

June 8th, 1905, it was very far advanced (see Fig. 2); the foot was enormously swollen, and from numerous openings an oily liquid was escaping in abundance, in which yellow particles, resembling fishes' roe, were suspended. Amputation was performed on June 10th.

CASE X.—Dr. Pappathanassiou has since sent me photographs of a tenth case—that of a woman from the neighbourhood of Zodiah. From one of these photographs (Fig. 3) it can be seen that the disease is present in the right hand, and has begun in the right foot.

In all the above cases, where amputation was performed, the pathological appearances characteristic of mycetoma were found to be present on cutting into the tumour. It was unfortunately not possible to make microscopic observations.

The above cases may be briefly summarized as follows: of the 10 cases, 8 were in males and 2 in females; 7 of the males were field labourers and 1 an Imam; 7 came from Zodiah or its neighbourhood, 1 from Wady Aghem, 1 from Loheia and 1 from Badjel; in 4 the left foot was affected, in 3 the right foot, in 1 the buttock, in 1 the right elbow, and in 1 both right hand and right foot; the duration of the disease had varied from two to ten years; in 7 the disease was of the black variety, in 2 of the yellow variety, and in 1 the colour is not stated; in 4 the disease was ascribed to a snake bite, in 1 to the bite of an insect, and in the rest no cause for it was suggested by the patient.

All the above-named places are situated in the Yemen, within a comparatively short distance of the Red Sea coast. Loheia is one of the principal ports of the Yemen; Wady Aghem is some thirty hours inland from Loheia; Zodiah (where the majority of the cases came from) is three and a half hours inland from Ibn Abbas, which lies on the coast, nearly opposite to Camaran, and between the ports of Loheia and Hodeidah; Badjel is ten hours inland from Hodeidah. All the cases were therefore drawn from within a comparatively short radius of the Camaran lazaret, where the known presence of European medical men would naturally tend to attract such cases from the neighbouring mainland. It still remains an open question whether the disease also exists further inland in the Yemen, and in the Hedjaz, Assyria, and the other Arabian provinces.

Since writing the foregoing I have myself seen the following two cases during a fortnight's stay in Camaran:

The first case was that of an Arab boy, aged about 16, from Deir-Mohammad, near to Zodiah, the district from which so many of the cases already reported came. The disease was said to have begun three years ago in the sole of the left foot. The foot was in an advanced stage of mycetoma, of the black variety, and there was marked marasmus.

The second case was that of an older man, aged about 25, also from Zodiah. Although the disease was said to have appeared four years earlier, it had only affected the middle toe of the right foot. It was said to have begun on the upper surface.

These cases are a further proof of the existence—and indeed of the frequency—of Madura foot in the Yemen province. I cannot hear that it is met with in the Hedjaz.

THE TEETH OF SCHOOL CHILDREN.—In an official report of Mr. Joseph J. Brittain, United States Consul at Strassburg, quoted in the *Medical Record*, he refers to the good results of the establishment of a dental clinic for school children in that city. In 1902 a clinic was opened for the care and treatment of the teeth of the children in the public schools. Attendance at the clinic is compulsory, and the children are treated free of charge. In the first year 5,343 children were examined and 2,666 received treatment. The third annual report, just published, states there were 12,691 visits to the clinic in 1904 and 6,282 children were treated, for whom 7,065 teeth were filled and 7,985 teeth were extracted, and 4,382 other children had their teeth examined. The children are taught to clean their teeth three times daily, and especially before going to bed. The dentist also instructs the children in the use of the toothbrush, each child receiving a brush for home use. Since the introduction of the treatment there has been a marked improvement in the general health of the public school children. Since the foundation of the Strassburg clinic similar establishments have been opened in Darmstadt, Mulhausen, and other cities in Germany.

## MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL.

### ANGINA PECTORIS WITHOUT APPARENT DISEASE OF THE HEART OR BLOOD VESSELS.

DR. CURTIN is so good as to invite me to comment upon a case—a remarkable case—of angina pectoris.<sup>1</sup> He considers that his case stands against my hypothesis that the seat of origin of angina pectoris is the first portion of the aorta, and lies not in the heart itself. As Dr. Curtin's skill was successful in saving the life of his patient, the nature of the attack, decisive enough clinically, must remain pathologically ambiguous. But Dr. Curtin thinks the case clear enough for some argument. He surmises, and probably with truth, that in his case the intense irritation of a sensory nerve or nerves had its common consequence of a widespread arterial constriction, "with a consequent damming back of the blood on the left ventricle, which, owing to the attenuated condition of its walls, became suddenly stretched, and therefore unable to bear the stretch on its increased superficial area."

I will not follow Dr. Curtin into "pseudo-anginas," which are no more angina pectoris than colic is appendicitis.

It may be my fault, but on repeated perusal of Dr. Curtin's note I fail to find any argument which, while supporting his postulate of excessive intraventricular pressure, excludes that of excessive intra-aortic pressure; or which pits one against the other. Yet surely such a difference is of the essence of his discussion? I would dwell on excess of pressure in one area, Dr. Curtin on this in the other. If I admit his plus intracardiac pressure he must surely admit my plus intra-aortic pressure?

Again, it is the misfortune of both of us in this instance that Dr. Curtin did not see his patient during the attack. A statement of the behaviour of the heart during the attack is of the first importance, and we are without it. We rarely see our patients in these attacks, yet in this good hap I have been more fortunate than most physicians, and am able to testify that in the large majority of seizures the heart goes on its way with but little perturbation. Fifteen minutes after the attack Dr. Curtin finds the heart "intermittent, losing about one beat in four"—that is, the reflex (vagus) inhibition, which might well have stopped the heart in the seizure, still showed traces of activity. (This reflex, I admit, may have been either splanchnic or aortic, or, again, as I rather suppose, binary, with an unknown distribution of the responsibility between the two areas.)

