# Union of South Africa.

[From our Pretoria Correspondent.]

### Tuberculosis Research.

The South African Institute for Medical Research, Johannesburg, has undertaken a comprehensive investigation into the causes, mode of spread, and methods of prevention of tuberculosis in the Union. The investigation is being financed in equal shares by the Chamber of Mines, the Department of Public Health, and the Native Deferred Pay Fund Board, and an advisory committee has been appointed on which all the parties concerned are represented. This research is being led by Colonel Lyle Cummins, professor of tuberculosis in the Welsh National School of Medicine, Cardiff, a well known authority on the subject, who is being assisted by Dr. Peter Allan, late medical superintendent of the tuberculosis sanatorium of the Union Health Department at Nelspoort. Professor Cummins is devoting the long vacations during the next three years to this investigation. He arrived in Capetown on July 25th, and proceeded direct by the "Union Express" to Johannesburg, where he was joined by Dr. Allan, who has been seconded from the Health Department for the research.

As regards natives, the scheme involves investigations, not only of the labour centres on the Witwatersrand gold mines and of the collieries and diamond mines, but also in kraals and locations in the native territories. The investigators have now completed a preliminary tour of the native territories of the Transkei and Ciskei, in which they were accompanied by Dr. A. I. Girdwood, chief medical officer of the Witwatersrand Native Labour Association.

### Hookworm in the Gold Mines.

Reference was made in the British Medical Journal of June 11th to the discovery of an unexpected prevalence of ankylostomiasis among Rand native miners recruited from Portuguese East Africa. The investigations which followed have not only confirmed this discovery, but also that the disease has spread to British South African natives and even Europeans employed in the mines. All European miners on the Witwatersrand pass through the Miners' Phthisis Medical Bureau once in six months. This procedure is designed primarily to detect and eliminate early silicosis, but it serves sometimes also to detect other conditions. It was at the bureau that European hookworm cases were discovered at the end of last year, after the sanitation department of the Rand Mines, Limited, had drawn attention to the existence of the disease among mine natives. Thereafter miners coming to the bureau who were observed to be suffering from marked anaemia were advised to consult their private doctors, it being pointed out to them that the condition might be due to ankylostomiasis. Of 66 men so advised, at least 26 were since found to be suffering from hookworm disease.

It now appears to be certain that hookworm is conveyed to the mines almost exclusively by natives from the East Coast (Portuguese East Africa), some 50 per cent. of whom have been found to be infected on arrival. Infection of the underground workings has been traced in all of the mines investigated, and it is clear that most, if not all, of the infected Europeans have contracted the condition from these mines. Seventy-six European cases have been reported from mines known to have soil infection. Except at the Village Deep and City Deep, the infection of the workings seems to have occurred only during the last twelve or eighteen months, and does not appear to be serious. There is no evidence that Europeans can contract the disease anywhere in the Union outside the gold mines in which larvae have been found. Hookworm amongst Europeans must therefore be considered an occupational disease. The Chamber of Mines has now accepted responsibility for the disease amongst Europeans as an occupational disease, and has not only taken steps for its eradication, but is also dealing with affected cases in terms of the Workmen's Compensation Act. The Rand Mutual Assurance Company, Limited, will pay compensation for such period as the workman is medically certified to be incapacitated for work; this will usually be for the four two-day periods in which he is receiving active treatment. No additional charge is being made by the company for this insurance.

In natives ankylostomiasis is not being regarded as an occupational disease, as they arrive at the mines in an infected condition. All newly recruited East Coast natives now receive mass treatment with carbon tetrachloride prior to and during the period of their employment. All natives admitted to hospital for any cause on the Village Deep and City Deep are examined for the presence of hookworm, and all those found infected are treated. Even in untreated cases the worms tend to die out in six to nine months, provided there is no reinfection. This natural termination, and the fact that treatment is simple and efficacious, will make eradication a fairly easy matter; the worm will have to be eliminated from its native carriers and the infection of soil prevented by the adoption of suitable latrines. Destruction of the larvae in the soil by means of antiseptic has not proved successful, but they are destroyed by saturating the soil with common salt solution.

