

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL.

MALNUTRITION IN AN INFANT DUE TO EXCESSIVE PUTRESCENCE IN THE ALIMENTARY CANAL, SUCCESSFULLY TREATED BY LACTIC ACID BACILLI.

It is now some years since Metchnikoff championed the cause of soured milk. In *Quelques Remarques sur le lait aigri*, published subsequently to his original pronouncement contained in the *Revue Scientifique*, 1904, Metchnikoff ably states his case, and makes a strong plea for the systematic introduction of the lactic acid bacillus within the alimentary canal, both as a preserver of health and as a remedial agent in disease. Considering the simplicity of the treatment, it is surprising to find how tardily it has been adopted. Whether this is due to the difficulty of getting milk soured and yet free from other pathogenic organisms, or whether the statement by some writers that hyperchlorhydria is commonly caused by the lactic acid bacillus, the fact remains that the literature relating to the soured milk treatment is of small volume. The conclusion of Heitzman and Monti that rickets is due to the excessive absorption of lactic acid from fermentation processes within the alimentary canal, and the consequent pasteurization of milk with the object of destroying the lactic acid bacillus have doubtless deterred many from adopting the method in children's diseases; but the recent laboratory work of Tissier and the clinical experiences of Dunn, Block, Judson, and others, give strong support to the views of Metchnikoff, and suggest that in soured milk we have a valuable intestinal antiseptic. The following case amply bears this out, and warrants the adoption of sterilized or pasteurized milk treated by pure culture of the lactic acid bacillus in all cases of malnutrition in children where intestinal decomposition is found to be excessive.

Rose C., aged 4 months, had never thriven. Her two brothers during infancy had also suffered from malnutrition, though in a lesser degree, and both subsequently developed rickets. The younger in addition became for months the victim of severe eczema capitis. The child had been carefully dieted, and for some weeks had received nothing but pasteurized milk. The ingestion of food was followed by vomiting, and she was greatly emaciated. Patches of eczema were beginning to appear on the scalp. Citrate of soda was added to the milk, but there was no improvement. On February 26th, 1907, the contents of the stomach were removed by catheter shortly after the administration of a bottle of pasteurized milk. The vomit contained no free HCl but an extensive bacteriological flora. The *Bacillus coli communis* and the lactic acid bacillus were absent, but there were present large yellow colonies of slender rods of varying length and motile. They liquefied gelatine and curdled milk. In all 436 colonies were counted, and 9 per cent. of these were bacteria capable of producing putrefaction. The child was placed on condensed milk, and the mother thought that vomiting had diminished slightly on that diet. On March 14th a pure culture of the lactic acid bacillus was added to a pint of diluted condensed milk after boiling, and when the temperature of the milk had fallen to blood heat. After standing some hours the milk was ready for consumption. Within one week vomiting had ceased and there was evidently an increase in weight. Later cream was added to the soured milk. By May 5th recovery was complete, the infant being in much better condition than her brothers had been at the same period. The eczema had disappeared. It is noteworthy that the eczema seemed to be arrested by the soured milk, a fact noted by Lesné. The little patient took the milk greedily even when soured and slightly curdled.

That an infant emaciated by reason of faulty digestive processes, set up in all probability by putrefactive bacteria, should be restored to health on a diet rich in another form of bacterium, raises far-reaching questions greatly beyond the scope of these notes; but it may be permitted to me to say, after some experience in other diseases, that in all probability every disease (and the list is a large one) dependent upon or accompanied by exces-

sive intestinal putrescence is likely to be influenced by the administration of soured milk.

For the benefit of those not in touch with a bacteriological laboratory, I may say that a preparation known as anticolin, and sent out by Raimés, Clark and Co., Edinburgh, is a pure culture of the lactic acid bacillus, and was the means adopted by me for the preparation of the soured milk in the above case.

Edinburgh.

A. VEITCH, M.B.

A CASE OF INTUSSUSCEPTION.

THE patient in the following case was a girl, aged 4 years, who appeared rather delicate and frail, but who previously had not been ill, except for occasional attacks of "biliousness."

