

Edinburgh. Of the eight deaths from these epidemic diseases in Dublin last week, five resulted from whooping-cough and three from diarrhoea, but not one either from measles, scarlet fever, diphtheria, "fever," or small-pox. The fatal cases of whooping-cough showed an increase. The 150 deaths at all ages included 31 of infants under one year of age and 33 of persons aged upwards of 60 years; the deaths of infants considerably exceeded the numbers in recent weeks. Six inquest cases and three deaths from violence were registered during the week; and 62, or 41.3 per cent., of the deaths occurred in public institutions. The causes of two, or 1.3 per cent., of the deaths in the city last week were uncertified either by a registered medical practitioner or by a coroner; in London the causes of all but one of the 1125 deaths last week were duly certified, as were all but one of the 81 deaths in Edinburgh.

THE SERVICES.

ROYAL ARMY MEDICAL CORPS.

Lieutenant-Colonel R. I. D. Hackett, Administrative Medical Officer at Bordon, and Lieutenant-Colonel C. R. Tyrrell, Staff Officer to the Principal Medical Officer, Eastern Command, exchange places on the foreign service roster.

ROYAL ARMY MEDICAL CORPS SCHOOL OF INSTRUCTION.

Major Charles C. Fleming, D.S.O., R.A.M.C., to be Instructor, vice Major J. D. Ferguson, D.S.O. (dated June 13th, 1909).

ROYAL NAVAL VOLUNTEER RESERVE.

The undermentioned has been appointed Surgeon: Albert James Gilbertson (dated June 24th, 1909).

TERRITORIAL FORCE.

Infantry Battalions.

5th Battalion Loyal North Lancashire Regiment: Surgeon-Captain Henry J. Taylor, from the 2nd Volunteer Battalion, The Loyal North Lancashire Regiment, to be Surgeon-Captain, with precedence as in the Volunteer Force (dated April 1st, 1908).

Royal Army Medical Corps.

2nd London (City of London) Field Ambulance: Reginald Ernest Bickerton to be Lieutenant (dated April 13th, 1909).

3rd London (City of London) Field Ambulance: Captain Hubert C. Phillips resigns his commission (dated May 8th, 1909). Bernard Elwell Potter to be Lieutenant (dated May 12th, 1909).

6th London Field Ambulance: Edward Pigott Minett to be Lieutenant (dated May 18th, 1909).

2nd North Midland Field Ambulance: Albert John Riddett to be Lieutenant (dated April 29th, 1909).

3rd North Midland Field Ambulance: George James Smith Atkinson to be Lieutenant (dated March 8th, 1909).

2nd South Midland Field Ambulance: Samuel George Webb to be Lieutenant (dated May 19th, 1909).

2nd Northumbrian Field Ambulance: George Reginald Ellis to be Lieutenant (dated May 1st, 1909). The undermentioned officers to be Captains (dated May 8th, 1909): Lieutenant Henry C. Pearson and Lieutenant Duncan A. Cameron.

3rd West Riding Field Ambulance: Lieutenant James Mackinnon, from the 1st West Riding Field Ambulance, to be Lieutenant (dated April 26th, 1909).

1st Northern General Hospital: To be Major whose services will be available on mobilisation: Robert Alfred Bolam (late Lieutenant, 9th Battalion, The Durham Light Infantry), with seniority next below Major W. G. Richardson (dated March 30th, 1909).

Sanitary Service: To be Captain whose services will be available on mobilisation: William Butler (dated June 5th, 1909).

1st South Midland Mounted Brigade Field Ambulance: Donald Buchanan to be Lieutenant (dated May 8th, 1909).

1st Home Counties Field Ambulance: George Potts to be Lieutenant (dated Feb. 11th, 1909).

1st South Midland Field Ambulance: Major Arthur R. Badger resigns his commission (dated June 4th, 1909).

5th Southern General Hospital: The undermentioned to be officers whose services will be available on mobilisation (dated July 21st, 1908):—To be Lieutenant-Colonels: Claude Clarke

Claremont, Charles Plumley Childe, Surgeon-Lieutenant-Colonel and Honorary Surgeon-Colonel George Gordon Sparrow (late 2nd Hampshire Royal Garrison Artillery (Volunteers)), Retired List, Harry Wynter Shettle. To be Majors: John Robert Stevenson Robertson (late Surgeon, Army Medical Department), Arthur Vernon Ford, John Phillips, John Rushworth Keele, Norman Elliott Aldridge, Charles Frederic Routh, William Prior Purvis, and Howard Percy Ward. To be Captains: Thomas Arthur Munro Forde, Samuel Goss, George Hebb Cowen, William Patrick McEldowney, Charles Archibald Scott Ridout, John Temple Leon, Harold Burrows, John Henry Pearson Fraser, John Lister Wright, Edward James Davis Taylor, Thomas Holmes, John William Gregory Kealy, Samuel Hughes, Charles Howard Saunders, William Patrick O'Meara, Rolland Atkinson Dove, Alfred William Power, John Tiley Montgomery McDougall (late Surgeon, Royal Navy), Charles Lamplough, and Montague Harold Way.

