

many cocci in a great number of the pus cells, and yet the cultures obtained showed a marked paucity of colonies—under twenty on a Petri dish.

The meningococcus was also recovered from the blood in 3 out of 15 cases.

The blood was taken from the bend of the elbow; the skin having been washed with mercuric iodide, being prepared as for operation, then a sterile needle was introduced into the vein and about 10 c.cm. of blood allowed to run directly into 300 c.cm. of peptone water. This was incubated for twenty-four to forty-eight hours at 37°, and loopfuls were then smeared over chapsagar. The first successful case was that of a boy whose blood was taken on the eleventh day of his illness. He died sixty-three days afterwards. The second case was a girl of 15 years, whose blood was examined on the second day of illness; she died twenty-four hours afterwards. The meningococcus was still living in the flask of peptone water nineteen days after the blood was added.

In the third case the blood was taken on the fourth day of disease; this patient died ten days later.

SUMMARY.

The meningococcus in the present Belfast epidemic has so far been isolated from cerebro-spinal fluid in 52 cases out of 75 examined, and from the blood of living patients in 3 out of 15 cases.

The organism is Gram-negative, does not peptonize gelatine, produces indol, forms acid from glucose and maltose, but not from galactose, gas is never produced, grows well in media containing raw ascitic fluid, lives for at least a week on "chapsagar," lives from two weeks to a month on ascitic bouillon, lives for two weeks to two months in fluid sugar media.

We are very greatly indebted to Drs. Ernest H. M. Milligan, W. J. Leighton, and Wm. Patton, house-physicians at the fever hospitals of Belfast, for supplying us with most of the lumbar-puncture fluids, and especially for the promptitude with which the samples were sent to the laboratory. To Dr. Gardner Robb, chief physician of the fever hospitals, we wish to extend our sincere thanks for many favours.

REFERENCES.

¹ *Klin. Jahrbuch*, 1906, Band 15, H. 2. ² Kutscher, Kolle and Wassermann's *Handbuch d. path. Mikro-organismen*, Ergänzungsband zweites Heft, p. 494, 1907. ³ See Kolle and Hetsch, "Die experimentelle Bakteriologie" (*Lehrbuch*, 1906), p. 250. ⁴ Houston and Rankin, *Lancet*, May 4th, 1907, p. 1213.

THE RÔLE OF THE VARIOUS ELEMENTS IN THE DEVELOPMENT AND REGENERATION OF BONE.

By SIR WILLIAM MACEWEN, F.R.S.,

REGIUS PROFESSOR OF SURGERY IN THE UNIVERSITY OF GLASGOW.
[Abstract of a Paper communicated to the Royal Society.]

THE present inquiry has been undertaken with the view of obtaining data, chiefly by direct experiment, as to the rôle which the various elements play in the development and reproduction of bone. This communication deals with a part of the subject under two heads: A, the potentiality of the periosteum as a factor in the production of bone; and B, the regeneration of bone from proliferation of osseous tissue. The following is a brief summary of the paper:

A.—POTENTIALITY OF PERIOSTEUM AS A FACTOR IN REPRODUCTION OF BONE.

(1) To test this, a complete cylinder, constituting a portion of the shaft of a long bone, was removed while the periosteum was preserved intact. This showed, ten weeks afterwards, an osseous defect, constituting a gap in the continuity of the shaft.

(2) Periosteum free from osseous plaques was removed and transplanted. This was not followed by reproduction of bone, but by absorption of the periosteum.

(3) Duhamel's silver ring experiments are discussed, and the correctness of the deductions drawn therefrom are questioned.

In order to test whether the bone cells or the periosteum produces the bone which covers the silver rings, three experiments, each differing from the other, were performed, in which silver rings were placed on bone deprived of its periosteum, with the result that in each case the rings became covered with bone.

B.—THE REGENERATION OF BONE, FROM PROLIFERATION OF OSSEOUS TISSUE.

The periosteum is shown to be a limiting membrane controlling the osteoblasts, as illustrated in fractures, when the periosteum is intact and when it is torn. The production of callus is not inherently greater in the lower animals than in man—the amount of callus in both depends on the limitation of the periosteum and the amount of movement. (4) Direct experiment, showing that a long bone deprived of its periosteum continues to grow; (5) so also do the flat bones of the skull. (6) Bone may be made to grow in the midst of lacerated muscles by the mechanical distribution of osteoblasts. Observation. Rider's Bone. Suggestion as to the production of myositis ossificans.

(7) Can shavings of nude bone grow on being placed between muscles in a gap in the continuity of the shaft? Experiment and result seven weeks after show that not only do they grow but that they also proliferate to a very marked extent.

Is there any direct evidence to show that transplanted living bone actually grows and proliferates instead of forming, like blood clot, a passive framework for the granulation tissue to penetrate, which framework will then become absorbed? There is, as may be illustrated (8) in an instance of bone grown in sponge filled with granulation tissue.

(9) To test the osteogenic power of bone cells constituting the shaft of a long bone, they were grown inside of a glass tube. Result.