On February 5th, 1907, the patient had indigestion, but attended school as usual. On February 6th at 8 a.m., she complained of acute abdominal pain, the bowels were moved freely, but the pain increased; she then vomited, and afterwards appeared more comfortable; the pain, however, recurred at intervals of half an hour, vomiting taking place during each paroxysm.

When seen at 12.30 the abdomen moved well on respiration. On palpation I thought I detected a "lump" just over the umbilicus. Per rectum nothing abnormal was found, and there was no blood or mucus on the finger when withdrawn. At 4.30, during an attack of pain, distinct peristaltic contractions passing towards the right iliac fossa were visible, and the tumour, a sausage-shaped swelling, became evident. At 6.30, under chloroform, by a mesial incision the abdomen was opened and the intussusception exposed. It extended up the ascending colon, and across the transverse colon as far as the splenic flexure. The first portion was easily reduced, but the last portion with great difficulty, owing to the oedema of the gut, which, however, appeared quite returnable. The intussusception was of the common variety—the ileo-caecal.

The abdomen was closed very imperfectly by three through-and-through silk-worm-gut sutures. Patient had taken the anaesthetic extremely badly, and was so collapsed that more careful suturing was not justifiable.

During the night and the next day—that is 7th—vomiting was frequent and excessive. The bowels were moved on the 8th by means of a gruel and turpentine enema, and a great quantity of flatus was passed. On the 11th, the patient complained of pain, the wound was dressed and a hernia due to excessive straining was discovered; the abdomen was strapped. From this time onwards although the general condition rapidly improved, the temperature chart showed an evening rise, never beyond 99.8° and usually about 99.4°. Careful examination failed to reveal the cause, and tubes mesenterica were suspected. On April 4th 250 mg. of Koch's tuberculin R was injected hypodermically. On April 30th the injection was repeated, in this case 500 mg. From the time of the first injection the temperature never rose above normal.

On May 15th the general condition of the patient had so improved that an operation was performed for cure of the ventral hernia.

Patient again took the anaesthetic extremely badly and almost expired on the table. The stitches were removed on the 24th, and the operation appeared to have been quite successful.

The case presents the following interesting features:

1. The age of the patient. Intussusception may occur at any age, and is quite common in infancy, but rare during any other period of life.
2. Absence of any definite cause. In infants, a dose of castor oil, gastro-enteritis are quite sufficient causes. In adults, malignant disease, or intestinal polypi, or any condition producing acute peristaltic contractions.
3. The nocturnal temperature, which became normal after the administration of tuberculin R.
4. The administration of tuberculin R, without estimation of the opsonic index.
5. The patient being such an extremely bad subject for an anaesthetic.

Northwich.

R. MANWARING-WHITE.

DR. EDWARD R. TAYLOR, Dean of the University of California, who is a member both of the medical and the legal professions, has been elected Mayor of San Francisco.

MEDICAL AND SURGICAL APPLIANCES.

The Invigro Body Brace.

THIS appliance was contrived to combine the essential features and advantages of a shoulder and an abdominal support. Straps with springs at the back serve as braces, whilst the abdomen is supported by a nickelled metal plate and straps, which cause no inconvenience nor chafing, as they are self-adjustable. The shoulder straps are constructed so as to give support with little pressure, whilst the portion of the appliance which is adjusted to the abdomen has none of the disadvantages of a binder, which weakens the parietes, and which is often so hot that the patient is liable to severe chill when it is left off. The brace tends to keep the shoulders erect and to overcome the effects of stooping. At the same time, it is devised to serve as a support to the abdomen in both man and woman where corpulence, pain, or any local trouble has shown that something is required to assist Nature in keeping the organs and figure in their natural positions. It affords comfort to subjects debilitated by child-bearing and overwork, and to strong women, such as able hospital nurses, suffering from physical fatigue induced by the duties of their vocation. The appliance is made by the Invigro Body Brace Company, 8, Bouverie Street, E.C.

MEDICAL NEWS.