For Attachment to Units other than Medical Units.—Surgeon-Major William B. Mackay, from the 7th Battalion, The Northumberland Fusiliers, to be Major, with seniority as from August 1st, 1903 (dated April 1st, 1908). Surgeon-Captain Philip John Le Riche, from the 2nd Volunteer Battalion, The Royal Sussex Regiment, to be Captain, with precedence as in the Volunteer Force (dated April 1st, 1908).

Attached to Units other than Medical Units.—Lieutenant James A. Gibson resigns his commission (dated April 12th, 1909). Captain Richard J. Swan resigns his commission (dated May 3rd, 1909). Lieutenant John E. Simpson to be Captain (dated May 11th, 1909).

THE BIRTHDAY HONOURS.

The list of Birthday Honours includes the names of Lieutenant-Colonel W. B. Leishman, R.A.M.C., who has received a knighthood; Surgeon-General Lionel Dixon Spencer, I.M.S., honorary surgeon to the King, who is made a Knight Commander of the Bath; Surgeon-General Hayward Reader Whitehead, R.A.M.C., P.M.O., Southern Command, and Colonel de Burgh Birch, A.M.O., West Riding Division, Territorial Force, who receive Companionships of the Bath; and of Lieutenant-Colonel Robert Neil Campbell, I.M.S., Officiating Inspector-General of Civil Hospitals in Eastern Bengal and Assam, who receives a Companionship of the Order of the Indian Empire. The *London Gazette* of June 25th contains the announcement of the appointment of Colonel Charles Edward Harrison, honorary surgeon to His Majesty, Brigade-Surgeon-Lieutenant-Colonel, Grenadier Guards, as a Commander of the Royal Victorian Order.

Correspondence.

"Audi alteram partem."

MALARIA PREVENTION AT MIAN MIR.

To the Editor of THE LANCET.

SIR,—I see by your issue of June 26th that Major S. P. James, I.M.S., and Captain S. R. Christophers, I.M.S., have not "undertaken the trivial task of replying in detail to each of the criticisms brought forward by Professor Ross," but endeavour to escape from Mian Mir in a cloud of generalities about malaria in India. Permit me to pin them to the point, which is this: whether Major James's recent statements at the Bombay Medical Congress regarding the failure of the operations at that station are true or not true. On a previous occasion these gentlemen neglected the same "trivial task of replying" to the criticisms of Colonel G. M. Giles, Captain E. P. Sewell, and myself on the same subject, and now I see that they repeat all their own inaccuracies about Mian Mir without condescending even to notice the complete refutations published by Surgeon-General H. Hamilton and Colonels W. Barrow, R. H. Forman, H. D. Rowan, and J. Shearer. Until, therefore, they do undertake this trivial task I feel justified in saying that the whole of their original work at Mian Mir was badly conceived and badly executed, and that it showed little evidence either of knowledge of practical malaria prevention, or even of a genuine intention to obtain success.

With regard to Major James's paper at the congress, the

criticisms of the five administrative medical officers mentioned above can, I think, be put in the form of the following series of questions: 1. Is it not true that, owing to exceptional rains, Mian Mir was flooded for weeks last August, and that an epidemic of malaria was raging in the surrounding country? 2. Why exactly did Major James visit the station, after long absence, a few weeks after the floods, at the precise moment when the mosquitoes and the malaria were sure to be exceptionally prevalent in spite of the admittedly partial measures which had been taken against them? 3. Why, in his paper, did he omit to make any reference either to the floods or to the epidemic? 4. Why did he call the station an "arid desert" when it contains many wells and even irrigated gardens? 5. Why did he say that it had been reduced to the "verge of bankruptcy" by the anti-malarial measures, when these had really formed only a small part of the local expenditure? 6. Why in his statistics did he take only a group of years which show, apparently, the worst results? 7. Why did he vitiate them still further by including the statistics of Fort Lahore, which was the unhealthiest spot in the neighbourhood and was not included in the anti-malarial operations? 8. Why did he not state how many of the children found infected by him had only recently come to the station? 9. How does he explain finding infection in the enormous proportion of seven out of ten men of the Gloucester Regiment, taken "more or less at random," when, as Colonel Forman has ascertained, the regiment did not really suffer much? 10. How does he explain the discrepancy between his statements and those of Colonel Rowan, the principal medical officer? 11. Why did he say that the success of mosquito-destruction operations elsewhere (Ismailia) had been "reported on evidence that will not bear criticism and is often ridiculous," without explaining his reasons and without inspecting the place (which is *en route* to India)? 12. Why has he not replied before to these criticisms?

