that incalculable factor, the endurance of the child.

A large number of deaths from traumatism occurred in premature children whose power of resistance to shock is very low in comparison with the mature child. The two causes of injury and prematurity are closely related, and it will be interesting to look a little more closely into the question of premature births.

The accompanying table brings out two or three points which are of some importance. The second column gives the proportion of births

TABLE II.—*Premature Births.*

Hospital.	Pre-mature birth-rate.	Stillbirth-rate.		Neonatal death-rate.	
		Pre-mature.	Mature.	Pre-mature.	Mature.
3	32·9	21·21	4·30	15·29	1·10
5	10·76	25·29	3·66	17·46	3·47
6	12·24	20·80	3·17	13·50	0·55

which were premature in three different hospitals. In hospital 3 nearly one-third of the children born in the hospital were premature; this hospital, as I have said, serves a large industrial centre. In the case of hospitals 5 and 6, the proportion is 10 per cent. and 12 per cent. respectively. All the hospitals serving industrial districts show about the same premature birth-rate as hospital 3. This table certainly suggests that women engaged in industrial work are unable to carry their children to term in anything like the same proportion as those engaged in lighter occupations. You will recollect that a somewhat similar observation was made by Pinard many years ago in Paris. It is impossible to pursue this point any further, but it also appears to be deserving of more extended inquiry.

Column 3 of this table shows the comparison between the proportion of premature and mature babies which are still-born, and it is not surprising to find that the premature stillbirth-rate is from five to seven times higher than the stillbirth-rate for mature babies. This is partly accounted for by the fact that the greater number of fœtuses born macerated are premature; from the hospital reports I should judge the proportion to be about 60 per cent. The most important factors, however, are that maternal complications are more frequent in premature labour, and that even in their absence, the premature fœtus is less able to endure the stress of labour than is the mature one.

Column 4 compares the chances of survival after birth of premature and mature babies under the same hospital conditions. Here the comparison is enormously to the disadvantage of the premature baby. The neonatal death-rate of the prematures does not vary greatly in the three hospitals, and may be put at 15 per cent. The death-rate of the mature infants varies widely from one-fifth to one-twelfth of the premature rate. The figure

of 3·47 for hospital 5 was due to exceptional circumstances which prevailed during two of the five years under review, and does not truly represent the average for that hospital. But between hospital 3 and hospital 6 there is a difference of 100 per cent. in favour of the latter.

There is, as we have seen, some evidence that social and industrial conditions may also be concerned in the causation of premature births, and this evidence may be shortly summarised thus:—
(a) Pinard showed that women admitted to hospital during the latter part of pregnancy carried to term in larger proportion than those who continued at work.

(b) Darwall Smith showed that premature births were four times as frequent in women with bad nutritional conditions as in those of average nutritional conditions.

(c) The English lying-in hospitals serving industrial districts with a large factory population show a proportion of premature births three times as high as London hospitals serving districts with a relatively small factory population.

POST-GRADUATE WORK IN VIENNA.

WITH A NOTE ON POST-GRADUATE WORK IN BERLIN.

BY

J. L. MEAGHER, M.B., B.S. MELB., L.M. COOMBE.

(Concluded from p. 47.)

CENTRALISATION OF WORK.

THE work was aided very much by the central situation of the chief hospitals. The largest, the general hospital, resembling in its drab colour and sprawling disposition a barrack, occupies a huge block near the centre of the city. It comprises the chief medical and surgical clinics. Other, more modern, magnificently appointed clinics are in the immediate neighbourhood. The greatest distance between the chief city clinics is less than half a mile. The existence of the medical book-shops and instrument shops in the quarter increases the facilities for the post-graduate.

Another feature of interest in post-graduate studies is the great German medical literature, periodical as well as text-book (not all of it, however, of unquestionable value), and the excellence of the printing, binding, and colour processes of standard works.

ORGANISATION OF COURSES.

The task of picking up knowledge would be, for the average graduate from one of the English-speaking countries, impossible if it were not for the existence of the American Medical Association. It has commercialised, and to an extent degraded, the teaching. Teachers have tended, under the

influence of the system of courses, to descend to the status of hacks. The value placed on their services is sometimes fanciful, suiting the requirements of members with most money. This is the defect of the system; it is accounted for partly, also, by the general post-war impoverishment of the city.