OWING to pressure on space it has been necessary to defer any notes on entertainments at Exeter, other than those which appeared last week, for publication in a later issue.

THE authorities of King Edward's Hospital Fund for London have received notice from the Bank of England that a sum of £100,000 has been lodged to their credit by Mr. Andrew Carnegie. The gift is unconditional.

THE MEDICAL SCHOOL AT SAIGON.—A military section has been added to the Medical School at Saigon in Indo-China. It is intended for the training of native medical assistants, and it is hoped that ten will be turned out fit for service every year. The students will be chosen by competitive examination from among the native troops under instruction. Their medical studies will extend over four years.

THE annual summer meeting and luncheon of the Irish Medical Schools' and Graduates' Association was held at the Rougemont Hotel, Exeter, on Thursday, August 1st. After the formal business had been transacted, nearly fifty members and guests sat down to luncheon. Sir John W. Moore, the President, was in the chair, and amongst those present were Lady Moore, Sir Charles Cuffe, Dr. J. A. Macdonald, Dr. and Mrs. McManus, Lieutenant-Colonel Boileau, Professor Sinclair White, Professor Ernest White, Lieutenant-Colonel Smyth, Dr. Johnson Smyth, Dr. Smith Whitaker, Dr. and Mrs. Abraham, Dr. Crespi and ladies, Dr. J. J. Macan, Dr. J. Craig, Dr. Booth, Dr. and Mrs. Stokes, Dr. Wynne, Mr. Chas. Ryall, Mrs. Creasy, Dr. and Mrs. Lawless, Dr. and Mrs. Vlieland, and Dr. W. Douglas (Provincial Secretary). Owing to previous engagements, Dr. Davy, Dr. Deas, Mr. Russell Coombe, Dr. and Mrs. W. Gordon, and Mr. Domville were unable to be present.

INTERNATIONAL CONGRESS OF PHYSIOTHERAPY.—As already stated in the BRITISH MEDICAL JOURNAL, the second International Congress of Physiotherapy will be held in Rome from October 13th to 16th. The Italian Minister of Public Works has granted special travelling facilities to all members attending the Congress. The reduced fares apply to all lines, both on the mainland and on the islands. We are asked to state that the Organizing Committee is authorized to issue to each member or associate, duly enrolled, a book of railway coupons. Each coupon entitles the holder to a ticket at from 40 per cent. to 60 per cent. reduction on the ordinary fare. As the book contains twenty tickets, available for any journey in any part of Italy, it enables members to make an extended tour in the country at greatly reduced cost. The coupons are valid for forty-five days—from October 1st to November 15th, 1907. Ladies duly registered as associate members of the Congress and exhibitors may take advantage of the reduced fares. Applications for membership should be accompanied by the subscription of 20 francs for members, or 15 francs for associates, and should be sent to the general secretary, Professor Carlo Colombo, Via Plinio, Rome. The English secretary is W. Deane Butcher, M.R.C.S., Holyrood, Ealing.

SEVENTY-FIFTH ANNUAL MEETING

OF THE

British Medical Association

Held at Exeter, July 27th, 29th, 30th, and 31st, and August 1st and 2nd, 1907.

THE SECTIONS.

BRIEF SUMMARY OF PROCEEDINGS.

SECTION OF PATHOLOGY.

Thursday, August 1st, 1907.