(10) Intrahuman transplantation of bone. Result 28 years after. Data are obtained from this experiment as to the growth of the humerus from the proximal and distal epiphyseal cartilages respectively. Also as to interstitial osseous increase—evidence of the increase in length of the diaphysis from the epiphyseal cartilage toward which the nutrient vessel runs.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL.

DYSTOCIA FROM ENCEPHALOCELE.

BEING summoned to Mrs. X., 38, 8-para, I found her in the second stage of labour, with inefficient pains. The child was in the fourth face position, and the waters that had come away were meconium stained; no sign of fetal life was made out. Rotation by hand and subsequently by forceps—under chloroform—failing, podalic version was done with much difficulty, being obstructed by a curious fluctuating tumour near the head. While preparations were being made to exercise traction on the after-coming head, a sudden sharp uterine pain shot it out, accompanied by a gush of sanious fluid and the disappearance of the "tumour" from the uterus. The swelling was then seen to be due to a large encephalocele. The child was dead. The mother subsequently did well.

Necropsy.—Full-time female child, normal size; very thick neck and small chin. Fronto-parietal part of skull normal in size; occiput smaller than usual. From occiput there sprang mesially a large encephalocele, which when empty and pendent reached to the sacrum, and without undue expanding held some 30 oz. of water. The sac walls were formed of skin, brain membranes, and thinned-out and expanded brain-cortex. The sac cavity was in free communication with the cerebral ventricles, by an opening roughly circular in shape and 1½ in. in diameter. The cerebral tissue entering into the sac formation appeared to consist of occipital lobes only; the remainder of the cerebral hemispheres was of normal size. The tentorium was absent. The cerebellum was represented by a peculiar tongue-shaped prolongation (perhaps the vermis only) extending 2 in. downwards on the dorsal aspect of the cord. Sections taken from this process, when cut and stained, showed a modified cerebellar tissue. All the organs of the body were examined, but no other abnormality was found.

REMARKS.—The mother informs me that three and a half years ago she had, what must have been from her description, a similar pregnancy, being a male child with a frontal meningocele, the size of a large orange. Her description of the child indicated also a spina bifida in the dorso-lumbar region, a small apple in size. This child lived seven weeks. Between these two abnormal pregnancies a healthy (girl) child was born, and is now 2 years old. No

history of shock or other influence possibly causative could be elicited. Two such pregnancies occurring within less than two years make the case, I think, worth recording. Playfair, quoting from Hecker (*Midwifery*, Part III, chap. vi.), specifies the dolichocephalic cranium—"prominent posteriorly, with the occiput projecting, which has the effect of increasing the length of the posterior cranial lever-arm and facilitating extension"—as an etiological factor in face presentations, and Herman (*Difficult Labour*, chap. iii) also makes allusion to it. This case might be regarded mechanically as an extreme example of such a condition.

Histon.

L. G. DAVIES, M.D. Cantab.

UTERINE HAEMORRHAGE AND OVARIAN DISEASE.

THE occurrence of periodic uterine haemorrhage long after the menopause, and in association with the development of cystic ovarian disease, seems to be sufficiently rare to make the following case of interest:

History.—The patient, a married woman aged 57, with four children, consulted me in November, 1905, on account of a haemorrhage per vaginam which she attributed to a fall ten days previously. She said she had been a very healthy woman, and had ceased to menstruate thirteen years previously. The onset of the menopause was reached by a gradual cessation of the flow, and accompanied by none of the usual symptoms.

State on Examination.—Vaginally nothing abnormal was found. Palpation was difficult, owing to adipose deposit, and at first nothing was discovered.

Progress.—After the lapse of some months, however, it was possible to make out a sense of fullness and resistance in the left iliac region, which gradually became more and more evident. Meanwhile the uterine haemorrhage recurred at regular intervals of three weeks, was never excessive in amount, and followed the usual course of a menstrual flux; the quantity gradually increased for the first two or three days, and then diminished daily until its cessation at the end of a week. The patient declined any operative interference, on the ground that she felt so well that she could not think that there was "anything the matter with her," and I lost sight of her for about six months. On her again consulting me in November, 1906, there was a large semi-elastic swelling to be felt filling up the left iliac region, reaching well above the umbilicus, and also extending across the middle line to the right. She told me that the "discharge" had continued to exhibit its previous periodic characteristic.

Operation and Result.—As the patient was by this time beginning to suffer from pressure symptoms she consented to operation, and this was performed almost exactly a year after I first saw her. A large multilocular cyst of the left ovary was removed, the right ovary being also taken away, as it showed commencing cystic disease. The uterus was examined and appeared quite healthy. The patient made an uninterrupted recovery.

REMARKS.—The points of interest seem to be (1) that a uterine haemorrhage so closely resembling an ordinary menstrual flux occurred so long after the menopause; (2) that its onset was apparently simultaneous with the commencement of the cystic disease of the (left) ovary; and (3) that it continued to appear at regular intervals during the whole period of the growth of the ovarian disease. Both Lewers and Pozzi make some reference to post-climacteric haemorrhage in cases of ovarian tumour, but I have been unable to find any reference to a case exactly corresponding to the one I have described.