Courses are arranged between the Association, with the sanction of the Faculty, and individual professors or assistants in the various departments of medicine. These are of two kinds—didactic (theoretical) and practical. They may be, as in the case of some of the didactic courses, unlimited as regards numbers of those attending, and consist of lectures and lecture-demonstrations. The practical courses, necessarily, are limited as to the numbers. The recognised fee per hour of the teacher's time is chargeable, and the payment by the individual is according to the number in the class. Twenty or thirty may attend an unlimited class, and obtain valuable instruction for a trifling sum. A more recent tendency was to abandon this arrangement for a fixed fee for each student. Popular courses are conducted in most specialties and in general medicine at all times. Usually there are alternative courses at the same time. There may be, as in oto-laryngology, two, three, or more identical courses, or a man may enrol for courses in radiographical diagnosis in various parts of the city, exactly similar or slightly differing in character. The best organised special department is that of oto-laryngology. (Another speciality deservedly attracting increased notice is radiographical diagnosis.) Almost the whole of this instruction, theoretical and practical, is given in English; anatomy is included. Most of the work is duplicated and frequently repeated. It is a continuous clinical feast. Special courses are arranged at the request of individuals on application to the section organiser or "orientation" man, as he is called. A professor may advertise his course upon the Association notice-board. This method of organisation, the keenness and constitutional habit of Americans, causes competition. The work done through the Association is strenuous. It imposes a considerable, sometimes an unfair, strain upon students and teachers alike.

It is a safeguard of the health of English and Dominion students that they are unable to keep pace with the Americans. Many of the latter fell sick and were compelled to leave Vienna. Some have died in the city. It is a commonplace among the American students that they injure their health through their exertions. The attempt to absorb an impossible amount of knowledge contributes harm. The Americans value time in money, and as the work is paid for at a time rate, the hours remain long. The freedom of access to all departments of a hospital for a hospitant tends to prolong the day's work. One may begin at 6 o'clock in the morning in the milk kitchen of a children's hospital or in the wards, with the bathing of babies

at the same hour. A sense of pleasure in imparting knowledge makes the sister in charge of a department, or a nurse, eager to show the visitor everything and to gratify his wish to work if he wishes to do so. It was to be noticed that the Continental students looked on; students from the new world did the work. By subordinates as by principals the post-graduate is welcomed.

The other means of doing post-graduate work in Vienna are: 1. Direct private arrangement with a teacher. Apart from the question of expense, this is the method of choice. 2. Enrolment in a university class. Matriculation and a very fair knowledge of spoken German is necessary. 3. Arrangements through private commercial organisations. The only advantage these possess is that their terms are less than those of the Association, but this is discounted by the fact that the courses are given in German.

THE POST-GRADUATE AS HOSPITAL WORKER.

The status most closely comparable with that of a post-graduate attending the practice of a London hospital is possessed by a hospitant or voluntary assistant. Such a one must possess a working knowledge of German or be in the company of a friend who does. He will pay the *Auslander's* hospital fee in Vienna, ranging from 13s. 4d. to £1 per month. He is entitled to the full hospital practice, including lectures, demonstrations, ward visits, out-patients' department, the use of the laboratory. He has the right to examine the patients in the wards, and in this respect is left very much to his own devices. He may work, if he chooses, all day in the wards. The hours of work are not strictly limited. In the afternoons he may remain in the ward until 6. He finds himself in effect perfectly free. If he is original and has a genius for clinical observation his opportunity is great.

It may be said again that the interest taken in the teaching and the cordial welcome given by the greatest of the teachers to the post-graduate, the interest taken by them in the work of the most recently enrolled hospitants, impresses the visitor greatly. He applauds the disinterestedness of his teachers. Some do not convey this impression; they are not many; they are to be found usually amongst the lower ranks of assistants.

Finance.—A proportion of the fees charged by the teachers is paid to the University funds. The Government takes a percentage.

THE SOCIAL SIDE.

There exists in Vienna an organisation devoted to the promotion of good feeling between post-graduate and teachers and to the social interests of the former. Care for the British post-graduate is among its special concerns. One of its functions is a periodical week-end re-union, usually at the end of an intensive course, at some resort. All depart in special trains, a company of, perhaps, 200, and are accommodated at one large hotel. A formal luncheon may be held on Sunday. The

memory of one such gathering held at Semmering, a mountain resort, at which the writer was present, lingers.

Such a thing as a post-graduate hostel does not exist in Vienna. A stifling, dingy café is, or was, a substitute.