The bulk of the letter by Major James and Captain Christophers consists merely of an abstract discussion, possessing neither depth nor novelty, of the old, old theme of quinine *versus* mosquito reduction. After all, the world judges by results. While, on the one hand, brilliant practical successes have been won by those who have loyally followed the new ideas; on the other hand, Major James and Captain Christophers have nothing to show but a series of philosophical reflexions—and a failure. Yet no men during the last ten years have had greater opportunities.

The position has been well put by Colonel Rowan, who writes: "Should Major James have any suggestions to offer (regarding Mian Mir) that are likely to be more effective than the anti-malaria measures already adopted, they will be most welcome, but it appears to me that he incurs a grave responsibility by attempting to discredit methods which have already, both in Mian Mir and elsewhere, been followed by a large measure of success."² I have not heard that Major James has made the required suggestions.

In the meantime, I keep the authors to their statements about Mian Mir. That is the centre of their position—though I perceive they are already endeavouring to make a strategic movement away from it. The Mian Mir bogey has been used long enough to terrorise malaria prevention throughout India—and elsewhere. It must now verify itself or vanish. Frankly, I do not think that Major James can substantiate his statements made at the Bombay Medical Congress. At any rate, until he attempts to do so, I propose to postpone the trifling task of discussing his more general, but, I think, equally fallacious, conclusions.

I am, Sir, yours faithfully,

University of Liverpool, June 23rd, 1909.

RONALD ROSS.

PS.—Those who wish to compare theory with practice should read the address by Colonel Gorgas in the Journal of the American Medical Association for June 19th, 1909.

To the Editor of THE LANCET.

SIR,—I was present at the Bombay Medical Congress in February, and heard the attack by Major James and Captain Christophers on Professor Ross's methods of malarial prophylaxis as illustrated by the "failure" in Mian Mir, together with the subsequent discussion. That I was startled goes without saying, for my experience—no small

one—had convinced me that Ross was right and that the problem which confronted us was not what we had to do and how to do it, but how we could succeed in awakening apathetic authority and induce it to provide the wherewithal to combat a disease which, from both the humanitarian and economic points of view, was of enormous importance. In days gone by I knew Mian Mir and I had watched with considerable interest the progress of the anti-malarial measures in that insalubrious cantonment from their inception down to the present time. Immediately after hearing Major James's paper I made careful inquiry from competent men on the spot, amongst them Lieutenant-Colonel H. D. Rowan, R.A.M.C., who for three and a half years (including 1908) was senior medical officer at Mian Mir; and I also made a comparative analysis of the incidence of malaria in other stations (e.g., Bombay) for the year 1908, which was an exceptionally bad year for malaria all over India, so much so, indeed, that at Cawnpore and elsewhere the railway companies were well-nigh crippled for want of *personnel*. I have been travelling much since then, both by land and sea, and it is only now that I have seen the further attack on Ross in your issue of April 3rd. Hence this belated communication. Your special correspondent in that article says: "In this opinion (i.e., the failure of Ross's methods in Mian Mir) Major James feels sure that he will be supported by medical officers at Mian Mir who were able to observe the terrible havoc, &c." Does he? Then all I can say is, that Major James in this, as in other respects, has jumped at an unwarrantable conclusion. Far from this being so, these medical officers without exception dissent emphatically, and no one more so than Lieutenant-Colonel Rowan, an officer of wide experience and one who knows far more about Mian Mir than Major James or any other man, and who, moreover, has made a special study of malarial incidence in that cantonment.¹ In a communication before me Rowan says:—

I have no hesitation in saying that James's statistics are unfairly adverse to Mian Mir and cannot be relied upon, and this for the following reasons: 1. They are admittedly very different from the returns rendered by the hospital. 2. They cover only a period of five years. 3. They include Fort Lahore. 4. Figures for 1908 are for 11 months only. 5. In 1908 the epidemic of malaria throughout the Punjab was of exceptional severity.