W. H. MALING, M.R.C.S., L.S.A.,

Sunderland. Surgeon to the Sunderland and Durham County Eye Infirmary.

RUMINATION IN MAN.

IN connexion with Dr. Brockbank's very interesting article on *merycism*, which appeared in the *BRITISH MEDICAL JOURNAL* of February 23rd, 1907, I have pleasure in quoting the following case, which has lately come under my notice:

A clergyman, aged 40 years, resident in Scotland until 1904; robust, active, and in perfect health; first remembers to have observed return of food to the mouth some twenty years ago. He was then attending the University of Glasgow, and noticed that after hurrying breakfast and rapidly walking a mile to 8 o'clock lecture, food was frequently regurgitated half an hour to an hour and a half after eating. No sour taste was observed; in fact, the function seemed quite natural and rather pleasant. He thought it was a form of indigestion, but there was no discomfort of any kind, and finally he came to view it as a

corrective process and even to depend upon the return of hastily-chewed food. For the most part, fairly large pieces of meat only were returned. He noticed that pork of all kinds, and mutton chops especially, provoked regurgitation, and that steak, grilled or fried, frequently returned. He still experiences the same thing, but only very occasionally. Fluid at times returns to the mouth, especially after a very full meal when much liquid has been taken; it is never sour or unpleasant. So far as he has observed, the action in regurgitation is a simple reversal of the process of swallowing. There is no eructation or spasmodic feeling, and to some extent the process is under control, though mostly quite involuntary. When a portion of partially chewed beef makes its presence felt in the stomach he can, by a slight contraction of the abdominal muscles, force it into the oesophagus, which automatically completes the process. He has lately observed roast pork return after two hours, still quite sweet. The only stomach trouble he remembers is some slight "heartburn" in early youth.

His mother and father were both quite normal. His father died at the age of 76, and his mother is still alive, aged 76. None of his brothers or sisters has any peculiarity of the kind. A male cousin had, however, voluntary control of the stomach and could at will ejaculate its contents.

A. C. L. LA FRENAYS,

New Amsterdam, British Guiana. Government Medical Officer.

INFECTION OF MEASLES TRANSMITTED BY LETTER.

A FEW weeks ago a patient entered my consulting-room complaining of being "run down and in desperate need of a tonic." As a matter of fact he had measles and the rash was fully out. I promptly referred him to bed. Visiting him the following day, the diagnosis was amply verified, but his symptoms of illness were so slight that, unknown to me, he sat up in bed and wrote a letter to a brother residing at an isolated farmhouse, "six miles from everywhere," in Devonshire.

My patient's course ran smoothly and he was soon about. But his brother was attacked by measles, having been in contact with no one previously who had had the complaint. Dr. Wigham of South Molton, having attended him, has been good enough to verify facts, and he, moreover, is quite of the impression that the letter carried the contagion, it having been written whilst all the symptoms of coryza were evident and during the height of the rash.

I deem this case of sufficient interest to publish. It has a moral and a warning: Correspondence by letter should not be carried on by a patient suffering from measles.

Woodford Green, Essex.

HUGHES R. DAVIES.

HYPEREMESIS.

THE following cases of persistent vomiting were treated successfully with acetyl salicylic acid:

CASE I.—The patient, a primipara two months pregnant, complained of constant nausea and vomiting and inability to retain even milk. She had suffered from constipation for about a month. On examination there was tenderness over the colon, and the uterus was found retroverted; this was replaced and a suitable Hodge pessary inserted; large enemata (soap and water and lysol) by siphon were given every second day and a bismuth mixture prescribed, the patient being kept in bed and fed in the horizontal position with small quantities of easily assimilable food. The nausea and vomiting, however, continued. Salol p. cretae aromatica in capsules, tr. nucis vom., cetrarin (Merck), magnesium carbonate, were tried in succession with no effect. The patient was getting more and more emaciated, and the advisability of inducing abortion began to be considered. As a last resort acetyl salicylic acid, 5 grains in solution with food, was prescribed with immediate result; the patient did not vomit for a fortnight and was able to take more solid food; the vomiting then returned somewhat, but soon after cleared up and the patient made a good recovery.

CASE II.—This was also in a primipara, six weeks pregnant; she could not keep any food down, and she suffered from constipation. She was getting thin and unable to do her household duties. Profiting by my experience with Case I, she was given 10-grain doses of acetyl salicylic acid with her meals. Vomiting was relieved by the first dose, and the patient is now feeling quite well and getting strong. Her constipation was treated with cascara.

CASE III.—The patient had a tuberculous history, and complained of constant nausea and vomiting after food, and pain

in the lower part of the abdomen. The uterus was pushed forward by a mass in Douglas's pouch, probably owing to localized tuberculous peritonitis, cut off by adhesions from general peritoneal cavity. The vomiting was treated with acetylsalicylic acid with the best results. She is now putting on flesh and taking her food well.

REMARKS.—Other milder cases of morning sickness have been treated with the drug with uniform success. I think the above cases indicate that it may prove of use in this troublesome and dangerous condition.

Sutton Bridge.

W. M. CROFTON, M.B., R.U.I.

REPORTS

ON

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

VICTORIA HOSPITAL, BANGALORE, INDIA.

