

hardly be otherwise than that many of these boys and girls are diseased, physically and morally, and require much education and treatment before they can form fit society for the healthy and good. Dr. Bernardo writes : " On Thursday, 28th March, our First Emigration Party for the current year, consisting of 226 Trained Boys and Lads, sailed from Liverpool in the Peruvian for Montreal, on their way to Canada as their future Home. One hundred and thirty of these, that is more than half the whole number, were actually taken from the streets for admission into the Homes." How long were they in the Homes and what process did they undergo before being shipped to Canada, are important questions for Canadians to have satisfactorily answered.

MILK SCARLATINA is a subject which is receiving a good deal of attention. At the last meeting of the Glasgow Philosophical Society, Dr. Carmichael communicated the results of experiments carried on by him in connection with the outbreak of Scarlet fever at Garnethill, Glasgow, last year. (*Brit. Med. J.*, Apr. 13). This epidemic was clearly traced to the milk of a certain farm, where were found two cows with ulcers and scabs upon their teats, similar to those described in connection with the Hendon outbreak. Both cows were desquamating freely. A calf fed on the milk of one was seized with a febrile disease, which nearly proved fatal, and which was followed by desquamation of the epidermis and of the hair. From a sample of the milk, Dr. Carmichael obtained a creamy looking mass, which consisted of micrococci, each the 40,000th of an inch in diameter, and similar organisms were found in the blood of the calf. By lime light good photographs of the organisms were obtained.

DR. RUSSELL, medical officer of Glasgow, at the same meeting, remarked that, on the medical side, there had been no hesitation in accepting Klein's case as one of a high degree of probability; but the difficulty was to get veterinary surgeons to look upon this as a matter worthy of consideration. It required some courage to speak in the presence of farmers and dairymaids of scarlatina being propagated from the cow to human beings. If scarlet fever originated in the cow, it originated in one or other of the numerous lesions to which the teats of the cow were subject, and, until it was definitely ascertained which of them was the infectious one,

the farming class should avoid using the milk of all cows suffering with such lesions.

THE British Medical Journal, referring to the auxiliary investigations described in the Annual Report of the Medical Officer of the Local Government Board, says : The most voluminous and important are those in which Dr. Klein continues his account of the researches into the alleged association between a certain form of cow-disease and scarlatina. It will be generally admitted that by the evidence here brought forward he has powerfully supported the view which he enunciated in previous reports. He describes six experiments on cows which had calved three or four weeks previously. In four cases he used subcultures, on solid media, of streptococcus obtained from the blood or pericardial fluid of a calf experimentally infected with human "streptococcus scarlatinae;" in two cases subcultures of the streptococcus derived directly from human scarlet fever. Each animal was inoculated by subcutaneous injection at the root of the ear. In all the six cases the animals developed ulcers on the teats; several of the animals had considerable fever and constitutional disturbance.

DR. KLEIN believes these ulcers to be among the very earliest evidence of disease in the animal. They occurred indifferently, whether the cow was milked by hand or was suckling her calf. The teat-sores showed themselves after an incubation period of from four to nine days from the inoculation; and subsequently a more general affection of the skin was found, accompanied by more or less febrile disturbance, and sometimes by pulmonary symptoms. In two of the experiments, the streptococcus were recovered from the milk; in one case the milk was drawn with antiseptic precautions during life, in the other it was obtained by incision after death from the deeper parts of the udder.

DR. BUCHANAN, in his comments on the reports, lays stress on the fact that the sores on the teats appeared to be with difficulty, if at all transmissible by direct inoculation from the infected animal to man. "This circumstance," he writes "was hardly perhaps to be anticipated, seeing how readily other sore-teat diseases are so communicable, and how readily cow-scarlatina in the consumers of milk from infected cows."