hygiene given in training colleges should be entrusted to specially-qualified medical practitioners.

We are, Sir,
Your obedient servants,

T. Clifford Allbutt, M.D., F.R.S.,
Regius Professor of Medicine, University of Cambridge.
G. L. Bruce,
Late School Board for London and London Committee of Education.
G. A. Heron, M.D., F.R.C.P.,
Representing the International Association for the Prevention of Tuberculosis.
Donald MacAlister, M.D., F.R.C.P.,
President of the General Medical Council.
William Osler, M.D., F.R.S.,
Professor of Medicine, University of Oxford.
John Tweedy, F.R.C.S.,
Late President of the Royal College of Surgeons of England.

BACTERIOSCOPIC ANALYSIS OF EXCREMENTAL POLLUTION.

Sir,—In the British Medical Journal of October 27th, p. 1090, Dr. Klein has a "Note concerning the Bacterioscopic Analysis of Excremental Pollution," in which he states that:

Unfortunately the MacConkey medium makes no selection between typical and atypical *B. coli*, nor does it exclude a number of other microbes capable of producing acid and fermenting glucose. Amongst these notably some liquefying microbes present in shellfish and also in other materials. It is well known that one of the principal differential characters of *B. coli communis* is its power to ferment lactose, a character not possessed by many species of coli-like microbes, which are nevertheless possessed of the power of fermenting glucose. This character of lactose fermentation could, therefore, be used at once in the preliminary tests for *B. coli communis* if we substitute glucose for the lactose in the ordinary MacConkey medium; by this a distinct simplifying of the analysis could be achieved.

I presume there is here a typographical error, and that Dr. Klein meant to say "substitute lactose for the glucose." These remarks suggest that bile salt lactose broth had not been thought of before in this connexion. I have, however, already called attention to this very point in a letter published in *Public Health*, May, 1904, p. 491, in which I said: ". . . there appears to have been a great deal of misapprehension with regard to bile salt broth. The first kind of broth used was one containing not glucose but lactose, and obviously this is to be preferred if search is being made for typical *B. coli* only. The change to glucose was made simply so as to include other organisms, for example, *B. enteritidis* (Gaertner)."

By using lactose it is possible to overlook many organisms of importance, as not only do they give no sign of their presence, but they may be inhibited by the acid produced by the lactose fermenters. The safest plan is, I think, to inoculate bile salt glucose broth with the material to be examined, and, after eighteen to twenty-four hours' incubation, to make from the glucose broth surface-plate cultivations on bile salt neutral red lactose agar. Next morning subcultures may be made from the colonies on the plates into ordinary nutrient broth. In six hours the growth in the broth will usually be far enough advanced for observations to be made with regard to morphology, motility, and staining reactions and for inoculating any other media it may be desired to use. I have found nutrient broth, nutrient gelatine, litmus milk, and bile-salt broths containing lactose, cane sugar, dulcit, adonit, sorbit, and inulin to be the most valuable.

As regards streptococci, to which Dr. Klein also refers, some grow very well in ordinary bile salt broth, but the growth is slow. Recently I was asked to examine a piece of membrane from a case of suspected diphtheria, and being curious to know if there were present any organism which would grow in bile salt broth (the Klebs-Loeffler bacillus will not) I put a portion of the membrane into a tube of bile salt lactose broth. After several days incubation at 37° C., there was good growth, which a microscopical examination showed to be due to streptococci only. Some cocci grow well when freshly isolated but soon die when subcultured.

The addition of "*Fleischwasser*" or of "beef extract" has always seemed to me to decrease the selective action of bile salt media, and it is upon this selective action that the value chiefly depends. As an example of this action, I may mention that the bacilli of plague and of pseudo-tuberculosis rodentium grow well, while the bacilli of fowl cholera and its allies show very little, if any, multiplication in bile salt media.

These media seem also to have somewhat of a selective action with regard to the different strains of the same bacillus. Thus, in the course of a series of experiments carried on with another object, I have derived the impression that in the case of *B. typhosus* a virulent bacillus will grow better in bile salt media than an avirulent one. If this impression turns out to be correct, the value of these media will be increased, and the idea will naturally suggest itself that possibly the virulence of an organism might be raised by a series of subcultures in bile salt media.

Alfred MacConkey.

Lister Institute of Preventive Medicine,
Queensberry Lodge, Elstree, Herts, Nov. 13th.

THE REPORT OF THE COMMISSION ON POOR-LAW REFORM (IRELAND).