If Dr. Curtin feels as insecure as I do in estimating the dynamic value of the heart by its physical signs, he will not pronounce upon the value of this patient's heart; it seems, at any rate, to have been good enough to ride through a terrific storm. So, if Dr. Curtin is disposed to attribute some defect to the fabric of this heart, I am disposed to suspect also some defect in the spring of the arch of the aorta of a man aged 59. I consider one surmise as good as the other, and my surmise is supported by my review of the whole subject in my Cavendish Lecture, a review I cannot of course repeat here. I must content myself with one quotation, and this is from Dr. Curtin's own note: "The most typical condition for angina pectoris is aortic regurgitation and stenosis, without mitral lesion"—that is, as I put it, a diseased aorta at a moment of excessive arterial pressure, the excess being either positive or relative to the morbid state of this part. That before the attack the pulse was of "low tension," even if Dr. Curtin attaches more value than I do to such an impression, does not affect the argument of either of us. Nor can we attach much importance to "softness" of the radial artery as an indication of the histological factor in other arterial areas.

In conclusion, I will venture to comment upon the way of nearly all writers in confusing the pain of angina pectoris with "feeling of dyspnoea, tension, or oppression about the heart . . . pain in the region of the apex," etc. (the italics are mine). As in Dr. Curtin's case, the pain in unmixed angina pectoris is not epicardial but substernal; and "dyspnoea" is not a feature of it.

Cambridge.

T. CLIFFORD ALLBUTT.

<sup>1</sup> BRITISH MEDICAL JOURNAL, April 14th, 1906.

PURPURA ACCOMPANIED BY ARTHRITIS AND  
VISCERAL LESIONS.

W. M., aged 6 years, had a slight sore throat on November 6th, 1905, but continued to go to school until November 8th, when he complained of pain in the right elbow. When I saw him first on that day the right elbow was considerably swollen and tender, the tonsils slightly hypertrophied and inflamed, the tongue white and furred, and the heart normal; the temperature was 99°. On November 9th both elbows were swollen and painful, and on the front of the legs and thighs were numerous purpuric spots, varying in size from a pin's head to about 1.5 cm. in diameter, occurring in groups of about 4 cm. diameter. The throat symptoms had disappeared; vomited twice. On November 11th the swelling and pain in the elbows had disappeared, but a crop of purpuric spots had come out on both elbows. The ankles were painful and slightly swollen. Between this date and November 15th the joint pains and purpuric spots subsided, but he had several attacks of abdominal pain, and vomited several times, but had no haematemesis. The urine was normal. On November 16th the left ear was swollen and purple, and for the next four days diarrhoea and vomiting were continuous, but were checked by a mixture of tr. opii  $\text{mij}$  and tr. catechu  $\text{xxxx}$ . The motions occasionally contained blood, at other times were of a green colour. He had two slight attacks of epistaxis on the fourth day, and the right upper eyelid was swollen and discoloured. The urine contained a trace of blood and albumen.

On December 5th it was noted that the quantity of urine was in the twenty-four hours only 18 oz., containing much blood and albumen. There was considerable oedema of the feet, scrotum, and face. After this fresh crops of purpuric spots appeared every few days on the arms and legs. Some of these exposed to pressure, as on the ankles, knees and elbows, ulcerated. By January 10th, 1906, the patient was covered with purpuric spots and a bronze-coloured rash; the urine, very scanty, contained blood and albumen. He had had occasional abdominal pains, but no more diarrhoea. There was great oedema of limbs, chest and face, and the abdomen was distended with fluid. On February 10th he had two uraemic convulsions, and he died on February 16th after another convulsion.

Throughout the illness the heart was frequently examined, but there was never a suspicion of any endocarditis. After the first week there were no joint pains. The purpuric spots continued to come out in fresh crops up to the death of the patient.

Both mother and father suffer from rheumatism; of five other children, four are strong and healthy, while one, aged 17, is suffering from Ménière's disease. The patient was a strong healthy lad before this illness.

The boy was kept in bed throughout the illness, and on a milk diet, which he took fairly well, until the last two weeks. With regard to drugs, arsenic, iron, and sodium salicylate were all tried without the least effect. Liq. morphinae hydrochloratis  $\text{mj}$  every four hours seemed of use in checking the uraemic convulsions. Hot packs were tried also, but without any benefit.

Oundle.

A. F. ELLIOTT, M.B.Camb.

THE ARTERIES DURING SOME INFECTIOUS  
DISEASES.

ABOUT the time when influenza was becoming sporadic and difficult to distinguish from cases of ordinary catarrh, the use of antidiphtherial serum was a recent agent in the hands of general practitioners. The serum was used in less heroic doses than are now customary, and although death was often averted, the disease was not fully controlled. Watching the results at that time, I became aware that within a week after the smaller dose was administered there occurred a perceptible thickening of the walls of the superficial arteries, most easily recognized in the radials at the wrist, but also present in all arteries which were within easy reach. It was not the hard artery of Bright's disease; it suggested rather the idea of swollen and oedematous walls. It was marked in elderly people, but was masked by the changes which attend advancing years. In youth it came more as a surprise, but investigation failed to elicit any evidence of kidney complica-

tions. It was not observed to be present in quite young children who had not yet learnt to walk, for in them the subcutaneous fat is too firm to permit of the vessel being readily traced; but from about the third year onwards it was obvious. The duration of the thickening varied from one week to over three.

In some cases which one hesitated to pronounce influenzal, but which sequelae demonstrated to be of that nature, a similar condition of the arterial wall was noted and it lasted about three weeks.

Enteric fever is rare in Guernsey in a grave form, but in some mild cases I noted this thickening of the radials; attending a very dicrotic pulse and persisting for about nine weeks. In both instances I have become accustomed to regard it as an important diagnostic sign.