THE chief attraction of the second meeting of this Section was an exhaustive discussion on phagocytosis and bactericidal action. Dr. Dean opened the proceedings with an account of the influence of serums on phagocytosis and the various substances found in the serums, and then summarized some of the work that has followed on Leishman's ingenious method of demonstrating phagocytosis. The phagocytic activity of the polymorphonuclear leucocytes appeared to him to be a variable factor under certain conditions, as instanced by experiments with blood from cases of leukaemia. Serum was found to act on organisms so that they tended to be drawn towards leucocytes that had been previously killed—an interesting sidelight on chemotaxis. The virulence of the organism was an important factor in phagocytosis, many observers having shown that leucocytes often refused virulent cocci whilst they ingested less virulent ones. The author concluded by giving the results of his work on the effects of heating serums. The almost constant ratio of phagocytic index of heated to unheated serums remained normal when virulent germs were used, but he obtained a reverse ratio with avirulent bacteria; but this reversed ratio after a short time was seen to be again reversed. It is quite impossible to produce all Dr. Dean's interesting results in a short summary. Dr. Buxton of Cornell University then described some experiments on the phagocytic action of cells in the peritoneal cavity, from which he concluded that the increased resistance of an immunized animal is almost entirely due to an increased power of phagocytosis, and, further, that an immunized animal's serum is no more bacteriolytic than that of a normal animal, and finally that there was no difference in the behaviour of the macrophages towards solid inert particles or organisms. Dr. Charlton Briscoe thought that opsonins did not exist in the blood as such, but perhaps rather as opsinogens or such-like substances, and that immune substances were only liberated after inoculation, and, being of the nature of an excretion, were eliminated in the urine. Drs. Houston and Rankin produced some very careful and detailed work on the meningococcus isolated from the Belfast epidemic. They found an increased agglutination and phagocytic power in the affected cases. From the fact that cases of posterior basic meningitis did not react in the same way as the epidemic type they conclude that Still's disease is an entirely different variety of meningitis. Professor Beattie suggested that the mononucleated cells (endothelium of omentum) were the producers of certain antibacterial substances. Dr. Peel Ritchie contributed a paper on a method of recognizing the specific substances in blood serum influencing phagocytosis and its application in determining the existence and etiology of bacterial diseases, and Dr. Bushnell mentioned some observations on phagocytosis in myelocytomia. The Chairman having made a few concluding remarks, a most instructive discussion came to an end. Dr. Carl Browning contributed a paper on experimental chemotherapy in trypanosome infections, the result of prolonged and exhaustive research. Dr. Bayon dogmatically stated his views on peritheliomata and endotheliomata, withholding, however, much technical detail, which he thought might not be appreciated by the Pathological Section save by the most experienced.

admiring the business instinct that seizes upon every occasion to attract public attention, we are inclined to think that the distribution of these cards transcends the limits of dental advertisement approved by the General Medical Council.

MEDICAL ETIQUETTE.

ARGUMENT.—It is much to be regretted that a newspaper should have printed a letter which was a public aspersion upon A.'s character and likely to do him harm. Under these exceptional circumstances we think he was justified in sending to the newspaper any available evidence to clear his reputation.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

THE MASTERSHIP OF DOWNING.

THE Mastership of Downing College has been offered to Professor Howard Marsh, who has been Professor of Surgery in the University since 1903. It is stated that the offer has been favourably received by Professor Howard Marsh, but the election cannot take place until October.

ESPERANTO.

The Esperanto Language Congress will meet in Cambridge on August 10th, and a large gathering is expected.

VICTORIA UNIVERSITY OF MANCHESTER.

FACULTY OF MEDICINE.

THE following candidates have been approved at the examinations indicated:

- FIRST M.B., CH.B. (Materia Medica and Pharmacy).**—L. T. Challoner, L. W. Howlett, N. Matthews, Jane C. Miller, L. Moss, R. P. Stewart, W. Stirling, J. S. B. Stopford, G. K. Thompson, W. Warburton, Charlotte E. Warner.
- SECOND M.B., CH.B. (Anatomy and Physiology).**—Estelle I. E. Atkinson, G. M. Benton, C. G. Brentnall, S. J. Clegg, J. F. Cocker, G. T. Cregan, H. A. Dunkerley, Gertrude H. Geiler, S. A. Winstanley, F. G. Wrigley.
- SECOND M.B., CH.B. (Materia Medica and Pharmacy).**—A. E. Ainscow, R. Briercliffe, J. Cowan, V. S. Cox, E. R. Eatock, C. W. Fort, P. S. Green, E. Grey, H. Harrison, H. Heathcote, R. C. Hutchinson, R. B. Jackson, G. Lapage, J. Leach, J. D. Mercer, W. H. Parkinson, A. Porter, J. B. Scott, W. A. Sneath, J. P. Stallard, J. Walker, H. C. Wright.
- THIRD M.B., CH.B.—R. J. Batty (Hygiene).**—J. A. Bateman, T. B. Bolton, W. C. Denniston, Frances M. Huxley, E. K. Lomas, W. P. Marshall, J. Morley, M. C. Skiller-Lawrence, J. Thompson, R. B. Thompson, B. W. E. Trevor Roper, W. W. Uttley, T. G. Williams, A. E. Woodall.
- FINAL M.B., CH.B. (Part I).**—V. Booth, C. H. Broomhead, Elsie Brown, G. Crawshaw, J. H. C. Green, E. Howe. **Part II.**—J. W. Bride, G. W. Burry, H. Coppock, D. I. Dakeyne, J. F. Dow, *J. A. Fairer, F. Hall, *F. Hartley, *R. Lakin, V. D. Madgavkar, P. Moran, W. Nightingale, Alice Oberdorfer, J. Rainford, R. Robertson, D. Rodger, Elsie M. Royle, V. Southwell, **T. W. Todd, G. B. Warburton, H. Whitehead, N. K. Williamson.
- CH.M.—A. R. Thompson.**

* First class honours.

** Second-class honours.

† Anatomy.

UNIVERSITY OF SHEFFIELD.

THE following appointments were made at the last meeting of the Council:

Demonstrator in Physiology.—D. H. de Souza, M.B., B.S., B.Sc. Lond. *Assistant Lecturer and Demonstrator in Physics.*—W. F. G. Swann, B.Sc. Lond.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary council was held on July 25th, Mr. Henry Morris, President, in the chair.

Issue of Diplomas.

Diplomas of Membership were issued to 112 candidates found qualified at the recent examination.

Diplomas in Public Health were issued to 13 candidates found qualified for this diploma.

Member of the Court of Examiners.

Mr. L. A. Dunn was appointed on the above Court in the vacancy occasioned by the retirement of Mr. Cuthbert Golding-Bird.

Mr. A. Pearce Gould and Mr. W. B. Paterson were re-elected on the Board of Examiners in Dental Surgery.

Catalogue of Osteological Specimens.

It was determined that the sale price of the revised edition of Part I (new) of the catalogue of osteological specimens in the museum be 10s. per copy.

CONJOINT BOARD IN ENGLAND.

THE Diplomas of M.R.C.S.Eng. and L.R.C.P.Lond. were conferred on the following gentlemen on July 25th:

S. H. C. Air, N. G. Allin, M. D. Anklesaria, R. E. Apperly, J. Appleyard, F. W. Aris, H. P. Aubrey, F. J. F. Barrington, R. L. Barwick, J. W. B. Bean, T. H. C. Benians, H. S. Berry, F. A. B. Bett, R. G. Bingham, J. W. Bintliffe, F. R. Bray, A. Camacho, L. B. Cane, H. B. Caryll, R. G. Chase, R. N. Chopra, F. Clayton, M. Cohen, F. G. Collins, P. C. Conran, R. N. Coorlawala, J. E. Copland, E. M. Cowell, A. J. Crawford, L. Croft, G. W. M. Custance, H. G. Daft, D. W.