EXTRAPERITONEAL TRANSPLANTATION OF URETERS INTO THE
RECTUM, ACCORDING TO THE DESCRIPTION OF
PETERS OF TORONTO IN A CASE OF
EXTROVERSION OF BLADDER.

(Reported by T. V. ARMUGAM, M.B. and C.M., Medical
Officer in Charge.)

On August 11th, 1906, R., a male, aged 18 years, was
admitted for complete extroversion of the bladder.

State on Examination.

He was smelling heavily of ammoniacal urine, and the posterior wall of the bladder was found to open on the surface between the normal situation of the umbilicus (which was absent) and the symphysis pubis, which was also absent, the ram of the pubes being $3\frac{1}{2}$ in. apart. The mucous membrane of the wall of the bladder was thickened and inclined to bleed in parts. There was a ring of ulceration and induration all round the exposed surface of the bladder. The ureters were found opening at the lower part of the exposed mucous membrane on either side of the median line, each on the summit of a papilla, and urine was observed to dribble from the summits of the papillae at intervals of fifteen to twenty seconds, but not simultaneously from both.

Operation.

On August 20th, 1906, the patient, having been prepared the previous day, was anaesthetized with chloroform, the external sphincter of the rectum was dilated with the fingers, and a medium-sized sterilized sponge with 2 feet of sterilized tape attached to it was introduced into the rectum as high as possible to prevent the escape of faecal matter. A sterilized Jacques catheter, No. 5, with its eye cut out, was introduced into the right ureter to a distance of 2 in. and fixed to the papilla with a silk suture. With a pair of blunt-pointed scissors the mucous membrane all round the papilla was released and the ureter was then released to a distance of 2 in. The left ureter was similarly dealt with, taking care not to open the peritoneal cavity. The reflection of the peritoneum was found to be unusually low. The mucous membrane of the bladder was cautiously dissected out. The rectum having been raised by an assistant with his fingers introduced into it, a pair of long dressing forceps was introduced high into the rectum and made to press on the point where it was decided to open the rectum from above; a small opening sufficient to admit No. 5 Jacques catheter was made in the rectum on its right side, and a similar opening was made on its left side. Through the openings the Jacques catheters were gently drawn into the rectum, until they brought through the ureters into which they were sutured; and then the ureters and the catheters were drawn out of the rectum and the papillae made to project a little ($\frac{1}{4}$ in.) beyond the sphincter. The surface of the bladder from which the mucous membrane was dissected out was packed with antiseptic gauze, and the sponge in the rectum was removed and the patient put to bed.

Result.

The catheter from the right ureter was passed out on the fifth day, and the one from the left on the seventh day. Up to the thirty-fourth day after operation the patient was having one faecal motion and passing urine per anum on an average five times in twenty-four hours, with a little dribbling of urine from his rectum during sleeping hours. From the thirty-fifth day up to the date of discharge from hospital—that is, the fifty-eighth day after operation—the patient was having one faecal motion during the day, and passing urine per anum on an average four times between 6 a.m. and 9 p.m., the waking hours. The dribbling of urine from the rectum during sleep stopped on the thirty-fourth day after operation, and from

that day up to the day of discharge from the hospital—that is, the fifty-eighth day after operation—patient was able to retain urine in the rectum from 9 p.m. until about 5.30 a.m. or 6 a.m., and was passing urine per rectum about four times between 6 a.m. and 9 p.m.

The patient left the hospital very much improved in general health, and has promised to come back for an operation for epispadias. In selecting sites for the openings in the rectum the precaution mentioned by Peters of Toronto was observed—namely, to select a point as high as possible, so as not to exert any traction on the ureters.

REPORTS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

J. O. AFFLECK, M.D., President, in the Chair.

Wednesday, June 5th, 1907.

ANAESTHESIA IN DENTAL OPERATIONS.

MR. W. GUY described his method of producing anaesthesia in cases in which the period need not last more than ninety seconds. After an exhaustive trial of various anaesthetics he found that gas and ethyl chloride yielded the most satisfactory results. He used an apparatus into the bag of which ethyl chloride could be directly introduced, and strongly disapproved of the use of cotton-wool or lint as recipients. In the case of adults he filled the bag with 1 gallon of gas, and caused the patient to breathe this for five respirations (all air being excluded); 3 c.cm. of ethyl chloride were then poured into the bag, and the patient respired the mixture for twenty-five seconds. His experience with this method was satisfactory from all points of view.

DR. GIBBS did not consider that administration of the mixture as described for a period of twenty-five seconds would be sufficient to induce anaesthesia for ninety seconds in all adult or alcoholic patients.

MASSAGE AND MOVEMENT IN FRACTURES.