### Control of Carriers of Infectious Disease.

In the *Government Gazette* of August 12th were published regulations with regard to carriers of infectious disease made under the Union Public Health Act. Persons suspected on reasonable grounds of harbouring infection, and consequently being liable to cause the spread of disease, must afford health officers of local authorities or of the Government every facility for obtaining specimens of blood, excreta, discharges, or of other material required for examination and investigation. A suspected carrier may be taken to a hospital or other suitable place for the purpose of examination and detained there as long as required. A carrier must observe all reasonably practicable instructions given him by a local authority or Government health officer in regard to disposal of his excreta and other precautions for preventing the spread of infection. He must notify change of residence or work. He may be required to undergo treatment, to remain under medical surveillance for a specified period, to report at specified times and places, not to handle food or articles used in connexion with food intended for consumption by others. Magistrates and health officers must ensure that these regulations are carried out sympathetically and without more hardship than is unavoidable in the public interest. Penalties are provided for persons found guilty of contravening these regulations, or failing to comply with them or to assist in their enforcement.

### The late Dr. J. M. Mehliss.

The death occurred, on July 30th, in the Johannesburg General Hospital, of Dr. John Maximilian Mehliss, in his fifty-ninth year. Since 1893 until shortly before his death Dr. Mehliss was medical officer to the Lazaretto and the Chronic Sick Home at Rietfontein. These two institutions—the former a Union Government concern administered by the Union Health Department, the latter falling under the Transvaal Provincial Administration—are situated close together, between Pretoria and Johannesburg. The son of an officer of the King's Hanoverian Legion, which corps provided the Eastern Province of the old Cape Colony with so many of its finest settlers, Dr. Mehliss was born in Grahamstown in 1868. His early education he received in Dale College, Kingwilliamstown, where he was a contemporary of the fathers of several of the younger medical practitioners of the Union of to-day. He went to Germany for his medical training, passing the Staats Examen in 1892, and receiving the Munich Doctorate the following year. He then returned to South Africa, and after a short appointment as district surgeon of Krugersdorp, he commenced the appointment at Rietfontein, which he held with conspicuous success. Last February cerebral haemorrhage occurred, and it seemed unlikely that he would be able to resume his duties. But after a surprisingly short time he was about again, doing his daily rounds of the wards, conducting the venereal clinics and doing the minor operations as before. Though his movements were slow

and weak there appeared to be no mental impairment, except for one curious manifestation: he would mistake young practitioners for their fathers, and, somewhat to their embarrassment, discuss with them events that occurred before they were born. His will required a burial at Rietfontein similar to that of his pauper patients of the Chronic Sick Home.

### Retirement of Dr. L. G. Haydon.

Dr. L. G. Haydon, assistant health officer for the Union of South Africa, retired from the Department of Public Health at the beginning of September after twenty-seven years in the service of the State. He qualified in Aberdeen in 1896, took the D.P.H. of the same University in the following year, and shortly afterwards volunteered for plague duty in India. He was soon in charge of seven improvised hospitals in a district where the average daily death rate was 350. As each hospital was always full at night, and all the patients usually dead before dawn, there was little to do in the morning but have the corpses burnt and the hospitals swept out. After plague had diminished in India his roving spirit took him to Australia. He carried with him some plague cultures, and though on arrival in Victoria he gave specimens to the health authorities, he was arrested for importing dangerous material. However, the Victorian Government relented and he was put in charge of a leper station, but soon after we find him in Durban with Buller's forces helping with the wounded from Colenso. At the end of the Anglo-Boer war he entered the Natal public health service, with which he remained until the Union Public Health Act of 1919 established a central health department for the whole Union. During the great war he served in the African campaigns. On September 2nd, the day he retired, he was bidden farewell by the staff of the public health department. Sir Edward Thornton, in making a presentation on behalf of the staff, commented on the valuable services that had been rendered to the country by Dr. Haydon. The latter responded suitably, stressing particularly the splendid team work and loyalty in the department. He leaves shortly for Australia, where he has farming interests.

