## SCIENTISTS URGE WHITE INDIAN RESERVATION

Interest in the White Indians of the Darien region of Panama was revived by a resolution passed by the governing Council of the American Association for the Advancement of Science at Kansas City. Because of the great anthropological and genetic interest that attaches to these strange people, and to the Tule or San Blas nation of Indians of whom they form a part, the Council invited the attention of the United States government to the advisability of using its good offices with the government of the Republic of Panama to secure for the Indians a permanent reservation made up of their own ancestral lands, where they may be secure from commercial exploitation and from the danger of destructive infusions of low-caste mixed white and negro blood.

Future meeting places of the Association were also announced by the Council. A year hence the scientists will gather in Philadelphia, in 1927 in Nashville, Tenn., and in 1928 in New York. Tentative plans were laid for meetings in Des Moines, Iowa, in 1929, in Cleveland, Ohio in 1930 and in New Orleans in 1931.

## GERMS TOO SMALL TO FILTER CAUSE MANY ANIMAL DISEASES

Elusive, ultramicroscopic forms of life, minute as those which cause small-pox, scarlet fever, sleeping sickness, and other diseases in human beings, are responsible for many of the diseases of animals, which cause an inestimable loss each year to farmers of every country.

Dr. Hubert Bunyea, avian pathologist of the U. S. Department of Agriculture, reported to the Washington branch of the Society of American Bacteriologists on the work that has been done in the control and eradication of these diseases in the United States and other countries. Rabies, foot-and-mouth disease, hog cholera, fowl pest, and bird pox, he said, are outstanding examples.

While the economic losses due to rabies are not as great as some, it is a very prevalent disease. All mammals, including man, are susceptible to it. It exists among the predatory animals of the Northwest, and this adds to its economic as well as its public health aspect.

The disease has been deprived of much of its horror by the discovery of Pasteur that animals and people could be rendered immune by repeated treatment with weakened doses of the virus. But the process is complicated and costly, and efforts to simplify it and make it practical for every day use as a preventive in the case of domestic animals, have not yet been entirely satisfactory, Dr. Bunyea said.

Another germ too small for the microscope to disclose with ordinary light rays, is the one that causes the foot-and-mouth disease and which has recently been made the subject of intensive investigation. This disease infects cloven-footed animals and is very contagious. The U. S. Bureau of Animal Industry has a commission investigating this subject in Europe. The bureau opposes the importation of any foreign viruses to this country, even for scientific study in fear of their spreading and prefers to study them where the diseases occur.

Hog cholera, which once nearly annihilated the swing industry in many parts of the country, is also due to a virus of the extremely small kind. The actual organism is still unknown, although a serum with protective power has been in use for years. The organism not only passes through filters that retain ordinary

bacteria, but it cannot be grown in test tubes in the laboratory.

Fowl pest is also caused by ultranicroscopic bacteria. It existed in the United States last year, and is believed to have been spread from a sample of virus brought into the United States for study at one of the large eastern universities. Prompt measures eradicated the disease.

The organisms of Fowl pest are very resistant under certain conditions and can survive for at least seven months in artificially stored blood. Fowls are more susceptible to their own special diseases than manmals and man are to theirs. Theirsemt-wild nature prevents their easy isolation and individual treatment, while their habit of flocking allows infection to spread rapidly.

The ultramicroscope, which uses X-rays instead of ordinary light, and can see what the ordinary microscope fails to reveal, has already been employed in the study of the minute forms of life that cause various animals diseases. So far the results have been only partially successful but research of this sort has just begun, and the possibilities are unlimited, Dr. Bunyea said.

## RADIATOR ALCOHOL DISSOLVES AUTOMOBILE LACQUER

Alcohol is a splendid lacquer solvent. Many automobile owners whose cars are finished with fine lacquers are discovering this to their sorrow. With enamels and varnishes these owners have not taken care to keep the alcohol for their anti-freeze radiator solution off the car finish. The spotting which resulted was negligible with these older forms of car finish, but with the new lacquers the results are disastrous.

Auto owners are warned by dealers selling automobiles that are finished with lacquer against allowing any form of alcohol to splash on these surfaces. In fact they must be careful that the vapor from a boiling radiator does not drift back over the engine hood. Because of these facts several builders of highclass automobiles are now recommending against any form of alcohol for antifreeze use. Instead they recommend using glycerine or ethylene glycol solutions.

Anti-freeze solutions made from glycerine or ethylene glycol have other advantages too. From the standpoint of the automobile owner perhaps the most important is the fact that if they are accidentally spilled or boil over ento the lacquered surface no serious harm is done. The research laboratory of the largest manufacturer of moderate and high priced automobiles in the world has made a careful study of this situation, and the subsidiary corporations are issuing corresponding information to their dealers and distributors throughout the country.