Since I began to use the antidiphtherial serum in larger doses I have failed to note this arterial change in many instances, and I now accept it as a criterion of the efficiency of the dose. It seems to be independent, in cases of diphtheria, of the existence of albuminuria, for I have failed to find it when both albuminuria was present and the palate was paralysed; while with no albumen in the urine and no signs of paralysis it has been obvious, provided that only a small dose of antitoxin had been given. I have observed it in some cases after a protective dose of antitoxin, and these cases have not developed the disease in a recognisable form; but if we accept Dr. Osler's figures for the City of New York—since January, 1895, 13,000 persons have been immunized, of whom only 40 contracted the disease—I venture to suggest that many more would have been found to show this sign, and that it is desirable to subject such cases as show this infiltration of the arteries to a careful bacteriological examination to determine how many of them are capable of conveying infection.

The vessel is not tortuous, not quite round like the artery of Bright's disease, and contains no gritty particles; it merely stands out large amid the subcutaneous tissue, and is a little more movable than in health. I do not think that it is more loosely held, but it gives one a little more leverage over it. It is best appreciated by a light touch, which conveys none of the sphygmographic characteristics of the pulse, but appreciates the fact of pulsation. It appears somewhat suddenly, at least within twenty-four hours, and it wanes gradually.

Should these observations be confirmed, we shall have a means of recognizing mild infections in doubtful cases; an index of the efficiency of our dosage in at least one of the curative serums, and some information as to the possible spread of infection by persons who are under observation. I may be wrong in assuming that it is caused by mild infections when phagocytosis is in excess of what is required for successful combat, or when the same condition results from the aid of a partially protective dose of a curative serum.

Birnham, Guernsey.

JOHN AIKMAN, M.D.

## REFLEX EPILEPSY AND OPERATION.

IN 1896 Mrs. A., aged 32, came to see me complaining of severe pain in the lower part of the back, etc. Ever since the age of 20 she had suffered from frequent epileptic attacks, sometimes as often as twice a week, not especially at the menstrual periods. Married at 24, she had never been pregnant. The pain had existed for two years, and was becoming more severe. On making a vaginal examination a large and tender ovary was felt in Douglas's pouch. Almost as soon as I pressed on the ovary she went off into a violent and characteristic epileptic attack. At that time I thought it might be a mere coincidence, but on every subsequent examination the same thing happened. She was then put on bromides, etc., but they did not have very much effect in diminishing the number of the attacks. In 1897, just a year after being first seen, as she still complained of the pain in the pelvis, she begged me to operate. At the operation I found that both ovaries were enlarged, cystic and cirrhotic, so I removed them. She got over the operation very well, but for at least eighteen months afterwards she suffered much from melancholia. She is now a strong, cheerful, and healthy woman, and moreover, has never had a fit since the operation. I believe the number of reported cases of reflex epilepsy cured by operation is few. It is for this reason that I record the case.

Guernsey.

E. LAURIE ROBINSON.

against foreigners, who have to go through their studies anew to obtain the right to practise. Living is very dear, and the country is very healthy.

The Republic of Domingo allows foreigners to practise. Dutch Guiana prefers Dutch doctors. The Republic of Hayti gives a licence after examination passed before a medical committee. It admits foreigners without difficulty, and they might find a fairly good opening.

In Japan the output of native doctors is sufficient for the needs of the country, and in China foreign doctors can practise only in the seaports.

## MEDICAL NEWS.

THE summer course of post-graduate lectures and demonstrations at Charing Cross Hospital will commence on April 30th.

THE late Mrs. Ellen Rush of Hove, whose will has now been proved, bequeathed £100 each to the Sussex County Hospital and the Alexandra Hospital, Brighton.

A COURSE of four lectures on the nervous system will be commenced by the Gresham Professor of Medicine at Gresham College on Tuesday, April 24th, at 6 p.m.

THE late Mrs. Mary Day, of Lulsley, Worcestershire, bequeathed £2,000 to the Worcester Infirmary, £1,000 to the Brompton Hospital for Consumption, and £500 each to the Worcester Dispensary and the Birmingham Blind Asylum.

AN inquiry into a case of death from lead poisoning, the second within a very short period, took place at Sheffield on April 3rd. The deceased was a married woman, aged 20, who took pills, made by herself from diachylon, for a "specific purpose." To a verdict to this effect the jury added a rider urging that diachylon should be scheduled as a poison.

THE annual meeting of the British Association for the Advancement of Science, which is to take place this year in York, will begin on August 1st, when the President-elect, Professor Ray Lankester, F.R.S., will deliver an address. Addresses will be given at general meetings of the Association by Dr. Tempest Anderson on volcanoes, and by Dr. Waller, F.R.S., on the electrical signs of life and their abolition by chloroform.

THE Committee of the International Congress for the Welfare and Protection of Children, held in London in 1902, has summoned a conference at the Guildhall, London, on Tuesday, May 22nd, to discuss (1) the free feeding of school children, and (2) children's courts, probation officers, and remand homes. Further particulars can be obtained from the Secretary, Mr. W. G. Lewis, 8, Wells Street, Gray's Inn Road, London, W.C.

THE MEDICAL CORPS OF THE UNITED STATES ARMY.—We learn from the *New York Medical Journal* that the Bill to increase the efficiency of the corps by providing an additional number of medical officers and abolishing the grade of contract surgeon, was passed by the United States Senate on March 29th by a vote of 42 to 5.

UNIVERSITY OF VIENNA.—The programme for the summer semester of the Medical Faculty of Vienna comprises 369 lectures and courses to be given by 32 ordinary, 57 extraordinary professors, and 133 *Privatdozenten* and assistants. The total number of students in the faculty during the last winter semester was 1,657, of whom 96 were women.

A MOVEMENT is stated to be in progress among associations devoted to bakery interests in London with the object of getting such restrictions placed on the retail trade in bread as will result in its being handled in a cleanly fashion, and not allowed to be contaminated in small chandlers' and other shops by contact with other articles. A somewhat similar proposition was considered by the London County Council some time ago, the argument then used being that bread is sometimes bought back by some bread retailers after lying in the dirty houses of their customers.

