephalitis. A few deaths have occurred in debilitated children. One or two deaths have taken place during comatose stages of nervous complications, but no permanent paralyses or sequelae have yet been recorded. There is no authentic instance of the subsequent development of leukaemia; reported cases are errors in diagnosis or confusion with the type of chronic leukaemia described above.

No drug has yet been found to influence the course. All the antibiotics have been tried, with negative results when properly controlled.

Next Refresher Course Article.—"Irregular Vaginal Bleeding," by Mr. Malcolm Donaldson, will be published on September 6.

CENTENARY OF THE UNIVERSITY OF SYDNEY

BY

KEITH INGLIS, M.D.

Professor of Pathology, New Medical School, University of Sydney

A community which feels the need of a university has the higher outlook, for it has been truly said that a university is the soul of a people. The people of Sydney realized this a century ago, and the University of Sydney was founded in 1850, though the real teaching work did not begin until 1852.

The main building (Fig. 1) is of perpendicular Gothic architecture and was built of sandstone from the Pyrmont quarries; it was begun in 1854 and finished about 1860, the architect being T. Blacket. A special feature is the Great Hall, in which are held official functions of all faculties. Outstanding among the attractions of the Great Hall are the stained-glass windows, which, before being sent to Australia, aroused the interest of Queen Victoria and the Prince Consort, and were set up in the Waterloo Gallery in Windsor Castle for inspection. The windows show representations of the founders of the colleges of the Universities of Oxford and of Cambridge, portraits of the kings and queens of

FIG. 1.—The main University building.

England since the Norman Conquest, and portraits of persons celebrated in British history, literature, science, and art. Projecting into the Hall from the Senate Room is an oriel window. The stone used in making this window is carved with armorial bearings, and came from Caen, in Normandy.

The Medical School

The medical school was established in 1883. P. T. Anderson Stuart came from Edinburgh to Sydney as Professor of Anatomy and Physiology, and A. MacCormick was his first demonstrator. There were four students, and classes were held in a small cottage of four rooms. A model of this cottage is now in the historical section of the museum in the New Medical School.

It was largely due to the initiative and enthusiasm of Anderson Stuart that funds were forthcoming for the construction of what is now known as the Old Medical School (Fig. 2). A document signed by representative citizens of Sydney appealing to the Government of New South Wales for funds to establish a medical school is to be seen in the historical section of the museum. Many thought Anderson Stuart's plans too ambitious, and when the first half of the Old Medical School was completed the building was referred to by some as "Stuart's folly." Not many years passed, however, before the other half of the Old Medical School had to be added.

In 1887 J. T. Wilson came to Sydney from Edinburgh, and he was appointed Professor of Anatomy in Sydney when Anderson Stuart's department was subdivided in 1890. Wilson filled this chair until 1920, when he went to Cambridge as Professor of Anatomy, retiring from this appointment in 1934.

Wilson's influence spread far, especially in British countries, for among his pupils were Grafton Elliot Smith, J. L. Shellshear, A. N. Burkitt, R. A. Dart, and John Irvine Hunter, who held Chairs of Anatomy in London, Manchester, China, South Africa, and Sydney. Hunter was appointed Challis Professor of Anatomy at Sydney when

FIG. 2.—The Old Medical School.

he was 25 years of age. The next year, after a lecture tour in America, he visited England, and there he died. This was a grievous loss to our school.

In 1902 a third Edinburgh graduate came to Sydney, D. A. Welsh being appointed the first Professor of Pathology. When Anderson Stuart and Wilson were joined in Sydney by Welsh, the Medical School had three outstanding men to shape its future. These three men, affectionately known to their students as "Andy," "Jummy," and "Taffy," were very different types, but all contributed to the development of the University of Sydney Medical School in the early part of this century, and brought from their homeland to the land of their adoption much that is best in the culture of the "Old Country."

The strong representation on the University staff of men from north of the Tweed gave rise to many amusing stories, often told by the Scots themselves. For example, there was the wit who suggested that when advertising staff appointments the Senate might as well state in the advertisement, "No one but a Scotsman need apply." Again there was the occasion when a visitor from abroad called on the Chancellor, a Scot, who was a little hard of hearing; the visitor commented on the large number of Scottish professors, and the Chancellor, who had not heard him aright, replied, "Our worst pest is the rabbits."

Speaking of the rabbit pest calls to mind one of the most interesting exhibits in the historical section of our museum; it is a flask of broth prepared by Louis Pasteur, and it came into our possession in the following way. In 1883 the rabbits had increased to such an alarming extent that the Government of New South Wales offered a reward of £25,000 to anyone who would provide a reliable means of destroying them. Offers came from many parts of the world, and among them was the plan of Pasteur to kill them off by means of cultures of virulent bacteria. In March, 1888, Dr. Loir, a nephew of Pasteur, and Dr. Germont arrived in Sydney with cultures, media, and all appliances necessary for the experiments. The flask of broth in our museum was put up by Pasteur himself and left in Sydney at the conclusion of the experiments.