Daniels, W. Deane, H. C. Devas, W. C. McN. Dickey, A. W. C. Drake, J. Duncan, J. E. Ellcome, T. Evans, E. G. Foote, C. L. Forde, S. K. Gleed, E. S. Goss, H. Granger, W. B. Griffin, C. L. Hadwen, A. Hanau, W. W. Hellyer, O. H. Hensler, T. S. Higgins, J. E. Hodson, G. Holroyde, A. E. Hles, W. A. M. Jack, W. J. Jago, A. G. Jenner, W. F. Jones, J. L. Joyce, C. G. Kemp, F. E. H. Keogh, S. M. Khambata, A. B. Khan, H. J. S. Kimbell, P. J. Kolaporewalla, C. F. L. Leopoldt, J. F. Lessell, J. R. Lloyd, J. J. Louwrens, L. G. J. Mackey, P. W. Mathew, J. E. Middlemiss, E. P. Minett, G. N. Montgomery, E. Morris, H. W. Nicholls, H. Nockolds, F. W. O'Connor, H. P. Orchard, E. V. Oulton, R. C. Paris, J. G. Phillips, B. J. Phillips-Jones, A. H. Pollard, M. A. Rahman, J. Ramsay, A. B. Rooke, V. K. Sadler, B. Saul, G. H. Sedgwick, G. A. Simmons, G. M. Simpson, F. O. Spensley, S. F. St. J. Steadman, R. Y. Stones, E. Sutcliffe, R. S. Townsend, H. T. Treves, J. R. H. Turton, B. Varvill, H. F. Veilacott, W. G. H. M. Verdon, P. J. Verrall, S. Vosper, F. J. Waldmeier, G. H. Watson, J. N. Watson, R. J. Willan, I. S. Wilson, J. F. Windsor, G. E. Wood, W. H. Woodburn, L. H. Wootton, O. K. Wright.

DIPLOMA IN PUBLIC HEALTH.

On the same date the following received the Diploma in Public Health:

I. McW. Bourke, E. Eckersley (Lt.-Col. R.A.M.C.), R. J. Ewart, M. H. G. Fell (Capt. R.A.M.C.), H. A. Foy, F. W. Lewis, W. G. Liston (Capt. I.M.B.), E. D. Parsons, W. F. Tyndale, C.M.G. (Capt. R.A.M.C.), B. Watts (Capt. R.A.M.C.), B. H. Wedd, J. E. Wilson, C. R. Wood.

The following candidates have been approved in the subjects indicated:

FIRST EXAMINATION (Chemistry and Physics).—†A. Abdel-Al, G. Aldridge, T. S. Allen, C. N. Atlee, *B. Barnett, S. I. Blairman, C. G. Sunn, T. C. Butler, T. Clarke, C. J. W. Clayton, *A. S. Coalbank, C. G. Colyer, †F. C. Cowtan, †A. L. Davies, D. H. Davies, B. G. Derry, *J. B. G. Dotto, †M. Dwyer, †A. R. Esler, †M. S. Esler, A. G. T. Fisher, F. T. Fisher, *G. G. Gariand, H. Gibson, H. M. Gilbertson, A. O. Gray, A. J. Green, K. H. Greenwood, W. E. Hallinan, M. Z. Hanafy, E. R. Hart, J. R. Hayman, E. H. Heaton, J. E. Hepper, †A. Holmes, H. S. C. Hooper, F. M. S. Hulke, D. R. N. O'N. Humphrey-Davy, †S. Hutchinson, A. E. Huxtable, *A. E. W. Idria, *W. L. Ingram, †G. B. H. Jones, C. Kennedy, G. W. King, A. B. Kramer, A. W. Lewis, C. C. Ling, †H. B. Logan, †E. B. Lounstaff, A. Lowndes, R. H. Lucas, †H. Mahmud, *W. F. Mason, W. H. Matthews, W. F. Morgan, O. C. Morphy, *E. A. J. Murphy, G. M. Oakden, J. F. O'Malley, *J. H. Paget, F. J. Palmer, G. H. Piercy, J. Pinder, *W. Piper, O. Pitt, †C. H. G. Pochin, A. G. Poock, R. F. Quilton, *M. H. Ratton, J. M. Redding, C. G. Reinhardt, †C. B. Robinson, *E. U. Russell, †E. H. S. Scarr, J. R. C. Stephens, †C. H. Symons, *A. Tilbury, *K. Vamadeva, †L. Waddell, E. A. Weaver, J. D. Webb, C. G. Whorlow, M. A. K. Wood, W. Worger.