Sir,—Dr. Rhodes's letter in your issue of November 10th furnishes clear evidence that he is not in a position to form a correct opinion on some of the findings and recommendations of the Commissioners. The enormous difference that maintains between the conditions that affect the English and Irish Poor-law systems absolutely precludes any person from forming a correct judgement who views the matter from an English standpoint. His reference to paupers shows that he is ignorant of the fact that we do not recognize paupers as such, but that our Poor Laws provide for the medical treatment of all poor persons who are not in a position to provide the same for themselves or families. We make no invidious distinction, and, if such a distinction were originally contemplated when our workhouse system was established, it was entirely upset by the passing of the Medical Charities Acts, and by the unrestricted admissions into our workhouse hospitals.

The Commissioners deserve the thanks of every public body in Ireland, not only for the manner in which they have exposed the rottenness of the foundations upon which the Poor-law system was established, in complete opposition to the recommendations of the Irish Royal Commission, which, after three years' inquiry reported in 1836, but still more so for their bold and statesmanlike suggestions to do away with, once and for all, the hybrid institutions which have been evolved from the original Unions. The separation of the hospital from the workhouse proper, and the installation of district hospitals properly equipped and officered, would in itself command the very highest praise; and when we contemplate the segregation of epileptics, the establishment of auxiliary asylums for the harmless lunatics who are at present hopelessly huddled together in cheerless outbuildings without intelligent attendants, and the erection of consumptive sanatoriums under county management, we are simply carried away by the magnificence of the suggested reforms.

The establishment of a State service for all Poor-law and county medical officers may, perhaps, be viewed askance by many Boards of Guardians, but I have no doubt the more it is thought over the more it will be appreciated and the fewer difficulties will be raised to bar its progress. If such a service were to be confined to the hospital surgeons, insuperable objections would be raised, but the Commissioners themselves suggest the inclusion of the dispensary medical service as tending to facilitate the scheme. In the 120th paragraph they say: "But the foregoing suggestions as regards hospitals could more easily be worked into some general scheme for the entire Irish County and Union Medical Service. The establishment of a State medical service in Ireland would mean a very small increase in the Parliamentary grant in comparison with the benefits involved—that is, "a State-supported medical service, both for county and district hospitals, and for dispensaries also." A State service on these lines has been adopted with practical unanimity by one of the largest meetings of the Irish Medical Association ever held (there were only eleven dissentients), and when we reflect that the intention of such a procedure is to supply the poor in every country district in Ireland with the best medical skill that can be obtained without any expense to the ratepayer—which skill would be available to all, for in the large majority of dispensary districts there would only be the State medical officer—we cannot see that the offer will not be gladly accepted. As to the details of the

scheme, we must, of course, wait. I have no doubt the final composition of the Governing Council will be such as to command the approval of both the people and the service, and until a complete scheme is formulated we can only watch and wait.

Dr. Moorhead's statement that the restriction of the service to Irish practitioners is a most unfortunate one, is amply borne out by the opinions of all with whom I have had the privilege of communicating. I am sure it will not be persevered in. We Irish doctors do not fear competition. I hope, however, before Dr. Rhodes uses his influence to create prejudice against the report he will make himself acquainted with the history of the origin and development of the Poor-law system in Ireland, and the conditions under which the Poor-law medical officers have been groaning for the past thirty years.—I am, etc.,

Lurgan, Nov. 17th. SAMUEL AGNEW, M.A., M.D.

SIR,—The recommendation of the Commission—that the medical officers of the county and district infirmaries of Ireland should have "hospital experience" and "capacity for operating" over and above what is indicated by the possession of a qualification in medicine and surgery—seems to me so reasonable and so necessary that I cannot understand why Dr. Rhodes should attempt to ridicule it in your issue of November 10th. He says that it means that an Irish graduate may be competent to treat the Lord-Lieutenant or a peer, but not a policeman or a pauper. Of course it means nothing of the sort—no more than the examinations for the army, navy, and Indian Medical Services mean that he is fit to treat a prince or a peer but not a soldier or a sailor.

The appointments to county and district hospitals should be held by men who would, by their scientific attainments, practical knowledge, experience, and skill, be capable of advising, and operating if desirable, on all cases submitted to them. No one who knows the circumstances of rural Ireland can doubt that such men are urgently required and should be procured, by competition or otherwise. Many lives are lost and much unnecessary suffering endured in country districts for want of such men.

The proposal that such appointments should for the present be restricted to candidates educated in Ireland is both just and reasonable. Under present conditions Irishmen get these appointments as English and Scotchmen get them in their respective countries. The exceptions to this rule are a negligible quantity.

