

of the skin would be the only symptom noticeable to outsiders. He thought the apathy which went with the disease was the probable cause of the girl's neglect to keep herself clean. A *post-mortem* examination showed well-marked tuberculous disease of the suprarenal bodies, there being no deposit of tubercle in the other organs.

LIMERICK BOARD OF GUARDIANS.

The initial salaries of the dispensary medical officers of the Limerick Union have been fixed at £150 per annum, to be increased after every five years of approved service until a maximum salary of £200 is reached on the completion of twenty years' service; the salaries of the apothecaries to be—workhouse initial salaries £100, to be increased by £12 10s. every five years until the maximum of £150 is reached; city dispensary initial salaries £125, to be increased every five years by £7 10s. until the maximum of £155 is reached.

SPECIAL CORRESPONDENCE.

PARIS.

Académie de Médecine: MM. Vaillard and Dopter on the Serum Treatment of Bacillary Dysentery.—MM. Calmette and Breton on the Danger of Ingestion of Tubercle Bacilli which have been Killed by Heat.—The Quinquennial Census.

At a recent meeting of the Académie de Médecine, MM. L. Vaillard and Dopter made an interesting communication on the results they have obtained from antidysenteric serum which they have prepared at the Pasteur Institute. Two principal forms of dysentery are recognized: (1) that due to the *Amoeba dysenteriae* is a tropical disease, often leading to abscess of the liver; (2) that caused by a special bacillus, never accompanied by abscess of the liver, but very contagious. The researches of Vaillard and Dopter concern this second variety, which besides being very frequent in the tropics, is also epidemic in the summer months in temperate regions. Since 1903 they have been rendering several horses immune at the Pasteur Institute by weekly inoculation of alternate and progressively larger doses of living bacilli, and soluble toxin; the latter is obtained by filtering through porcelain a bouillon culture which has been kept for twenty days at 37° C. The injections are made first subcutaneously and then intravenously. Experiments on rabbits have shown that the serum thus prepared has a preventive action, lasting for eight or ten days, and also a curative action. The serum has been applied in 96 cases of dysentery in man as the sole remedy. The cases were of different intensity, the gravity being estimated by the daily number of stools, the intensity of the painful symptoms (colics, tenesmus), and the symptoms of toxæmia (hiccough, vomiting, subnormal temperature, cramps, weakness, rapid loss of flesh, etc.). With the usual methods of treatment the disease lasts six to twenty days or more, and may become chronic. The authors classify their 96 cases as follows:

	Stools in 24 Hours.	Number of Cases.	Deaths.
1. Ordinary cases ...	15 to 20	50	0
2. Severe cases... ..	30 to 80	18	0
3. Grave cases	80 to 150	24	0
4. Very grave cases ...	150 to 288	4	1

The efficiency of the serum is shown by the following results:—(1) Almost immediate action on all the local and general symptoms: Generally speaking, a few hours after the injection of serum the patients get a true feeling of well-being. The abdominal pains and tenesmus become calmer, and, except in very grave cases, disappear during the first twenty-four hours. The intestinal troubles at the same time are remarkably modified; the stools are no longer sanguinolent, and their number falls rapidly; in forty-eight hours they are no longer glairy, become faecal, and soon there is but one daily motion. The general condition and the symptoms of toxæmia are influenced equally rapidly; the vomiting and hiccough stop, the cold

extremities and subnormal temperature gives way to normal temperature and good pulse; the appetite returns, and the patients demand food. In severe cases the improvement is rarely seen under forty-eight hours, but, once started, is complete in a few days. (2) Rapidity of the cure: With the usual methods of treatment the ordinary cases of dysentery last ten to fifteen days, the grave forms taking twenty to thirty days or longer; convalescence is often long and difficult. In all the patients treated by the serum the disease was cured in two or three days in ordinary cases, in three to four days in severe cases, in four to six in the grave cases. In four patients considered as hopeless, three were cured after eight, eleven, and twenty days respectively; the fourth case died on the thirteenth day. The duration of the disease is thus much reduced, and convalescence is shorter and much easier, the majority of patients being completely cured in eight or ten days. In very grave forms convalescence may be prolonged for a month. Relapses are rare; the authors have seen two cases—one in the third week, the other on the tenth day after the last injection of serum, that is, when its action is exhausted. These relapses are immediately stopped by a single dose of serum. The serum would appear also to act in chronic or lengthy cases, for one case which resisted the usual treatment for five months was radically cured by three injections of serum. (3) Method of using the serum: The serum is given by hypodermic injection, the dose varying with the gravity of the case. In ordinary cases 20 c.cm., in severe forms 30 c.cm., are often, when given at the beginning of the disease, sufficient to give immediate relief. If after twenty-four hours the colic persists and the stools are still too frequent, the injection must be renewed. Sometimes a third injection in smaller dose is useful to hasten the cure. In grave cases 40 to 60 c.cm. must be injected at once, and the same dose repeated the following day; if intestinal troubles still continue the serum must be given daily in decreasing doses till the stools are but few in number. In very grave cases 80 to 100 c.cm. were given in two injections during the day; the injections were given in decreasing doses for six, eight, and seventeen days consecutively in the three cases which recovered. The authors concluded that this serum, which is harmless for man, affords a specific treatment for dysentery of bacillary origin, acting both on the intestinal affection and on the symptoms of intoxication.

MM. Calmette and Breton, of the Pasteur Institute at Lille, in a recent number of the *Presse Médicale*, wrote on the danger of ingestion of tubercle bacilli which have been killed by heat. From experiments on guinea-pigs they conclude: (1) In guinea-pigs already infected with tubercle, either through the digestive organs or by intraperitoneal injection, the repeated ingestion of small quantities of tuberculous bacilli killed by boiling considerably hastens death, in the same way as repeated injections of small doses of tuberculin; (2) in healthy guinea-pigs the repeated ingestion of tubercle bacilli killed by boiling is not inoffensive, and at times produces disorders exactly similar to those observed in healthy animals to which are given at short intervals several small doses of tuberculin. MM. Calmette and Breton think it right, therefore, to call attention to the fact that the ingestion of tuberculous products, even sterilized by heat, may be very dangerous to patients already affected with tubercle, and may not be harmless for those who are free from tuberculous taint. As sterilization by heat does not remove harmful properties from milk, milk from tuberculous cows, even when sterilized, should be forbidden as food for man. Tuberculous children and adults should never be given milk, even sterilized, from suspicious or tuberculous cows. These new facts should decide legislation to make new regulations for the strict inspection of cowhouses when the milk is intended for sale, and for the periodic testing by tuberculin of all the cows.

The quinquennial census in France was taken on Sunday, March 4th. His Majesty the King made his return at the British Embassy. At the last census both Queen Victoria and King Edward VII, then Prince of Wales, were on French territory.

THE late Mr. George Goyer Gilligan of Reading left £100 to the Royal Berkshire Hospital.