FIRST EXAMINATION (Elementary Biology).—T. S. Allen, W. Andrew, H. A. Arkill, H. F. Barge, B. F. Beaton, J. S. Bhajiwalla, P. N. Button, F. W. Campbell, N. Cheune, A. Cory, A. L. Davies, E. C. Drabble, J. H. Drinkall, A. R. Esler, K. S. Fawcett, P. C. Fenwick, F. T. Fisher, H. Gibson, H. M. Gilbertson, A. O. Gray, E. R. Hart, A. E. Huxtable, W. S. Hyde, A. B. Kramer, C. C. Ling, A. R. MacGillivuddy, W. H. Matthews, H. M. A. Menage, W. F. Morgan, J. Morrey, C. S. Owen, C. H. G. Penny, M. G. Pettigrew, J. M. Redding, W. G. Reynolds, S. A. Riddett, G. F. Romer, W. E. Tanner, J. W. Thomas, C. W. Treherne, A. G. Turner, I. L. Waddell, E. A. Weaver, C. G. Whorlow.

FIRST EXAMINATION (Practical Pharmacy).—S. D. Adam, C. V. Anderson, S. V. Appleyard, N. W. Berry, H. S. Blackmore, T. R. H. Blake, O. H. Bowen, T. S. Bradburn, G. N. Brandon, T. C. Brentnall, R. O. Bridgman, H. H. Budd, J. H. Burdett, H. J. B. Cane, W. E. Carter, H. J. Clutterbuck, F. G. Collins, R. Crawford, A. E. Cullen, C. R. Dudgeon, P. A. S. Dyson, G. J. F. Elphick, C. L. Forde, A. J. S. Fuller, H. Gall, H. L. Gauntlett, T. S. Gibson, B. Goldsmith, B. G. Goodwin, S. R. Harrison, J. E. Hepper, H. H. Hiley, G. A. Hodgson, J. B. Holmes, T. R. L. Jones, L. H. Khan, S. Lall, C. F. L. Leopoldt, M. Lindsey, T. P. Lloyd, W. E. Lloyd, D. Macrae, H. L. Mann, E. H. Marshall, G. K. Maurice, M. M. Melrose, J. K. Milligan, J. Morrey, M. K. Nelson, B. N. Norman, M. Nurick, W. G. Orchard, H. L. Paddon, W. R. Parkinson, A. C. Paterson, P. V. G. Pedrick, A. S. Pern, A. Pimm, V. St. L. Pincock, D. A. Power, J. A. Prendergast, M. D. Price, J. S. Robertson, L. L. Satow, H. L. H. Steele, A. M. Stuart, W. F. Sutcliffe, W. P. Tindal-Atkinson, H. J. A. Tootal, C. G. Waddington, G. F. Walker, W. Watts, A. Weston, A. White, H. White.

* Passed in Chemistry only. † Passed in Physics only.
‡ Passed under Old Regulations.

CONJOINT BOARD IN SCOTLAND.

AT the examinations held in July in Glasgow of the Conjoint Board of the Royal Colleges of Physicians and Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow, the following candidates passed their respective examinations, namely:

FIRST EXAMINATION (Five Years' Course).—*F. W. Grant, J. G. Morrin, *M. W. Rees, F. P. Quirk, J. D. Wright, W. Millerick, J. B. Michie.

SECOND EXAMINATION (Five Years' Course).—*S. K. Senn, Edith Hutton, *R. J. Helsby, H. H. Scott; (Four Years' Course) T. M. Jamieson.

THIRD EXAMINATION (Five Years' Course).—R. B. M. Sullivan, O. R. Belcher, T. S. Douglas, I. Flack, H. F. Collins, A. Baxendale, R. M'C. Blair.

FINAL EXAMINATION (and admitted Licentiate of the Co-operating Bodies).—J. D. Jones, J. F. Jefferies, †J. R. D. Holtby, H. C. de Souza, W. Riddell, I. Flack, G. E. Nash, W. E. Barrett, G. E. Aitken, R. K. Nisbet, D. W. Morison, C. R. Veval, J. N. Rai, C. A. Langmaid, B. D. Khote, E. G. Hodgson, C. J. Tillekeratne.

* With distinction. † With honours.

UNDER the title of "Istituto Terapeutico Italiano," an institute has recently been established at Milan for the investigation of the action of new drugs, especially in regard to serumtherapy and hypodermic medication. Dr. Zanoni is the Director of the institute.