The following men, who later became distinguished in Great Britain, were for a time on the staff of our Medical School: Almoth Wright, who later became Principal of the Institute of Pathology, St. Mary's Hospital, London; C. J. Martin, who later became Director of the Lister Institute, London, and who befriended so many Australian medical officers during the first world war; Grafton Elliot Smith, who went from Sydney to Cambridge, to Cairo, to Manchester, and finally to University College, London; J. P. Hill, a member of the biology staff in Sydney, but who worked with the Medical School team there, and who later became Professor of Histology and Embryology at University College Hospital, London. These four men afterwards were elected Fellows of the Royal Society, as also was J. T. Wilson.

FIG. 3.—The New Medical School.

The New Medical School

The New Medical School (Fig. 3) was completed in 1933. The cost was met by a munificent gift from the Rockefeller Foundation of America at the time of the establishment of the full-time Bosch Chairs of Medicine, Surgery, and Bacteriology.

In 1941 the Lord Nuffield Theatre of Pathology was built in the basement of the new Medical School with money donated to the Royal Prince Alfred Hospital by Lord Nuffield. We thought, at one stage, of building a replica of the theatre at Padua, that medical Mecca where William Harvey was a student. Eventually it was decided not to proceed with this plan, for various reasons, one of which was that we thought students of to-day would prefer an amphitheatre where they could be seated, rather than have to stand throughout a whole necropsy demonstration, as William Harvey must have done when he was a student at Padua.

There are now 14 Chairs in the Faculty of Medicine, all but one of them full-time. The Departments of Anatomy, Embryology and Histology, Physiology, and Biochemistry are in the Old Medical School; the Departments of Pathology, Bacteriology, Pharmacology, Medicine, Surgery, and Obstetrics are in the New Medical School; the Departments of Preventive Medicine, Tropical Medicine, and Child Health are in the School of Public Health; the Chair of Psychiatry is a part-time appointment.

The Clinical Schools

In the early days of the Faculty the Royal Prince Alfred Hospital was the only clinical school, but in 1909 Sydney Hospital became a clinical school, and at a later date St. Vincent's Hospital followed. When the recent war ended, the number of students entering the Medical School became so large that additional hospital facilities were found essential, and the Royal North Shore Hospital, the Concord Repatriation Hospital, and the Rachel Forster Hospital were all used for the training of students.

Obstetrical experience is gained at the Royal Hospital for Women, the Crown Street Women's Hospital, and the King George V Hospital. Experience in diseases of children is gained at the Royal Alexandra Hospital for Children, and knowledge of infectious diseases at the Prince Henry Hospital. Psychiatric patients are studied at Broughton Hall, Callan Park, and Gladesville Mental Hospitals.

Training in all the clinical schools follows British practice, emphasis being laid on the tutorial system of bedside instruction to small groups of students. The teaching is carried out mainly by honorary medical officers, many of whom are part-time university officers. The close contact of teacher and students in the out-patient departments, wards, and special clinics has proved itself in Sydney as in Great Britain, and is the foundation of medical vocational training.

The B.Sc. (Medicine) Degree

For some years past a few selected students, after completing the third-year examination, have spent a year doing an honours course in anatomy, physiology, or biochemistry, and proceeding to a B.Sc. degree. As this arrangement worked well the principle has been extended, and a new degree (B.Sc. Medicine) was established recently which is available not only to selected students who have completed the third-year examination (replacing the B.Sc. degree) but also to selected students who have completed the fourth-year examination, so that pathology, bacteriology, and pharmacology have been added to the other three subjects. At present 16 students are devoting a year's work to special study in one of these six subjects.

The Postgraduate Committee in Medicine

In 1929 the New South Wales Branch of the British Medical Association established a Committee for Postgraduate

Medical Education in New South Wales. Several years later this committee was made autonomous by the Branch, and in 1932, with the approval of the Branch, an approach was made to the University, and this committee became the Postgraduate Committee in Medicine in the University of Sydney. The committee conducts metropolitan and country courses and organizes postgraduate medical education throughout New South Wales.

Conclusion

Judged by European standards our University and its Medical School are very young; but it is the way of youth to be hopeful, and we have great hopes for the future of our alma mater. We realize, however, that as we mature we must take care not only to maintain a high standard in professional training but also to foster academic interests, for only thus will we be receptive to those subtle influences which underlie the true university spirit which encourages that noblest of all quests—the search after truth for its own sake.

The photographs of the Main University Building and of the New Medical School were taken by Mr. S. Woodward-Smith, and that of the Old Medical School by Mr. Stanley L. Spencer.