MR. C. W. CATHCART in a paper on the treatment of fractures expressed the following conclusions:

(1) Absolute immobility of the broken ends of bone is not essential to bony union. The slight amount of movement necessarily involved in the daily massage of a fractured limb and in the daily active and passive movement of the adjacent joints seems to hasten cure. (2) Massage, combined with active and passive movement, not only aids the actual union of the bones, but help in the absorption of effused blood and serum, thus preventing the formation of adhesions and maintaining the nutrition of the muscles. They, therefore, hasten union and at the same time prepare the limb to return to functional use almost as soon as the bones are united. (3) Splints and other retentive apparatus, including extension, are required more to prevent mal-union than non-union, and hence are called for specially where the weight of the limb or muscular action are likely to lead to a bad position during healing. During the acute stages massage diminishes swelling, allays muscular spasm, and diminishes pain. Later on it stimulates the circulation in the part, disperses accumulations of blood and serum, and maintains nutrition of the muscles.

In performing massage and movements the cardinal rule should be to cause no pain.

MR. WALLACE pointed out that in Edinburgh for many years past the methods advocated had been carried out.

MR. MILES did not consider that a masseur was necessary in carrying out such treatment. He had found that with comparatively little training nurses were able to perform all the necessary manipulations. He was still of opinion that long splints were necessary in the treatment of fractures of the shaft of the femur. For such cases Hodgkin's splint was probably the best.

NASO-PHARYNGEAL INFECTION.

DRS. J. S. FRASER and J. D. COMRIE, in a paper on the naso-pharynx as an infection-carrier in epidemic cerebrospinal meningitis, pointed out that epidemics of this disease were frequent in seaport and colliery towns. Their investigations were chiefly concerned with the occurrence of the disease in Leith, where up to May 28th, 1907, 83 cases have occurred. Most of the cases were found in the densely crowded and poorer parts of the town near the docks. Eighty per cent. of the cases were under 16 years of age, at the period of life when adenoids and nasopharyngeal catarrh were common. The *Micrococcus*

MEDICAL NEWS.

MR. MCADAM ECCLES, M.S., F.R.C.S., will deliver the next Lees and Raper Memorial Lecture.

THE new buildings of the City of London Lying-in Hospital will be opened by Princess Christian on Monday, July 1st, at 3 p.m.

DR. D. LIVINGSTONE DAVIES, of Criccieth, has, on the recommendation of the Lord Lieutenant, been appointed to the Commission of the Peace for Carnarvonshire.

DR. FRANK BILLINGS, Dean of the Rush Medical College, University of Chicago, has been elected President of the National Association for the Study and Prevention of Tuberculosis.

THE Lord Lieutenant of Ireland, on the recommendation of His Grace the Duke of Devonshire, has been pleased to appoint D. F. Walker, M.D., of Springfield, Portlaw, to be a magistrate for the county of Waterford.

MRS. MARY SCHARLIEB, M.D., M.S., will open a discussion on "Alcohol and the Children of the Nation" at the meeting of the Society for the Study of Inebriety, on July 9th, at 4 p.m., in the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W.

THE papers moved for by Sir William Collins in the House of Commons on April 12th containing "the results of an inquiry into the origin of certain deaths from tetanus in the Punjab, consequent on the employment of Dr. Haffkine's prophylactic against plague," have been issued as a Blue Book, price 1s.

THE first meeting of the Society of Tropical Medicine and Hygiene will be held at 20, Hanover Square, W., on Wednesday next, at 8.30 p.m. The President, Sir Patrick Manson, will deliver an address, and Dr. Daniels will give a lantern demonstration. Medical men interested in tropical medicine are invited to be present.

THE Committee of University College Hospital, in making an appeal to meet the deficit in the annual income, states that during 1906 the average number of occupied beds was 279, as compared with 212.5 in 1905; at the same time the cost of an occupied bed had been reduced from £99 14s. 8d. in 1905 to £87 0s. 7d. in 1906.

THE objects of the Income Tax Reduction League, formed on June 11th, are the organization of income-tax payers, the reduction of the rate, and the taxation of trading concerns upon the distributed profit only. Lord Avebury is the President and the Hon. Herbert Gibbs Vice-President. Among the members of the Society is Mr. W. Bruce Clarke, M.B., F.R.C.S.; Mr. T. Hallett Fry, 2, Cloisters, Temple, E.C., is acting as Honorary Treasurer.

AN Association for the Advancement of Science on the lines of those of England, France, and America, has recently been founded in Italy. It will hold its first meeting at Parma in September. The Association is in reality a revival of the Society of Italian Men of Science which held its first meeting at Pisa in 1839 and its last in 1870. The old society, however, had come to be used more as a means of political propaganda than for the furtherance of science; hence the discontinuance of its meetings when the unification of Italy was achieved.

THE Government of Queensland and certain other of the States of the Commonwealth of Australia have recommenced the practice of providing assisted or entirely free passages to the Colonies to applicants of good physique, character, and health, and guaranteeing them work at ordinary colonial rates on arrival. A large number of emigrants left England at the beginning of June on these terms, travelling by the *Omrah*, a vessel belonging to the Orient Royal Mail Line, who are the official contractors in connexion with the emigration service.

ON June 11th, at Grosvenor House, the Earl of Derby presided at a meeting of the National Health Society, at which Princess Christian distributed prizes and certificates won by ladies who attended the courses of lectures and examinations held by the Society. Of the old students, five have in the course of the past year been appointed sanitary inspectors, six health visitors, one an inspector of midwives, another an inspector under the Infants' Life Protection Act, and two others respectively a female relieving officer and a lady almoner at one of the great London hospitals. The offices of the Society are at 53, Berners Street, Oxford Street, W.