Permit me very briefly to comment on these points. If Major James relies upon statistics at all—and he does—surely it would be more in accord with the fitness of things if he adopted the carefully compiled official figures and not some hypothetical data evolved from his own inner consciousness, and based on a few scattered personal observations extending over a few days during a flying visit to Mian Mir? The anti-malarial measures were begun in 1904–05, and "it is, therefore, ludicrously unfair to attempt to demonstrate the effect of these measures by comparing the figures of 1908 with those of 1904 and the intervening years" (Rowan). Obviously the comparison should have been made with the quinquennium, 1899–03.

Fort Lahore is one of the most pestilential spots in India; it is some four miles from Mian Mir, and in 1908, for the first time, its vital statistics were, by order, included in those of Mian Mir. The figures for the two places 1903–07, average admissions per 1000 malaria and simple continued fever, were: Mian Mir, 544; Fort Lahore, 891. Yet Major James asserts that the inclusion of the latter favours the former. He strikes an average for December, 1908, on the previous 11 months, ignoring the fact that this month is one of the healthiest in the year. Clearly this is fallacious. If malaria was epidemic everywhere surely it is unreasonable to expect that Mian Mir should wholly escape?

As I have said, the anti-malarial measures were begun actively in 1904, and I may add that they were admittedly limited and partial, nor did the Government give a rupee towards them; every penny had to be found from the funds of a semi-bankrupt cantonment. Yet here are the results, the figures being admission ratios per 1000 of strength British troops: 1878–82, 1960; 1883–87, 1524; 1888–92, 1088; 1893–97, 981; 1898–1902, 925; 1903, 1030; 1904, 587; 1905, 425; 1906, 490; 1907, 177; 1908, 537, malaria only (includes Fort Lahore).

Is further comment necessary? Hardly. I personally have not the smallest hesitation in saying that if the Government will give the cantonment of Mian Mir £1000 per annum

¹ R.A.M.C. Journal, September, 1908.

² Allahabad Pioneer, March 13th, 1909.

¹ Vide his article in R.A.M.C. Journal, September, 1908.

malaria can be practically abolished from it. Major James and his coadjutors have, in my opinion, been guilty of a very grave scientific crime in thus unwarrantably attacking proven prophylactic measures. In India our whole difficulty has been to impress upon a lay bureaucracy the necessity of giving effect to the great discovery of Ross, so far with but very indifferent success. Opposition from without we are accustomed to, but when it comes from within our own ranks, the mischief accruing may not only undo the work already accomplished but may take years to remedy. Dealing as we are with by far the most important factor in the development of tropical and subtropical countries, it seems to me that with existing evidence and experience available, Major James and Captain Christophers should have been very sure of their facts before venturing to enunciate their conclusions. Their whole attack is unwarranted and unwarrantable; their "facts" are fallacies; their data false. They have, in my opinion, done incalculable harm; for it is an easy matter to make an assertion but a difficult thing to refute it. Already the effect is apparent in the lay press and elsewhere, and it is certain that with the prevalent procrastination of the East, the awakening which we had fondly hoped was at hand, will now be indefinitely postponed. I for one should not care to bear the responsibility they have so lightly assumed.

I am, Sir, yours faithfully,

R. H. FORMAN,

Colonel, R.A.M.C.; P.M.O. Bombay Brigade.

At Sea, June 8th, 1909.

PURULENT CONJUNCTIVITIS IN INFANCY.

To the Editor of THE LANCET.

SIR,—Those who continue to call the conjunctival inflammation of infancy by the antiquated, inaccurate, meaningless term "ophthalmia neonatorum" may be reminded of a wise saying of Lord Bacon's—namely, "*It is the nature of man, to the extreme prejudice of knowledge, to delight in the spacious liberties of generalities.*" In no department of medicine does a more illogical conservatism prevail, so far as terminology is concerned, than in that of ophthalmic surgery. "Yes, ophthalmia neonatorum is wrong," is the argument, "but then, you know, it has been sanctified by use." Again, much is made of the statement that the term is useful as a generic one, implying by this that an infantile conjunctivitis which can be caused by more than one micro-organism had better be described as, not what it is, a conjunctivitis, but as an ophthalmia, which it is not. Thus, to the extreme prejudice of knowledge, a spacious generality is indulged in, to which, as I have frequently observed, much of the confusion in, and the deplorable results of, the treatment of the disease may be directly ascribed. But there is another illogical conservatism in addition to that above mentioned which is undeniably more serious in this connexion. I allude to the far prevailing belief that only strong solutions of silver nitrate are of any use in the prevention and treatment of purulent conjunctivitis due to gonococcal infection in the adult and in infancy. A recent committee upon this subject in its final report has laid stress upon the use of a 1 per cent. solution of the drug. On paper this may appear to be a solution of very moderate strength. But in actual fact it consists of five grains of the silver nitrate in solution, whereas, for 25 years at least I have found that the strongest solution which is necessary is one which contains no more than one grain of the drug to the ounce of water. A great point has been made of the fact that the mothers of Liverpool, possessing babies at the breast, suffering from gonococcal infection of the conjunctiva, can be admitted, with their infected offspring, into a hospital where the conjunctival inflammation can be at once dealt with by skilled treatment. If this step is necessary for the mothers of Liverpool I can only say it is perfectly unnecessary for the mothers of the district of West London, who come with their babies to the West London Hospital. The mothers of the West London district, or those representing them, cure the babies themselves by the instructions given them, which include the treatment which I have prescribed for 25 years, and a solution of silver nitrate of the strength of one grain to the ounce of water. There is no fuss, no difficulty; the cases are brought twice a week for my inspection, and if the corneæ are intact at the time of the first visit, nothing else happens than perfect recovery from the conjunctival inflammation, no matter of what virulence

