

the present time against the plea of "leaky filters" as being an explanation for the existence of the filterable state of bacteria, is to be found in the oft repeated cultivation of homologous bacteria from various kinds of bacteriophage. Bacteriophage has been a subject of investigation in innumerable workshops. Two facts are quite universally agreed upon. First, that phage in an active state is filterable through the finest stone filters. Second, attempts to cultivate homologous bacteria from phage filtrates have been almost axiomatically unsuccessful. It is, however, a comparatively simple matter to obtain growth of the homologous "phaged" microbe in the filterable state in K medium. From this growth in K medium, direct cultivation at the proper time upon agar will yield colonies of re-phagable organisms.

THE LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

ACCORDING to the regular London correspondent of the *Journal* of the American Medical Association, the London School of Tropical Medicine, founded in 1899, has undergone great development in recent years, largely in consequence of the munificent gift of \$10,000,000 from the trustees of the Rockefeller Foundation to enable the University of London to establish a center of postgraduate teaching and research in the science and art of preventive medicine. The idea that preventive medicine should embrace not this country alone but the whole world led to the incorporation of tropical medicine in the scheme. Hence the palatial buildings which were opened in 1929 by the Prince of Wales are called the London School of Hygiene and Tropical Medicine. The school is probably the most complete institution of the kind in the world. The staff is organized in six main divisions: public health, biochemistry, bacteriology, medical zoology, epidemiology and vital statistics, tropical medicine. The students form three main groups. A number varying between 70 and 100 come for a course of six months in tropical medicine and hygiene. Most of these are already in or desire to enter a public medical service in the British Empire or foreign countries. In a paper read before the Royal Society of Arts, Major Greenwood, F.R.S., professor of epidemiology and vital statistics, states that the course of instruction, partly clinical, partly laboratory training, makes considerable demands on their energy because much ground has to be covered in the time. The next largest group consists of students seeking to enter public health service and intending to sit for the diploma examination in public health of the University of London. This course is longer and takes a whole year, and it is possible to present the different aspects of a problem of disease more completely—the chemical, bacteriologic, parasitologic, epidemiologic and administrative sides one

after another. Thus a sound knowledge of, say, the prevention of plague is obtained from various specialists. The third group consists of students specializing in one branch, such as bacteriology or epidemiology. It is said to include some of the best students, many of whom are foreigners. The division of epidemiology has already had students from thirteen countries.

THE RETURN OF "THE DISCOVERY"

THE London *Times* reports that *The Discovery*, Captain Scott's old ship, returned to London on August 1 and berthed at the East India Docks after two years in the Antarctic. Sir Douglas Mawson, the leader of the expedition, was not on board, having left the ship in Australia.

Captain K. N. Mackenzie, who is a native of Oban, said that a fine film of the voyage had been made, including many interesting scenes of penguins and icebergs. On arrival at Sir Douglas Mawson's 1910 camp in Cornwath Bay they found a tin of tobacco which had been lying there for over 20 years. It was in perfect condition, and with much amusement they watched Sir Douglas enjoy his first puff of this old mixture. The expedition had a number of dangerous experiences with icebergs in discovering seven hitherto uncharted regions. These new regions are Princess Elizabeth Land, MacRobertson Land, Banskarectic Land, Sabrina Land, Knox Land, Kemp Land and Enderby Land. Altogether, the expedition charted 1,000 miles of new coast line, which they flagged and claimed for Britain. One third of the whole of the Antarctic Continent was circumnavigated and 4,800 miles of Arctic water plied. The expedition collected data which has been left at Adelaide University, from which it is expected that several scientific discoveries of importance will be made. The slump in the whaling industry had given the whales a much-needed chance to survive, and the expedition discovered two new whaling grounds of first-rate importance.

Navigating Officer W. R. Colbeck, speaking of the blizzards experienced in the Antarctic, said that on one occasion the expedition encountered a hurricane off Adelie Land. The engines could not face it, and as a heavy sea was running they were drifting on to the edge of an ice pack. The sides of the vessel were badly battered. Later, the vessel was jammed in an ice pack for several days. The expedition went as far south as 68½ degrees, when they came to land and could go no further. Some special broadcast programs were sent out from Sydney on a short-wave length and were enjoyed very much. The expedition did a great deal of oceanographic work as a result of which 20 tons of specimens were obtained.