Preparations and Appliances

AN IRRIGATOR FOR THE FENESTRATION OPERATION

MR. PETER H. HUGGILL, F.R.C.S., consulting ear, nose, and throat surgeon, St. Giles's Hospital, London, S.E.5, writes: Many instruments have been devised and recommended for the fenestration and similar operations on the temporal bone, and it is therefore with some hesitation that another is suggested. This irrigator-sucker has been in use for over two years and has proved very satisfactory. It is easy to adjust and control, and if the sucker end becomes blocked the remedy is simple: the polythene tubing is withdrawn and the blocked end cut off or a new piece substituted. The one instrument can be used for both right and left ears.

Essentially the apparatus consists of two brass guide tubes carrying lengths of polythene tubing, size 2. The guide tubes rest between the teeth of the mastoid retractor, and with the usual one, which has four teeth on each blade, there is a choice of three positions for each tube. The tubes are

kept in place by a wire spring, and they also carry small hooks which engage the soft tissues and prevent the tubes "riding up" the blades of the retractor. After the tubes are in place, two lengths of polythene tubing are pushed through and adjusted for the depth of the cavity. The taps have rubber nipples through which the other ends of the polythene tubing are pushed, and have olivary mounts to connect with the sucker and the saline reservoir; they clip on to the handle of the retractor. It is a great advantage to have the taps close to the operative field so that they can be controlled by the surgeon himself.

I wish to express my thanks to Mr. W. A. Whittlesey for his help, and to the photographic department of St. Mary's Hospital for the photograph, which shows the finished instrument made by Willen Brothers, of New Cavendish Street.

Correspondence

Because of the present high cost of producing the Journal, and the great pressure on our space, correspondents are asked to keep their letters short.

Sickle-cell Trait in Africans

SIR,—I was interested in the letter from Drs. Henry Foy and Athena Kondi (July 5, p. 41) regarding sickle-cell anaemia and the sickle-cell trait. Those reading this letter and being unacquainted with conditions in South Africa might get the wrong impression of its frequency in this country, where the disease is practically non-existent. The article from South Africa cited by Drs. Foy and Kondi (Grek and Findlay, *S. Afr. med. J.*, 1951, 25, 780) reports only one single case, and that in a girl of West African descent. It was reported because of the extreme rarity of the condition, and it was the only case which had been seen in a black inhabitant of the Union of South Africa up to that time.

As Grek and Findlay stated, in 1946 I examined the blood of 600 random admissions to the Coronation Hospital for non-Europeans, Johannesburg, and found only two cases exhibiting the trait. One of these cases had a Cape Coloured ancestry (a notoriously mixed group) and the other was resident in the Northern Transvaal. At this time the hospital was dealing with all Bantu races resident on the Witwatersrand, so these specimens represent a fair cross-section of the Africans of the Union as a whole. Up to date only three cases of sickle-cell anaemia have been reported in this country, one in an Indian (Berk and Bull, *Clin. Proc.*, 1943, 2, 147), one in a European (Altman, *ibid.*, 1945, 4, 1), and one in an African of West African descent (Grek and Findlay, 1951). I have subsequently seen one other case in an Indian resident here.

A more recent investigation covering several thousand specimens from different Bantu tribes and geographical areas of the Union—the results of which will be published shortly—has given me no reason to change my views on the extremely low incidence of the disease in this country. Since 1946 physicians have been on the watch for this disease, and it certainly has not been missed because it has been unlooked for.—I am, etc.,

South African Institute for Medical Research,
Johannesburg.

S. B. GRIFFITHS.

Gnat Bites

SIR,—Gnats in this country usually include small blood-sucking winged insects of *Culicidae* (mosquitoes), *Culicoides* (midges), and *Simulidae* (black flies). In late summer and early autumn mosquitoes are more troublesome, at least in most parts of the country, than all other blood-sucking winged insects, owing to the fact that by the end of July the breeding season has reached its peak, and the adult density is at its highest throughout the months of August and September. Then with the approach of colder nights they begin to die off, or go into hibernation, depending on the species.

Mosquitoes are especially troublesome around low-lying coastal districts where there is stagnant brackish water, in thickly wooded areas, and around sewage farms and allotments. In some districts they are troublesome only indoors, in some only out of doors, while in others they are troublesome both indoors and out. This depends on the species of mosquito. Some species bite only in the open because they never enter houses, others only indoors because the adults enter and remain in habitations for the whole of their lives, except when they leave for brief periods to lay their eggs. If both these types are prevalent in an area, then biting occurs indoors as well as out.

Local irritation following the bite of a mosquito is due to the secretion of the salivary glands of the mosquito, which is injected at the time of biting and before it begins to draw blood. This secretion prevents the blood from clotting while the insect is feeding. A mosquito takes up about its own weight in blood,