## Ireland.

### Carnegie Welfare Clinic for Dublin.

In the presence of a large gathering of the medical profession and ladies interested in philanthropic work in the city, the new Carnegie Welfare Clinic, Lord Edward Street, Dublin, was recently opened by Sir Donald MacAlister, Bt., K.C.B., vice-chairman of the Carnegie United Kingdom Trust, in connexion with Civic Week celebrations. General Mulcahy, Minister for Local Government and Public Health, who presided, extended a hearty welcome on behalf of the citizens of Dublin to Sir Donald, who, he said, as President of the Medical Council, had done so much to establish good relations between the medical profession of the Saorstat and of Britain. As vice-chairman of the Carnegie Trust he had given a great personal contribution of service to Dublin in seeing that the grant for that magnificent clinic had been preserved until the building could be erected. They were under a deep debt of gratitude to him for this, and for his presence. Sir Donald MacAlister, in declaring the institute open, said that ten years previously, in October, 1917, the Physical Welfare Committee of the Carnegie Trust resolved to employ part of its funds for the purpose of encouraging the movement to promote better conditions of life for the needy mothers and infants of Great Britain and Ireland. Progress had been initiated and fostered here and there by various voluntary societies and local authorities. Yet, although the objectives of the movement were clearly of national importance, and concerned the well-being of the people everywhere, and though laws had been made empowering local expenditure on schemes for promoting its ideals, but little was being done in the country generally to use these powers or to establish permanent agencies for the welfare of mothers and young children particularly. The policy of the Carnegie Trust in such cases was to apply its funds, not to relieve authorities of their obligations, but by example to show them how they might best fulfil these. The Trust was willing to act as a pioneer in certain selected areas by offering, for instance, the capital cost of a suitable building for a new institution, where lack of capital was proving a hindrance, on condition that the annual maintenance costs of the work in it were guaranteed from local sources. It sought to help those who were ready to help themselves when initial difficulties of site and buildings had been overcome. With this end in view it had decided to offer to each of half a dozen local authorities in England, Scotland, and Ireland the gift of a model maternity centre, designed and equipped on the best and most practical lines, provided that these authorities undertook its upkeep and agreed to work it efficiently for the purpose in view. Many more such centres were, of course, required if the needs of the people were to be adequately met, but the model centres would, if successful, at least afford an example which might move other authorities to emulation and imitation, and so serve to advance the national solution of the problem. The Trust's enterprise, and the hopes it formed, had not failed of fulfilment. The Carnegie model centres in Shoreditch, Birmingham, Liverpool, Motherwell near Glasgow, and at Rhondda in South Wales had been of undoubted value to these places, but, what was more important, they had been copied—perhaps surpassed—in well over three hundred other localities. It could now be said that in Great Britain the movement had at last taken firm root. The immense public utility of the maternal welfare centre had been demonstrated and recognized. A new sense of responsibility for the well-being of the nascent generation had been awakened in the community, and the scope of the national public health service had been widened and made more humane in its treatment of mothers and infants than ever before. The aim of the centre was not treatment of damage already done; that was the function of hospitals and infirmaries. It was the prevention of damage, the conservation of life by the diffusion of knowledge among mothers, the watchful avoidance of danger to the normal, and the healthy development of infants. On behalf of the Trust he thanked Sir Coey Bigger for his aid to the Welfare Committee in realizing its aims and overcoming its difficulties; he had more than once proved a sagacious counsellor and a tactful negotiator. Gratitude was expressed also to Commissioner Dr. Dwyer, Dr. Russell, medical officer of health of the city, and to the architects and builders. Senator Sir Edward Coey Bigger, M.D., moving a vote of thanks to Sir Donald MacAlister, expressed the hope that his valuable address would be an inspiration to all interested in child welfare work. Sir John William Moore, seconding the vote of thanks, said that Sir Donald MacAlister had protected the medical profession from ruin in Ireland. It was by his statesmanship that the authorities on both sides of the channel had been brought to agree that the Medical Acts would not be interfered with, and that the Saorstat should have its own Medical Council and its own *Medical Register*. The vote of thanks was passed with acclamation, and Sir Donald was presented with a silver key as a memento of the occasion.

## Correspondence.

### THE ETIOLOGY OF EPIDEMIC ENCEPHALITIS.

Sir,—Might I be allowed to point out that Dr. Greenfield's criticism in the British Medical Journal of September 24th (p. 535) of some of the work done on the etiology of encephalitis lethargica is hardly in agreement with the facts. He groups the workers in this country with Loewy and Strauss, and Kling, and then states that the results can be completely discounted. This statement is apparently based on the fact that rabbits suffer from a spontaneous form of encephalitis due to the *Encephalitozoon cuniculi*.

The main facts of our experimental work on encephalitis lethargica are that during the height of the first epidemic in England inoculations into monkeys and rabbits gave numerous successful results, and in the case of the latter as high a figure as 70 per cent. was reached, while