ABOUT a year ago the *Commercial Motor* estimated that before the end of 1906 there would be 1,300 motor omnibuses running in London. The new regulations of the Chief Commissioner of Police have, however, retarded delivery; and as the most important of these are designed to minimize the noise and rattle and the trail of half-burned petrol which we were learning to associate with these convenient vehicles, the average Londoner who has any sense or senses left will not regret the delay. On Easter Monday, we are told, there were 393 motor buses in the London streets.

PHYSICAL EFFICIENCY AND THE TEETH.—A sidelight on the physical development and efficiency of the working classes is thrown by a step which Messrs. Peak, Fearn,

and Co. esteemed worth while to take last year. This firm employs at its works in London 2,400 hands—men and boys, women and girls—and some years ago, by way of ensuring such efficiency as is born of good health, engaged a medical staff to look after them. This plan was satisfactory so far as it went, but last year the firm started a little dental surgery of its own, engaging a dentist to attend twice a week and do any work required. The institution soon became so popular that after a month or two it was found necessary for the dentist to attend three times a week instead of twice, and in the twelve months that have elapsed 338 patients have been treated, 167 being men and boys, and 151 women and girls. Their average length of service is five and a half years, preference being given to those longest in the firm's employ, unless the applicants for relief are in actual pain. At intervals of about a fortnight there are anaesthesia days, when one of the medical staff attends to give gas for extractions; at other times local anaesthesia is employed. The gas extractions during the year numbered 1,053, and the local anaesthesia extractions 316. The ordinary treatment is entirely free, but a portion of the cost of artificial teeth must be contributed. The chairman of the company, who has supplied us with these details, states that the managers are satisfied that the company is fully compensated for the expenditure by the results. This we can well believe to be the case, and the plan might well be followed in other quarters. As it stands, it is a notable practical comment on the relation between physical deterioration and working efficiency. Apart from the benefit to the workers themselves and to those who employ them, such a plan, if general, would do much to bring home to the working and other classes how important a part teeth play in the preservation of health.

HEALTH CONDITIONS IN THE PHILIPPINES.—The Board of Health for the Philippines may certainly be congratulated upon the efficiency of their system and the way they have got it into working order. Their monthly report for October last, which has reached us, affords a very considerable amount of information upon the vital and sanitary statistics of the archipelago. In Manila the birth-rate and death-rate nearly balanced in the month under consideration, being 45.10 and 45.51 respectively. The population of the city was 220,000, nearly 190,000 of these being Filipinos, 21,000 Chinese, 2,528 Spaniards, and 4,389 Americans. Only one case of plague was reported, and this proved fatal, but an energetic campaign against rats was carried on, and nearly 14,000 destroyed in the crematoria. House inspection seems to be very thorough; more than 56,000 have been visited. In the city 31 cases of cholera and 29 deaths occurred, and in the provinces 358 cases with 249 deaths. The epidemic began in the end of August, and up to the end of October 767 persons had died. It is remarkable how much higher was the mortality per cent. of cases attacked in the city—nearly 88 per cent.—than in the country, where it was only 73 per cent. In spite of epidemics, a somewhat excessive death-rate, and a tropical climate, the centenarian is apparently no rarity, for no less than four persons over the age of 100 years died in Manila during the month. The tables reveal the existence of a great amount of leprosy, which appears to be widespread, though especially affecting the island of Cebu, where 707 cases are recorded out of the total number from all islands and provinces, so far as it can be collected, of 3,544 cases. The disease is much more prevalent among males than females, 2,238 of the former as against 1,306 of the latter being affected.

VIENNA ANTIRABIC INSTITUTE.—During the year 1904 the total number of persons who underwent a course of inoculative treatment for the prevention of hydrophobia in the Vienna Antirabic Institute was 235. This does not include 103 persons for whom the inoculations were considered unnecessary, either because the dogs that inflicted the bites were subsequently proved to be free from rabies, or because no wound was visible. From the total number inoculated 45 have to be deducted either because patients without a wound were very anxious to be treated, or because after the completion of the treatment 10 test inoculations made on the suspected dogs in the Military Veterinary Institute proved that the animals were not rabid. In one of these cases the patient died of acute suppurative inflammation of the larynx immediately after the first inoculation. Among the remaining 190 there were 4 deaths, 2 of which occurred within fifteen days of the beginning of treatment, and are therefore not included in reckoning the mortality. The total number of cases treated at the Institute now amounts to 2,127, with 27 deaths, a mortality-rate of 1.27 per cent. Deducting 15 fatal cases in which death occurred within the period just stated, the mortality-rate is only 0.7 per cent.

any ethical committee, would receive appropriate censure, but it hardly comes under the terms of the warning issued by the General Medical Council last December. If the Prevention of Corruption Bill now before Parliament becomes law, such an act will expose the giver of the bribe to fine or imprisonment. In our opinion the present case should be reported to the licensing authority from which the offender holds his diploma, as the body most able to make him see the error of his ways.

#### SENILE DECAY OR DISEASE?

**DELTA.**—A member of a friendly society is not usually entitled to sick pay for disablement from old age only. In most cases he manages to get it by being certified as suffering from some ailment which is the outcome of old age. A certificate to the effect that he is suffering from senile decay would not entitle him to sickness pay.

## UNIVERSITIES AND COLLEGES.

### UNIVERSITY OF OXFORD.

#### A Diploma in Anthropology.

THE University has instituted a Diploma in Anthropology to be granted to all persons, whether members of the University or not, who, after pursuing an approved course of study, satisfy examiners appointed by the University as to their proficiency in anthropology. Every candidate before admission to the examination must have been engaged in the study of anthropology for at least one academic year. The subjects of examination will be: (1) The Elements of Physical Anthropology; (2) The Elements of Cultural Anthropology. Courses of instruction have been arranged; the first annual examination will be held in Trinity Term, 1906. The precise date of the examination will be notified each year in the *Oxford University Gazette*, and copies of the list of lectures and of the syllabus of subjects to be offered in the examination, together with such other information as a candidate may require, may be obtained on application to the Secretary to the Committee for Anthropology, John L. Myers, M.A., Christ Church, Oxford.