THE Livingstone College for Missionaries held its annual festival, known as Commemoration Day, on June 5th. In giving an account of the position of the college, Dr. C. F. Harford, the Principal, claimed that ethically it deserved support, because it was right that missionaries despatched to dangerous and isolated stations should be given such

medical instruction as would enable them to care for their own health and in some wise relieve suffering among the natives around them. Educationally, the scientific training given broadened the mental outlook of the missionaries, and enabled them to give the people amongst whom they worked simple instruction in the laws of health, based on real knowledge. The Year Book of the college, which has just been published, contains extracts from large numbers of letters from missionaries who are old students of the college. Many of these throw an interesting light on matters of a medical character in uncivilized lands, and prove beyond doubt that calls are made upon missionaries for assistance in suffering to which they can scarcely decline to respond.

THE annual meeting of the Colonial Nursing Association held on June 14th brought together a large gathering, which included both Lord Ampthill and Mr. Austen Chamberlain. The Association, which owes its foundation largely to the influence of Mr. Joseph Chamberlain, when Secretary of State for the Colonies, has now been some twelve years in existence, but still only has on its roll 167 nurses, and of these 121 are employed by some one or other Government. Enjoying a species of semi-official recognition, it might be expected to play a much larger part, and doubtless it would if more of the many persons to whom the well-being of workers in the smaller colonies is a matter of direct interest came to its assistance. In the majority of the small scattered colonies in tropical and semi-tropical countries it is, as Mr. Austen Chamberlain remarked, scarcely possible for the white residents to keep up a supply of nurses without external assistance, while, as he also added, it is undoubtedly true that if medical men require skilled assistance at home in the treatment of their patients they require it still more in distant lands where all difficulties connected with the effective treatment of disease are gravely increased. Sir G. Taubman-Goldie, who also addressed the meeting, laid much stress upon the latter consideration, adding that during the time that he was in Nigeria half the deaths among the men under him were due, he believed, to lack of proper nursing assistance, and that a vast saving of life could be effected were it provided. He regarded the matter as of imperial importance, because a heavy death-rate inevitably increased the difficulty of keeping up a supply in the Crown Colonies of suitable officials with adequate local experience. The same considerations apply to those at home who are interested in the success of commercial enterprises in the less healthy colonies.

CHELSEA CLINICAL SOCIETY.—The annual dinner of the Chelsea Clinical Society was held at the Criterion Restaurant, Piccadilly Circus, London, on June 6th, with the President of the Society, Dr. J. D. E. Mortimer, in the chair. The great success of the dinner must be ascribed to the admirable brevity of the toast list and speeches, to the crayon drawings executed with marvellous quickness by Surgeon Henry Hunt, R.N., to the singing of Mr. Julien Henry, and the excellent arrangements made for the comfort of all concerned by Dr. Austin Cooper on behalf of the Dinner Committee. After the usual loyal toasts the Chairman proposed "The Chelsea Clinical Society," pointing out its advantages to medical practitioners, and showing how it promoted good fellowship. After Dr. J. Barry Ball had responded to this toast, Dr. Vincent Dickinson gave "The Visitors and Kindred Societies," which was replied to by Dr. L. Mark. The proceedings terminated with Dr. Herbert Owen proposing "The President and Officers of the Society," which was acknowledged by Dr. Mortimer and Dr. Cooper.

PELLAGRA IN ROUMANIA.—The staple crop of Roumania, or at least the staple food of her peasantry, is maize, and last year's harvest is stated in the British Consular report to have been the best yet recorded, reaching a total of 126,000,000 bushels. Whether the grain was harvested in good condition does not appear, but it seems that pellagra, always more or less prevalent in this country, has lately considerably increased. In 1901 the number of cases was recorded as being 33,645, but in 1905 this had risen to 54,689, and now it is reported in the papers, though not officially, that last year the cases exceeded 100,000 in number. No statistics on this head are given in the report, and the fact that in the tables of mortality for Bucharest only 3 deaths are ascribed to this disease proves nothing, as the malady is one especially affecting the poorer country districts. Indirectly it may account for the very high infant mortality, for nearly 22 per cent. of the children born die before they are a year old, and in some districts in Northern Moldavia half the deaths registered are those of children under 5; indeed, it is estimated that 60,000 children under this age die every year in the rural communes.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

THE LATE PROFESSOR NEWTON.

THE Vice-Chancellor announces that the late Professor Newton has bequeathed to the University his Natural History Collections and Library and the sum of £1,000 for maintenance.

PHYSIOLOGY AND PSYCHOLOGY.

The General Board of Studies, in consequence of a letter received from Dr. Rivers, recommend that in place of the present lectureship there shall be two University lectureships as from Michaelmas, 1907—a lectureship in the Physiology of the Senses at an annual stipend of £100, and a lectureship in Experimental Psychology at an annual stipend of £50.

DEGREES.