A NOTE ON POST-GRADUATE WORK IN BERLIN.

My experience in Berlin was limited to the Kaiser and Kaiserin Friedrich Kinderkrankenhaus, the Director of which is Prof. H. Finkelstein. The spirit there was of greater cordiality even than in Vienna. I was informed that I was the first Englishman who had been seen there since the beginning of the war. The impression of the German methods was of a greater thoroughness than the Viennese; greater industry was shown in research work; it seemed to have a more solid, useful character.

The American Medical Association does not exist in Berlin. As a result, post-graduate work is confined to the hospitant or to the method of private arrangement. The former is the only class of post-graduate work in Berlin of which I have experience. A knowledge of German is necessary, and a better knowledge than would suffice for Vienna, for the reason that more correct grammatical German is spoken, and the rate of delivery is faster. Men working elsewhere in Berlin expressed themselves as well-satisfied with the tuition. Some complaint was made of the charging of high fees by certain professors. The personality of Finkelstein makes him popular with post-graduates. He speaks English frequently at the ward visits, but German only at a demonstration. The hospitant's fee is 6s. 8d. per month. Research workers are encouraged. An outline of the daily routine at the hospital may be of interest. The hospitant may begin at 9 in the wards or at 7 in the milk kitchen if he chooses. An assistant conducts a ward visit from 9.30 to 11. The Director visits daily a different group of wards, beginning at 11, the visit lasting, perhaps, an hour, and a half. About 1 o'clock three times a week a clinical demonstration, attended by the majority of the hospital staff, is held in the main building. Patients are presented, some by the Professor, others by his assistants, case reports read, X ray plates and laboratory specimens shown. A discussion follows, in which the post-graduate shares. The demonstration lasts until 2.30 p.m. A similar system is in vogue at the children's hospital section of the great Charité, the largest public hospital in the city. Czerny is in charge there, famous for his wit, inconsequential manner, and original views on infant feeding. The same readiness to please the visitor is shown in Berlin as in Vienna. The outstanding characteristics of Finkelstein's hospital are kindness to a stranger, the personal touch between the hospitant and the whole of the staff, the schoolboy spirit displayed by everyone, and the devotion of the staff to the "Chief." The assistants are young men.

EDITORIAL NOTES

DANGERS OF MEDICAL PRACTICE.

It will not soon be forgotten that at the Manchester Assizes on Nov. 29th and 30th, 1926, two medical men were tried on charges of manslaughter and of conspiring criminally to procure abortion. The charges arose out of the death of a patient of one of them at the house of the other. The two doctors were acquitted on the charge of manslaughter, and the charge of conspiring to procure criminal abortion was not proceeded with. They had been committed for trial on a charge of murder, but the grand jury had thrown out the bill on that count. A medico-legal expert writes: "The case was one of great interest both in its general and in its pathological aspects. In its general aspects it indicated very clearly the dangers which medical practitioners incur in the practice of their profession, and the great need that there is for taking every precaution to guard against these dangers. The pathological evidence in the case was very remarkable, and showed clearly that pathology studied on the dead body needs to be supplemented by a practical acquaintance with the conditions existing during life. Otherwise the deductions made from observation of the conditions after death are apt to be very misleading." These doctors were both members of the London and Counties Medical Protection Society, and were defended by that Society. Their defence will have cost, we are informed, over £1000, and the cost is entirely borne by the Society. Without such help a doctor is terribly handicapped in defending himself, and failure in such a case means absolute ruin. A subscription of £1 a year is a very small premium to pay for insurance against such risk, and that is one of the things the recently-qualified practitioner should not omit or defer.

* * *

As illustrating the wide spread of acquaintance with the facilities for clinical study offered through the FELLOWSHIP OF MEDICINE is an unsolicited and gratuitous advertisement entitled "Post-graduate Education in England" in *The Caduceus*, the Journal of the Hong-Kong University Medical Society. It refers to our affiliation of 50 general and special hospitals in London, the arrangement by the Fellowship of courses of study in all departments of medicine and surgery throughout the year, special attention being given to the requirements of overseas graduates, and ends by stating that "for full information of the facilities in London, and the principal cities of the United Kingdom, application should be made to the Fellowship of Medicine. We send our cordial New Year's greetings to our brethren in China, with good wishes in their efforts to further the post-graduate cause in their far-away and at the present time distressful country."

* * *

The complete list of Special Courses arranged by the Fellowship of Medicine for 1927 is now available.