### UNIVERSITY OF LONDON.

#### MEETING OF THE SENATE.

A MEETING of the Senate was held on March 28th.

#### Recognition of Teachers.

The following were recognized as teachers of the University: *University College*.—Dr. Charles Bolton (medicine), *King's College*.—Dr. Arthur Whitfield (dermatology), Dr. H. A. Wilson (physics).

*London Hospital Medical College*.—Dr. Otto Grünbaum (clinical medicine), Mr. W. T. Lister (ophthalmology).

*St. Thomas's Hospital Medical School*.—Mr. L. S. Dudgeon (pathology and bacteriology), Mr. J. S. Fairbairn (midwifery and diseases of women), Mr. Harold Low (anaesthetics), Mr. P. W. G. Sargent (surgery), Dr. R. Percy Smith (mental diseases), Mr. E. Stainer (dermatology).

*St. George's Hospital Medical School*.—Mr. L. Jones (surgery), Dr. H. E. D. Spitta (hygiene).

*Royal London Ophthalmic Hospital*.—Dr. J. H. Parsons (ophthalmology).

*Lister Institute*.—Dr. Allan Macfadyen and Mr. George Dean (bacteriology), Dr. A. Harden (chemical pathology), Dr. C. J. Martin and Dr. Sven Gustaf Hedin (pathology).

*East London College*.—Dr. C. H. Lees (physics).

The following were provisionally recognized:

*Middlesex Hospital Medical School*.—Dr. William Wright (anatomy). *St. Mary's Hospital Medical School*.—Mr. H. B. Pantham (biology).

#### Panel of Lecturers in Physiology.

The following names were added to the list panel of university lecturers in advanced physiology:

*King's College*.—Dr. T. G. Brodie, F.R.S., Dr. C. J. Martin, F.R.S., and Dr. O. Rosenheim.

#### Entry to the M.S. Examination.

It was resolved:

That candidates being already Bachelors of Medicine who shall have qualified for the B.S. degree by passing the surgery portion of the M.B., B.S. Examination, and who shall have obtained honours, be permitted to enter for the M.S. Examination after an interval of one year only from the time of obtaining such honours, provided that they comply in other respects with current regulations.

#### Donation to the Institute of Medical Sciences.

A resolution was adopted conveying the thanks of the Senate to the Worshipful Company of Goldsmiths for their munificent donation of £10,000 to the fund now being raised for the establishment of an Institute of Medical Sciences.

#### Chair of Protozoology.

The Senate have appointed Mr. E. A. Minchin to the recently-founded chair of protozoology established by means of an endowment of £750 a year for five years made by the Secretary of State for the Colonies from funds contributed for the purpose partly by the Rhodes trustees and partly by the Royal Society Tropical Diseases Research Fund originally established under the Colonial Office.

#### Appointments.

Dr. A. D. Waller, F.R.S., was appointed the representative of the University at the quatercentenary celebration of the University of Aberdeen and a governor of Hartley University College, Southampton.

#### Lectures in the Physiological Laboratory.

A course of eight lectures on the physiology of nerve will be given by Dr. N. H. Alcock on Tuesdays at 5 p.m., beginning on May 8th.

#### KING'S COLLEGE.

Dr. C. S. Myers, Lecturer on Experimental Psychology at King's College, will give a course of eight lectures during the summer session on Fridays, at 4 p.m., the first taking place on May 11th. The lectures are free to students of King's College, to students of other medical schools in London, and to medical practitioners on presentation of their cards.

### UNIVERSITY OF GLASGOW.

THE following candidates have been approved in one or other of the subjects included in the examinations indicated.

**First M.B.** (Botany, Zoology, Physics, Chemistry, Therapeutics):

A. J. Archibald, C. Auld, R. B. Bain, A. M. Bayne, E. A. C. Beard, C. S. Black, J. Broadfoot, J. S. Brown, J. Buchanan, C. J. B. Buchheim, J. A. S. Burges, T. S. Campbell, W. G. Clark, J. Cook, J. H. Coulter, R. H. Deans, J. T. Dick, D. Downie, P. Drummond, R. Drummond, A. Dunlop, J. Dunlop, M.A., W. D. Dunlop, P. Figdor, A. S. Findlay, J. Findlay, A. Fraser, T. L. Fraser, R. Gale, N. Gebbie, W. E. Gemmell, R. Gilchrist, E. G. Glover, J. Gray, A. W. Gregorson, A. B. Hamilton, J. Hendry, W. H. Howat, W. Howie, J. Jack, N. A. MacD. Johnson, T. J. Kirk, C. Lundie, D. C. Macdonald, M. A. Macdonald, W. Macewen, A. Macintyre, D. McIntyre, B. McKean, T. J. Mackie, T. Mackinlay, M. McKinnon, A. B. Maclean, C. Macmillan, J. P. Mathie, D. Meek, A. Millar, J. Mitchell, J. M. I. Morgan, A. R. Muir, F. Murchie, F. L. Napier, C. M. Nicol, R. R. K. Paton, A. S. Richmond, J. Robertson, A. F. Ross, J. H. N. F. Savy, J. M. A. Scott, J. L. Scott, J. M. N. Scott, M.A., J. D. S. Sinclair, J. S. Somerville, M. Sommerville, G. R. Spence, J. Stewart, T. L. G. Stewart, G. I. Strachan, C. L. Sutherland, W. Taylor, J. J. Townley, C. F. Troup, C. H. Wagner, J. D. Walker, J. C. Walker, H. E. Whittingham, H. M. Williamson, G. J. Wilson, J. Y. Wood, Women: M. A. A. Beard, L. E. Dodge, F. A. Gallagher, A. M. M. Michael, M. Muir, E. B. Orr, M. A. Pilliet, F. E. Sexton, J. Wallace.