The following degrees were conferred last week:

M.D.—T. G. M. Hine, King's; J. Mellanby, Emm.; G. I. Western, Pemb.; E. B. Leech, Christ's.
M.B., B.C.—F. Gayner, King's; C. Cassidy, Sid. Suss.; H. P. Crampton, Cla.; H. P. Gibb, Sid. Suss.; H. W. Wiltshire, Cla.; H. Dimock, Sid. Suss.
M.B.—C. E. Droop, Trin.; J. W. Linnell, Joh.; H. C. Cameron, Joh.; A. R. Jordan, Cla.; E. Lloyd, Emm.
B.C.—L. H. L. Mackenzie, Trin.

The following degrees were conferred on June 15th:

M.D.—E. B. Leech, Christ's.
M.B., B.C.—H. Dimock, Sid. Suss.
M.B.—E. Lloyd, Emm.

THESES.

The Raymond Horton-Smith Prize for 1907 is awarded to John Mallanby, M.A., Emmanuel College, for his M.D. thesis on *The Properties of Diphtheria Antitoxin and Its Relation to the Proteids of Normal Serum*.

Proxime Accessit: H. Morriston Davies, M.A., B.C., Trinity College, M.D. thesis on *The Functions of the Trigeminal Nerve*.

EXAMINATIONS

The following have been approved at the examinations indicated.

FIRST M.B. (*Chemistry and Physics*).—W. B. Alcock, G. Arnfield, L. W. Barlow, W. F. Bensted-Smith, A. H. Birks, J. Brewer, D. F. Burton, E. Calvert, C. G. H. Campbell, M. H. Cane, J. W. H. Chun, J. D. Clarke, L. B. Clarke, A. C. Clifford, G. B. Code, E. R. C. Cooke, J. H. Cumming, G. C. Fairchild, A. N. Garrod, B. Graves, J. L. Green, E. F. W. Grellier, A. F. Hall, J. D. Jones, A. Kennedy, C. H. Leeke, J. D. Legge Currie, G. R. D. McGeagh, W. C. D. Maile, A. S. L. Malcolm, R. K. Merson, G. C. Metcalfe, E. J. Nangle, W. S. Newton-Clare, A. B. Paul, N. P. Pritchard, L. C. Rivett, R. S. Scott, H. J. S. Shields, J. W. Stretton, C. R. Taylor, H. F. W. Warden, C. Warner, H. A. Watermeyer, B. H. C. Wilson.

FIRST M.B. (*Elementary Biology*).—W. B. Alcock, L. A. P. Anderson, G. Arnfield, L. W. Barlow, W. F. Bensted-Smith, A. V. Boyall, J. Brewer, D. F. Burton, E. Calvert, J. W. H. Chun, J. D. Clarke, A. C. Clifford, B. K. T. Collins, A. G. W. Compton, B.A., S. S. Crosse, J. Deighton, E. L. Dobson, E. Donaldson, G. C. Fairchild, A. N. Garrod, J. E. Gething, B.A., B. Graves, J. L. Green, E. F. W. Grellier, R. H. Growse, A. F. Hall, S. M. Hattersley, D. W. John, I. W. Joynt, G. R. D. McGeagh, J. M. D. Mackenzie, G. Madge, W. C. D. Maile, A. S. L. Malcolm, E. G. Martin, B.A., R. K. Merson, G. C. Metcalfe, E. J. Nangle, W. S. Newton-Clare, N. F. Norman, T. Owen, A. B. Paul, J. H. Pendered, D. V. Pickering, A. C. Pickett, L. C. Rivett, L. T. Rutherford, R. S. Scott, H. Sharpe, B.A., L. W. Shelley, H. J. S. Shields, F. B. Smith, G. A. Smythe, L. C. Somervell, J. W. Stretton, A. L. Sutcliffe, C. R. Taylor, J. F. Taylor, G. S. R. Thomas, J. W. Tonks, G. A. Wace, J. R. Waddy, H. F. W. Warden, C. Warner, W. G. Watson, S. M. Wilcox.

THIRD M.B. (*Pharmacology and General Pathology*).—C. W. Archer, B.A., A. E. Bonny, R. S. Carey, B.A., L. Colledge, B.A., C. A. Dottridge, B.A., E. A. Dyson, B.A., A. Feiling, B.A., P. K. Gilroy, B.A., A. H. Haggood, B.A., A. R. Hargreaves, B.A., S. L. Harke, B.A., W. Harmsen, B.A., E. H. V. Hodge, B.A., H. E. Humphrys, B.A., R. H. Hutchinson, B.A., P. C. V. Jones, B.A., G. C. Kidd, B.A., F. H. Lester, B.A., P. A. Lloyd-Jones, B.A., C. K. McKerrrow, B.A., L. Meakin, B.A., A. F. Morcom, B.A., L. B. Perry, B.A., J. H. Ryffel, M.A., R. M. E. H. Thursfield, B.A., J. H. Trench, B.A., C. Tylor, B.A., R. M. Vick, B.A., B. Wahby, T. N. Wood, B.A., A. E. M. Woolf, B.A., C. S. E. Wright, B.A.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary Council was held on June 13th; Mr. Henry Morris, President, in the chair.

