



AN OLD STORY

Very ancient Peruvian vase representing the corn god, decorated with four ears of corn.

ful agriculture everywhere: preparation of the soil, destruction of weeds, use of fertilizers, terracing in steep terrains, irrigation in dry areas, development of special varieties and strains of plants through selective breeding. These things take time, and lots of it.

Some speculative souls, fascinated by certain parallels developed independently by American and Old-World cultures, have tried to trace a common origin through the mythical "lost continents" of Atlantis or Mu. For these suggestions Prof. Merrill has scant patience. If there ever had been a mass emigration from some old, high civilization, in a land that now lies beneath the ocean, it would be only reasonable to expect that the migrants would have driven their flocks and herds before them, and would have carried stocks of seed to plant in the Promised Land of their exodus. But what do we find? Native man in America had but one animal of Old-World animals, the dog—exactly what a nomad hunter would be expected to have along with him. He had no Old-World flocks and herds at all, and not a single Old-World crop plant of any significance. There was not one American plant in Europe, Asia or Africa until Columbus and his successors brought them; not one Old-World crop raised in America until European colonists brought the seed in.

The evidence, then, seems overwhelming: agriculture, and the civilizations dependent on it, was developed along somewhat parallel lines in the two hemispheres, but in each independently of the other. And with its array of "orphan plants" in cultivation, Amer-

ica seems to have at least an admissible claim to the honor of having started farming first.

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PUBLIC HEALTH

Russians Trace Tularemia Outbreak to Infected Water

AN EPIDEMIC of rabbit-fever in Siberia has taught scientists that water can carry the dread tularemia infection, Drs. S. I. Karpoff and N. I. Antonoff of the Institute of Epidemiology and Microbiology report (*Journal of Bacteriology*, September).

Engaged in harvesting wheat, a whole community of farm workers took up residence in a field "between the cities of M. and T." As drinking water they used that from a river and from a small brook which emptied into it below the point where the river water was obtained. A few days later a large number of cases of a disease which resembled somewhat the plagues of the Middle Ages broke out among the farmers. In all cases there was swelling of the glands about the mouth and throat, the liver "stood out the thickness of a finger's breadth," and the spleen was swollen and sensitive. The doctors diagnosed the disease as rabbit-fever, but were puzzled about how it could have been spread.

In the United States doctors had discovered the disease to be spread by infected rabbits; in Norway the wild rat was the culprit, while in Russia water

rats were guilty. But in this epidemic only a few rats had been seen, and the doctors knew definitely that the affected people had picked up the disease from something eaten or drunk.

Then another fact became apparent. Those who had drunk unboiled water from the brook became ill, but those who drank similar water from the river were quite healthy. Bacteriological analysis solved the problem. The brook water was loaded with tularemia germs, that from the river was clean.

An epidemic of tularemia, acquired from water rats, broke out in the Ural region of Russia in 1928 when a commercial demand for the water rat pelts turned the entire population to the job of catching and skinning them. A lot of infected rats may have been in the brook that was found infected with tularemia germs, although scientific investigators, one month later, did not find any rats in the brook.

Avoiding the newly discovered danger of acquiring tularemia from water is simple enough: Only water that is bacteriologically clean must be used for drinking.

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MEDICINE

Whooping Cough Vaccine Must be Given in Large Doses

THE SECRET of successful vaccination against whooping cough may lie in the amount of vaccine given to each child, it appears from results obtained at the experimental whooping cough clinic being conducted by WPA experts under supervision of the New York City Health Department.

The value of whooping cough vaccination has not yet been settled to

the satisfaction of physicians generally.

At the clinic a study is being made of the value of the various whooping cough vaccines used in the prevention of this disease. Within recent years whooping cough has been responsible for more deaths than any other infectious disease of childhood.

Seven different vaccines are used in the clinic upon groups of children