**Second M.B.** (Anatomy, Physiology, Materia Medica and Therapeutics):

J. A. Aitken, D. Anderson, W. Anderson, T. Archibald, W. H. S. Armstrong, J. Atkinson, W. Barr, J. Blakeley, R. E. Row, J. L. Boyd, W. B. Brownlie, H. M. K. Calder, J. Cameron, J. Carrick, D. Clark, D. J. Clark, A. B. Cluckie, J. H. J. V. Coats, J. Cook, (Partick), J. Cruickshank, N. Davie, W. Dawson, J. C. Dick, A. D. Downes, M.A., T. L. Fleming, T. S. Forrest, W. L. Forsyth, R. D. B. Frew, D. Gibson, W. Gilmour, A. T. A. Gourlay, E. O'D. Graham, J. V. Grant, J. D. Gray, D. Hamilton, J. S. Harbison, M. Harkin, T. Harkin, J. M. Henderson, J. M. L. Hendry, B. Hutchison, A. M. Kennedy, C. L. Kerr, J. Lang, W. Leitch, F. C. Macaulay, R. M. Carlie, J. G. McCutcheon, N. MacInnes, M.A., J. B. Mackay, W. M. Kendrick, T. C. Mackenzie, F. W. Mackichan, W. C. Mackie, J. W. McLeod, J. M. C. Millan, P. R. M. Naughton, D. I. M. Naughton, W. Matheson, K. C. Middlemiss, R. M. K. Morrison, M.A., J. Mowat, W. A. Muir, A. C. Munro, C. S. M. K. Munro, A. R. Paterson, A. Patrick, M.A., R. M. F. Picken, B. Sc. D. Purdie, M. Purvis, R. Rae, H. N. Rankin, N. M. N. Rankin, H. G. Robertson, T. D. C. Ross, N. C. Scott, J. B. Sim, A. H. Sinclair, J. J. Sinclair, J. A. Stenhouse, W. Stevenson, D. Stewart, E. E. Stewart, J. Stewart, M.A., H. C. Storrer, D. Taylor, W. Telfer, J. A. Thomson, J. S. Thomson, R. M. Walker, T. C. D. Watt, J. Weir, D. M. G. Wilson, J. A. Wilson, H. Young, Women: M. B. S. Darroch, M. Foley, M. G. Forrest, E. S. Hill, M.A., J. A. Macvea, J. D. Rankin, W. M. Ross, J. C. Russell, J. H. Stewart.

**Third M.B.** (Pathology Medical Jurisprudence, and Public Health):

W. W. Adamson, A. Anderson, A. H. Arnott, D. Arthur, B.Sc., H. Bertram, R. I. Binning, W. Brown, M.A., B.Sc., J. Cairncross, T. H. Campbell, A. J. Couper, J. R. Craig, J. C. Crawford, C. A. Crichlow, J. A. Doctor, R. J. Driscoll, J. Dunbar, D. Duncan, A. Dunsmuir, L. J. Dunstone, A. W. Eadie, W. M. Elliott, A. Fairley, T. Forsyth, S. N. Galbraith, B. Gale, R. Govan, H. M. Granger, T. P. Grant, W. C. Gunn, A. Hogg, A. J. Hutton, P. J. Kelly, G. Ligertwood, E. B. Macaulay, A. T. I. Macdonald, J. R. McGilvray, R. Minroy, J. H. McKay, W. A. McKellar, A. D. M. Lachlan, D. C. MacLachlan, A. N. R. McNeill, J. M. V. V. I. C. Marshall, J. H. Martin, H. Matthews, W. S. Melville, J. W. Miller, T. Miller, J. R. Mitchell, H. Morton, R. C. Muir, P. O'Brien, I. Papiermeister, D. Renton, M. M. Rodger, R. C. J. Schlomka, A. Scott, G. W. Scott, J. M. Smith, J. Steedman, C. K. Stevenson, M. J. Stewart, L. Storey, J. A. Struthers, J. M. Taylor, R. S. Taylor, H. J. Thomson, R. Todd, J. M. Walker, W. B. Watson, F. R. Wilson, H. M. Wilson, S. Wilson, M.A., T. Winning, M.A., G. Y. Yardumian, Women: M. M. Buchan, K. R. M. Lucas, J. I. Robertson, M.A., M. B. Taylor.

The following candidates passed with distinction in one or other subject:

**First Examination.**—H. M. Williamson, J. T. Dick, E. G. Glover, J. Hendry, T. J. Mackie, H. E. Whittingham, A. M. Bayne, C. J. B. Buchheim, Agnes Mary M. Michael, Ellen Brown Orr, Florence Elizabeth Sexton, J. Y. Wood, J. Dunlop, M.A., A. B. Hamilton, M. A. Macdonald, C. L. Sutherland.

**Second Examination.**—J. Cruickshank, R. M. Walker, N. C. Scott, J. Stewart, M.A., Mabel Foley, B. Hutchison, J. W. McLeod, W. A. Muir, A. R. Paterson, N. M. N. Rankin, Jessie Capie Russell, H. C. Storrer, J. S. Thomson, R. R. Bow, A. D. Downes, M.A., F. C. Macaulay, A. Patrick, M.A.

