

very specialized nature of the work, much of the apparatus is designed and constructed at the laboratory, although full cognizance is taken of the progress of design and manufacture which is continually taking place in the wireless industry. As the various researches are completed the results are published in the form of official reports, papers read before scientific societies, or articles in the technical press, and they are found to be of great value to all those engaged in the wireless profession, as well as to those who have found wireless an interesting hobby.

#### EXPEDITION TO CENTRAL AMERICA FOR MEDICAL RESEARCH

MEMBERS of the research expedition to the tropics of Central America, organized by the Johns Hopkins School of Hygiene and Public Health and conducted under the auspices of the International Health Board of the Rockefeller Foundation, returned on September 15.

Dr. W. W. Cort, professor of helminthology at the Johns Hopkins University, was director of the expedition. Others on the staff were Dr. Maurice C. Hall, chief of the zoological division of the U. S. Bureau of Animal Industry; Drs. N. R. Stoll and Harold Brown, of the Johns Hopkins University; D. L. Augustine, of the Harvard Medical School; W. A. Riley, of the University of Minnesota, and W. C. Sweet, of the Rockefeller Foundation. Besides gathering much information on parasites and parasitic diseases, the expedition brought back about 150 bottles of prevailing parasites, some of them apparently new and of economic and scientific importance.

Dr. Hall made the following statement regarding the results of the expedition:

The trip has furnished a valuable background of tropical conditions as regards factors in parasitic development. In the extent and nature of diseases of livestock caused by parasites in the countries visited, the findings were unexpected and reassuring in many respects. The range cattle of those countries proved to be practically free from gastro-intestinal parasites, and in many cases appeared to be entirely so. While there is an abundance of moisture and warmth in the tropics, things which themselves are favorable to parasites, the seasonal distribution of rain is highly unfavorable to parasite eggs and larvae.

In the countries visited—Panama, Nicaragua, Salvador and Guatemala—there are from two to six months, as a rule, and more in exceptional seasons such as this year, when there is no rain whatever. In the absence of moisture the hot tropical sun has a desiccating effect which is fatal to parasite eggs and larvae and no doubt has a decided sterilizing action on bacteria. Furthermore, the rains themselves are torrential and in the mountainous countries must have a washing effect which serves to

sweep worm eggs and larvae into the many water courses and out of contact with livestock. There is little overstocking on these ranges and consequently there is a lack of concentrated infection.

One important object of the expedition was to determine what tropical diseases are likely to be carried northward by shipments of livestock. The survey has given a satisfactory answer to that question.

Cattle in the countries visited suffer from ticks and tick fever. Tuberculosis appears to be rare among the range cattle; the bacterial diseases of importance were anthrax, blackleg and tetanus. In contrast to the relative freedom of range livestock from parasites, household animals in the countries visited showed fairly extensive infestation. Swine especially suffer from kidney worms which cause considerable loss of meat and lard. Another common swine parasite causes the disease known as swine measles or cysticercosis, due to bladder worms in the meat. These bladder worms are the larval stages of a large and dangerous human tapeworm.

The results of the expedition show that in shipping livestock from Central America to the United States the only diseases of livestock that appear to warrant serious consideration are tick fever, anthrax, blackleg and tetanus, though final conclusions depend on the identification of the parasites collected and also on further studies in Central America. Dr. Hall made his examinations of animal parasites largely at local abattoirs, in collaboration with Dr. Augustine.

#### SELECTION OF A CHEMIST FOR THE UNITED STATES BUREAU OF CHEMISTRY

THE United States Civil Service Commission states that the position of chemist in charge of drug control investigations in the Bureau of Chemistry of the Department of Agriculture is vacant, and that, in view of the importance of the position in the field of pharmaceutical and pharmacological research, and to insure the appointment of a thoroughly qualified man for the work, an unusual method of competition will be followed to fill the vacancy. Instead of the usual form of civil service examination, the qualifications of candidates will be passed upon by a special board of examiners, composed of Dr. W. W. Skinner, assistant chief of the Bureau of Chemistry, Department of Agriculture; Dr. G. W. McCoy, director of the Hygienic Laboratory; Dr. H. A. B. Dunning, of Hynson, Westcott and Dunning, Baltimore, Maryland; Dr. Carson P. Frailey, secretary of the American Drug Manufacturing Association, and Dr. A. S. Ernest, examiner of the United States Civil Service Commission, who will act as chairman of the committee. For the purposes of this examination all