Deputation to the Lord President of the Privy Council.

A report was received and entered on the minutes from the above deputation, which consisted of the President, Vice-Presidents, Mr. Howard Marsh, Mr. Butlin, and Mr. Pearce Gould, and which placed the views of the Council concerning the relative positions of the Fellows and Members before the Lord President.

The Licence in Dental Surgery.

Diplomas were issued to twenty-six candidates found qualified.

The Examination in Dental Surgery.

The following recommendations by the Board of Examiners in Dental Surgery were adopted:

1. That colonial dental practitioners who have completed a course of not less than three years' instruction in mechanical dentistry and who have been registered in British Colonies under conditions which do not require the passing of a recognized preliminary examination, be admitted to the Examinations for the Licence in Dental Surgery, provided they pass

the required preliminary examination in general education and complete the course of study required by the regulations at a recognized medical school and hospital and at a recognized dental school and hospital.

2. That a candidate who possesses a registrable dental qualification be admissible to re-examination without producing certificates of additional study.

The following regulation was also adopted, this regulation having been previously adopted by the Royal Colleges in regard to conjoint candidates:

A candidate must present himself for examination in chemistry and physics together (unless he claims exemption from one of them) until he has reached the required standard to pass in both, or in one of those parts, but he will not be allowed to pass in one part unless he obtains at the same time half the number of marks required to pass in the other part.

Closing of the Library.

The library will be closed during September and October next for repainting.

Appointment of Examiners.

The following appointments were made for the ensuing year:

Elementary Biology.—T. G. Stevens, H. W. M. Tims.
Anatomy.—W. H. C. Greene, A. Robinson, W. Wright.
Physiology.—B. L. Abrahams, J. B. Leathes.

For the Primary Fellowship.

Anatomy.—C. Addison, W. McA. Eccles, A. Keith, A. H. Young.
Physiology.—T. G. Brodie, G. A. Buckmaster, C. F. Myers-Ward, W. H. Thompson.
Midwifery.—A. H. N. Lewers, H. J. M. Playfair, W. R. Pollock, W. H. Tate.
Public Health.—Part I: H. R. D. Spitta. Part II: H. T. Bulstrode.

Election of Members of Council.

A meeting of Fellows will be held at the College on Thursday, July 4th next, for the election of four Fellows into the Council in the vacancies occasioned by the retirement in rotation of Sir John Tweedy, Mr. Herbert William Page, Mr. Charles William Mansell Moullin, and Mr. Frederic Samuel Eve, of whom Sir John Tweedy did not offer himself for re-election.

A vote of thanks was passed to Sir John Tweedy for the long and zealous services rendered by him to the College.

Fellowship.

At the same meeting the following candidates were admitted to the Fellowship:

R. G. Turner, S. E. Denyer, R. H. Paramore, J. V. Arkle, F. A. Hepworth, W. L. Cripps, F. W. Goyder, F. A. G. Jeans, W. G. Ball, H. W. Perkins, A. J. Walton, I. G. Back, J. C. Mead, W. I. Cumberlandidge, E. R. Faulkner, P. L. Giuseppe, M. Birks, R. D. Forbes, F. E. McKenty, D. T. Barry, R. B. Etherington-Smith, A. C. Goodwin, R. E. Harcourt, J. Swift-Joly, F. S. Mackenzie, H. H. Rayner.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE ABUSE OF MEDICAL CHARITIES.

THE recent Conference of Charity Organization Societies at Norwich resulted, amongst other things, in a useful discussion on the abuse of medical charity and charities. It was founded on a paper dealing with provident medical associations, read by Lieutenant-Colonel Montefiore on behalf of Dr. Gray of the Medical Subcommittee of the London Charity Organization Society. In this paper the system was strongly commended of appointing almoners to examine the financial fitness for free treatment of persons attending hospital, and of choosing for the work individuals well trained in charitable work among the poor. The chief point made, however, was that the true solution of hospital abuse and allied questions lay in the promotion of provident dispensaries, and in these institutions working hand in hand with the hospitals. Some of the suggestions arising from the paper were subsequently well driven home by Dr. Beverley of Norwich, who was for two years Chairman of the Hospitals Committee of the British Medical Association. Provident dispensaries, he considered, encouraged thrift and a spirit of self-respect and independence, which was often lacking in the *habitudes* of hospital out-patient departments. The latter, he indicated, should bear the same relation to the working classes as do Harley Street and its neighbourhood to those who can afford to pay ordinary fees. The general theme was further exemplified by Mr. H. A. Ballance, who described in detail the working of the Norwich Public Medical Service, a society instituted to provide the working classes with medical attendance in times of sickness, and to benefit those persons who financially are just below the class which is able to afford the minimum fee of ordinary private practitioners. He also explained in general terms some of the undesirable features of friendly society medical contract work, and more particularly the unfairness of allowing members of friendly societies to benefit by those contracts long after they have ceased financially to be on a par with ordinary members of the society. The discussion terminated in some speeches, ruled to be out of order, intended to show that the provision of medical assistance for all classes should be the duty of the State and not of individuals.