**Third Examination.**—L. Storey, T. H. Campbell, R. Govan, T. Millar, M. J. Stewart, A. Scott.

## CONJOINT BOARD IN ENGLAND.

THE following candidates have been approved in the subjects indicated:

## FIRST EXAMINATION.

*Part I (Chemistry) and Part II (Physics).*—H. G. Alexander, G. S. Ashby, J. A. A. Boddy, T. R. Bowen, G. N. Brandon, A. B. H. Bridges, J. W. Elliott, J. S. Ellis, H. A. Evans, N. E. Farr, H. L. S. Griffiths, E. W. Hall, W. H. Hooton, W. B. Lawrence, D. C. Lloyd, V. C. Martyn, C. Noon, C. P. Oswald, A. C. Paterson, J. Powell, C. E. Reckitt, C. E. Rice, \*H. Rimington, W. R. Sadler, J. M. Smith, H. G. Spain, H. Stott, C. J. V. Swahnberg, H. J. A. Tootal, W. P. Vicary, C. G. Waddington, J. E. P. Watts, H. Wetherbee, G. E. Williams.

*Part III (Elementary Biology).*—H. G. Alexander, S. V. Appleyard, T. E. Ashley, G. A. Batchelor, H. J. Beresford-Heelas, I. B. Bernstein, F. S. D. Berry, H. G. B. Blackman, T. C. Brentnall, A. B. H. Bridges, R. T. Brochie, J. J. Brown, L. C. W. Cane, W. E. Carter, H. E. Cockerott, W. H. Cornelius, J. Cowan, G. L. Curnock, A. C. L. D'Arifat, W. T. Dobson, H. W. Doll, H. A. Evans, S. Falkner, C. E. Freeman, A. S. Gillett, F. N. Grant, H. L. S. Griffiths, E. W. Hall, N. H. Harrison, D. Havard, A. A. Henderson, A. M. Henry, H. H. Hiley, A. S. Hoole, W. H. Hooton, C. N. Hutt, A. Jones, G. L. Jones, J. E. T. Jones, R. L. Jones, G. A. E. Kelman, C. V. Laing, C. de C. W. Langdon, W. M. Langdon, W. B. Lawrence, E. C. Linton, R. K. MacGregor, D. A. Macpherson, D. McRae, H. L. Mann, S. Marle, G. K. Maurice, G. M. May, A. E. Moore, W. C. Murray, G. Nelson, F. C. Nichols, H. L. C. Noel, C. Noon, H. L. Paddon, G. N. Palmaer, G. E. H. H. Phillips, A. Pimm, W. Piper, G. Fitz P. Rigden, H. O. Salt, L. L. Satow, A. L. Saul, H. E. Scargill, S. H. Smith, H. L. H. Steele, H. Stobie, M. C. Wall, A. F. Waterhouse, L. C. Watkins-Baker, J. E. P. Watts, H. White, R. F. Wilkinson, A. T. Williams, J. W. Williams.

*Part IV (Practical Pharmacy).*—A. M. Barlow, G. W. Beresford, J. H. Bulcock, W. W. Cook, L. K. Cooper, P. A. Creux, W. F. Denning, G. Eager, L. Edwards, C. A. Ellis, F. C. Endean, G. J. French, H. W. Gabe, E. W. Gandy, F. J. Gordon, T. S. Harrison, J. L. Houlton, C. H. T. Iltot, R. W. Ironside, C. M. Kennedy, T. H. V. King, M. Leckie, R. L. Ley, H. B. Maxwell, E. Morgan, R. J. Mould, H. H. Moyle, E. Nuttall, F. W. O'Connor, F. E. L. Phillips, J. H. Roberts, R. P. Rowlands, W. F. Skinner, H. Smith, H. McL. Staley, E. L. Sturdee, H. D. Thomas, H. E. H. Tracy, F. T. Turner, J. Valerio, E. B. C. White, R. Willan, H. M. Williams, F. H. P. Wills, V. J. A. Wilson.

## SECOND EXAMINATION.

*Anatomy and Physiology.*—R. B. Abraham, S. D. Adam, M. M. Adams, H. R. Bastard, R. C. Brewster, A. J. Brown, S. H. Browning, E. F. W. Buckell, J. A. Byrne, H. D. Clapham, W. V. Corbett, F. J. Craddock, B. Dale, A. Dewar, M. J. D'Lemos, J. R. B. Dobson, R. S. Doran, D. C. Druitt, A. K. Glen, G. C. Gray, J. R. Gyllencrutz, G. F. S. Harvey, P. K. Hill, V. P. Hutchinson, \*\*C. W. Huyssse, †W. B. Johnson, C. F. V. Keibell, J. A. A. Kernahan, P. J. Kolaporewalla, M. D. A. Kureishi, E. MacEwan, P. A. MacKay, S. P. Mort, H. R. Mullins, C. E. H. Paley, A. B. Pettigrew, A. P. Phillips, C. J. M. Phillips, C. C. Pickles, A. H. Platt, L. O. S. Poidevin, M. A. Rahman, A. Rhodes, J. F. Richardson, R. G. Riches, L. Russell, H. I. Shahin, T. Sheehan, W. D. Southern, D. M. Stone, T. W. R. Stode, W. M. Swan, A. D. Vernon-Taylor, H. E. MacM. Wall, G. R. Ward, L. F. K. Way, A. L. Weakley, L. M. Webber, E. W. Witney, K. Wolferstan, C. A. Wood, S. M. Wood, J. F. W. Wier.

\* Exempt from Physics.

\*\* Passed under old R.C.S. Regulations.

† Awarded the Begley Studentship in Anatomy.

## CONJOINT BOARD IN SCOTLAND.

THE following candidates have been approved at the examination in Edinburgh:

*First Examination (Four Years' Course).*—R. B. Sephton, T. A. R. Aiyar. *(Five Years' Course).*—H. Ellison, R. Dorset, W. Crosse, H. C. Bankole-Bright, R. Parry, B. Singh, J. W. Hitchcock (with distinction), H. G. Chouler, R. C. Fuller, H. C. de Souza, E. J. Vaillant, D. R. Das Gupta, G. N. Groves, H. E. K. Fretz, G. Beveridge, D. Morrison, C. G. Timms, A. L. Salmon, and M. B. Irani; and 4 passed in Physics, 3 in Biology, and 1 in Chemistry.