If the country and district hospitals were thrown open to competition, the English and Scotch appointments being made as at present, of course it would be "another injustice to Ireland," *pace* Dr. Rhodes's sneer. As it would be an injustice to England and Scotland if the similar appointments in these countries were thrown open to public competition while the present mode of appointment continued in Ireland. When, if ever, the medical services of England, Scotland, and Ireland are thrown open to competition, Irishmen will face the test with confidence. This is "reciprocity" as we understand it in Ireland, not the one-sided reciprocity for which Dr. Rhodes clamours.

I venture to disagree with my friend Dr. Moorhead when he says this recommendation has caused dissatisfaction in the ranks of the Irish profession.

We may be poor, and we may be proud, but we are not foolish, as we certainly would be if we threw open to the competition of the United Kingdom the few appointments which we now obtain until the similar appointments in Great Britain are reciprocally thrown open to us.—I am, etc., RICHARD RYAN, M.D., J.P.

Bailieboro', co. Cavan, Nov. 19th.

LIFE AND HEALTH ASSURANCE ASSOCIATION, LIMITED.

SIR,—We trust that you will be good enough to give due prominence to this letter, that it may serve as an efficient warning to other medical men.

Some three months ago we were severally and unknown to each other approached by a man called "Robins," an agent of the Life and Health Assurance Association, Limited, with a view to become their medical referee for the whole of the Isle of Wight at certain specified rates of payment.

The agent made it virtually compulsory that we should first insure in the company in order to become eligible for the appointment. Foolishly, we did so, paying our premiums on the spot, each having been given to understand that he would be the sole representative of the company in the island, and that the income resulting from the appointment would cover our premiums many times over!

For a considerable time nothing further transpired, until, after much correspondence and agitation on our part, we were eventually informed that we had been appointed to our respective local districts at rates considerably lower than those specified by the agent. These appointments being, of course, utterly valueless, we both rejected them, demanding at the same time the immediate return of our cheques.

Thanks to the good offices of the Medical Defence Union, our premiums have at length been returned with a very bad grace.

We have recently discovered, on p. 1164 of the BRITISH MEDICAL JOURNAL of October 27th, 1906, a note about this company, which shows that, in spite of the repudiation by the head office in Edinburgh of the methods practised by their agent, he is still in their active employ.

As fools we undoubtedly stand convicted, but, under the strong impression that in this respect we are not wholly unique, we have determined to publish our folly in the hopes that others similarly approached may know how to deal with, and what to expect from, companies who do business on these lines.—We are, etc.,

J. A. B. HAMMOND, M.B.,
Shanklin, I.W.
DRURY PENNINGTON, M.B.,
Sandown, I.W.

November 15th.

THE EVAPORATION OF CHLOROFORM DURING INHALATION.

SIR,—In reference to Dr. Levy's reply to my criticism of his paper, I would ask one question and make one suggestion. The question is—How does Dr. Levy in giving chloroform from a mask arrange that "the whole of the chloroform is evaporated through the agency of the respiratory air currents only?"

The suggestion is that it would be wiser to concentrate all our mental efforts on watching the patient and attending to his requirements. I quite agree that counting drops is not a laborious mental exercise, but it must to some extent take our attention off other matters.—I am, etc.,

London, W., Nov. 16th. G. A. H. BARTON.

FROM an article on the Needs and Advantages of an International Congress of Military Surgeons, reprinted from the *Journal of the Association of Military Surgeons of the United States*, by Colonel Nicholas Senn, there would seem to be a desire to create a congress whose main object shall be to "render war more and more humane until the millennium of peace will take possession of the earth." Never were wars more humane than they are to-day; yet never were they of more frequent occurrence. Truly, their duration is shorter, and fewer people are hurt than was formerly the case, but there is no indication of any diminution "of the narrowing lust of gold" or of "the thousand wars of old." Probably at no previous period have men been so keen on preparing for war as at present: the prospect of diminished suffering on the field is not likely to restrain men from the fray. The line of argument adopted by Colonel Senn seems, therefore, to be faulty; it might have appealed to an audience so long as the spoken words rung in the hearers' ears sentiments of perfervid humanity, but subsequent reflection must have shown that some higher motive will be required to diminish wars than the desire to render them less painful. Colonel Senn acknowledges that "the military section of the International Medical Congress has done much in promoting that part of the healing art which it represents," and also that "among the most important duties which now concern the military surgeons is the one which has for its object to convey the blessings of modern medicine and surgery as practised in civil life to the soldiers in camp, field, and hospitals." These blessings may surely be better acquired at a conjoint international congress of civil and military surgeons than at one composed only of the latter branch of the profession.