the infection might be. I have so repeatedly published and taught the lines of treatment by which these results can be attained that it is unnecessary here to allude to them particularly. Meanwhile I am glad to see that my suggestion, published in a letter to THE LANCET at the beginning of the year, that the International Ophthalmological Congress should appoint a sub-committee to consider the standardisation of the treatment of purulent conjunctivitis in infancy, has been adopted. I am, Sir, yours faithfully,

Wimpole-street, W., June 24th, 1909.

PERCY DUNN.

THE USE OF ANTI-DIPHTHERITIC SERUM IN NON-DIPHTHERITIC INFECTIONS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 15th you were good enough to comment editorially (p. 1407) upon a communication (p. 1385) in which I suggested the use of anti-diphtheritic serum in the laryngitis of measles as a matter of routine and without waiting for a bacteriological diagnosis. My point was that the laryngitis occasionally supervening in measles may be diphtheritic in nature, and that therefore such an eventuality should be forestalled by the immediate use of serum. I adhere to that thesis, and as the matter is of some importance in daily practice, may I answer the argument in your editorial note? You maintain that laryngitis is a symptom rather than a complication of measles and only endorsed my plea when that laryngitis was membranous in character. I will only quote one authority to decide between us—namely, Dr. E. W. Goodall in his article on "Measles" in the last edition of Hutchison and Collier's "Index of Treatment" (p. 525). He "strongly recommends that in all cases of laryngitis in measles occurring in localities where diphtheria is at all prevalent [and where, may I ask, is it not?], a subcutaneous injection of 4000 units of antitoxin be given." The really important question upon which my critic did not touch seems to me to be whether antitoxin is harmless should the case prove one of other than diphtheritic infection. It is years now that serum has been recommended in conditions very different from the disease for which it was first intended. Thus, it has been used in cerebro-spinal meningitis, in anæmia as a stimulant and tonic, in tetanus, in menorrhagia, and in hæmophilia. Recently in your columns¹ Mr. Frank Argles refers to its value in "cases of quinsy or bad scarlet fever throats."

Now, Sir, my only reason for recommending the serum was on the chance of the infection proving diphtheritic, and the belief that the risk of delay was greater than the risk of an unnecessary injection of antitoxin would alone, in my opinion, justify its use. I do not believe the indiscriminate use of antitoxin to be free from danger, and cannot give entire credence to those statisticians who compile hundreds of thousands of cases with no untoward consequences other than slight discomfort, slight urticaria, and slight arthritis. I have myself seen an injection of fresh antitoxin followed, in an adult, in less than 20 minutes, by intense dyspnoea, collapse, and complete unconsciousness, with, as the pulse returned, the expectoration of an enormous quantity of blood-stained froth, and later, by severe arthritis and urticaria. The initial syncopal state lasted not less than two hours, throughout which period death appeared imminent.

In the *Therapeutic Gazette* of March 15th, 1909, Gillette of New York collects 16 cases of death and 10 cases of grave collapse following injections of antitoxin, in most of which some respiratory abnormality—asthma, bronchitis, hay fever—had pre-existed. Fatal cases of injections of horse-serum have also been recorded. Of Gillette's fatal cases only two lived longer than ten minutes after the injection. In only one could anaphylaxy be alleged, an injection having been given ten years before. It is impossible to exaggerate the importance of these facts, and I venture, Sir, to conclude that their interpretation should lead us to extreme care in the use of antitoxin and to limit its employment to cases in which the diphtheritic poison is evident or suspected.

I am, Sir, yours faithfully,

A. A. WARDEN,

Visiting Physician, Hertford British Hospital, Paris.

June 26th, 1909.

¹ THE LANCET, June 5th, p. 1636.