*Second Examination (Four Years' Course).*—A. V. Bam. *(Five Years' Course).*—L. N. Robertson, S. M. Ware, D. Murphy, I. C. Pratt (with distinction), F. R. Watson, E. P. Maitland, T. J. George, and J. P. Synnott; and 3 passed in Anatomy and 1 in Physiology.

*Third Examination (Five Years' Course).*—J. H. Johnston (with distinction), A. J. Brown, G. H. Urquhart, O. T. Jones, W. Taylor, P. T. Rutherford (with distinction), O. Carlyle (with distinction), J. H. Bennett, W. R. Ellis, G. W. Knipe, C. L. Stewart, J. A. H. Muller, J. H. Morris-Jones (with distinction), Jane H. Filshill, W. F. G. Scott, A. P. O'Connell, K. S. Kanga (with distinction), M. J. Hayes, C. Berry, Dora Robbins, S. Piarroux, C. Jones, P. Stewart, M. B. Irani, J. N. Rai, and V. S. Sanzgiri, and 1 passed in Materia Medica.

*Final Examination.*—Sibyl Caridwen Bevan, S. Nix, J. S. Macdonald, H. T. Simpson, G. W. Knipe, J. E. Syme, G. J. Congdon, F. Yates, F. V. Woodbury, A. W. Thomas, J. C. Grant, Gertrude Ellen Austin, Maude Conway, A. S. Campbell, W. B. Clarke, and J. S. Bruggman.

## ROYAL COLLEGE OF SURGEONS IN IRELAND.

## ELECTION OF EXAMINERS.

CANDIDATES for the office of Examiner are requested to lodge their applications in writing with the Registrar not later than Tuesday morning, April 24th. Graduates of any university recognized by the College are eligible. The election will take place on May 1st.

The principal prizes for the winter session have been awarded to the following students: G. C. Sneyd, W. A. Swan, H. D. Gasteen, H. J. Hedley (Practical Anatomy), H. W. White (Medicine), H. W. White (Surgery), H. C. Carden, H. J. Hedley (Physiology), J. J. Lyons, H. W. Kay, R. White. Each prize consists of a medal and £2. Second prizes were also allotted. The summer session began on April 2nd.

## SOCIETY OF APOTHECARIES OF LONDON.

THE following candidates have been approved in the subjects indicated:

*Biology.*—M. C. Dence, W. H. Hooton, D. L. Schwabe. *Chemistry.*—A. E. Hempleman, W. H. Hooton, E. M. Johnstone, A. J. V. Mathews, D. L. Schwabe. *Materia Medica and Pharmacy.*—C. J. M. Lawrence, G. W. Simpson. *Anatomy.*—S. H. Andrews, E. C. Banks, H. R. Ibbotson, M. A. Kenny, I. Pulteney, J. B. Tackaberry, A. D. Vernon-Taylor, G. F. Wilson. *Physiology.*—S. H. Andrews, S. S. Brook, D. M. Hunt, H. R. Ibbotson, W. K. Kershaw, H. E. Middlebrooke, I. Pulteney, J. B. Tackaberry, A. D. Vernon-Taylor, G. F. Wilson.

## OBITUARY.

## SURGEON-GENERAL JAMES PATTISON WALKER, M.D.,

## INDIAN MEDICAL SERVICE.

THE character and career of this able and distinguished officer, whose death was mentioned in a recent issue, are deserving of prominent and detailed notice. He was a man of talent and energy, lived and served in stirring and critical times and circumstances, which brought his attainments and capacities into active exercise, and he acquitted himself in a great variety of offices with marked ability and success.

Dr. Walker was appointed on April 5th, 1845, at the age of 25, an Assistant Surgeon in the Bengal Medical Department, and arrived in India on August 11th of the same year. During the first two and a-half years of his service he was in military employ, mostly in medical charge of native regiments in several stations of Bengal, the North-Western Provinces, and the Punjab. He devoted himself to the study of native languages, and was the first medical officer to pass in Hindustani in the higher standard.

In February, 1848, he obtained civil employ and was appointed Civil Surgeon of Humeerpore in the N.W. Provinces. He was removed thence in October to take part in the Punjab campaign. For his services he obtained the Punjab medal and Goojerat clasp. In April, 1849, he resumed his appointment at Humeerpore, and in March, 1850, was transferred in a similar capacity to Mynpoori.

The charge of the district gaol was then, as now, an important part of the work of a civil surgeon. His zeal and administrative ability in managing prisoners and prisons attracted attention, and in August, 1851, he was appointed Superintendent of the Agra gaol, and in November of that year of the Central Prison at that station. This was the first institution of the kind established in India, and was intended for the detention of "life" and long-term prisoners and criminals of a desperate and degraded type. The scheme was experimental, but under the capable and energetic efforts of Dr. Walker it proved a great success, and many other central prisons were subsequently organized throughout India after this model.

Order, discipline, sanitation, industry, and education received his personal and unremitting attention, and both authorities and visitors bore warm testimony to the excellence and success of his methods. The education of convicts, commenced in the Mynpoori district gaol, was a novel feature of his administration, and contributed to quietude and order as well as to intellectual occupation and improvement as well as to moral reformation. Female prisoners were instructed as well as male.

He was met with suspicion and obstruction, and plots were laid against his life; but his personal enthusiasm, honest earnestness, and marvellous influence overcame all obstacles, and in prison, and no doubt beyond prison, great good was accomplished. He also threw himself with vigour into the promotion of education throughout the provinces by composing, printing, and distributing books, maps, and diagrams, and preparing school apparatus.

While on leave in England in 1855-6 he inspected and studied a large number of penal institutions with a view to bringing the knowledge thus acquired to bear on his work in the Agra Central Prison. The mutiny of 1857 found him at his old post in executive and medical charge of some 3,400 prisoners, including the worst criminals in Upper India, among them some 100 murderers. The prison guard, about 500 strong, was deeply tainted with the prevailing disaffection; a Sepoy guard detailed to