

DISCOVERIES MAY BE OF HIGH AVAIL IN DISEASE BATTLE

By EVERETT TIPTON

Pasadena, Calif., Dec. 3.—(AP)

—The combined efforts of two scientists have made it possible for the first time to see with a new and powerful microscope bacteria which cause some 60 communicable diseases.

Their work is hailed as promising "to lay the basis for revolutionary discoveries in bacteriology."

One of the men, Royal Raymond Rife, left college 14 years ago with a desire to experiment and invent. In order to find time for his experiments he obtained work as a chauffeur and fitted out a laboratory on the second floor of a garage.

"Medium K"

The other scientist, Dr. Arthur Isaac Kendall, director of medical research at Northwestern university, discovered what he term "medium K," a substance in which it was possible to cultivate germs as they develop in the human body.

In his effort to filter and isolate certain germs, notably typhoid, he found they at first appeared in "rod" shape. On further filtration they disappeared. He believed they assumed a smaller form but no microscope available was powerful enough to confirm his belief.

Dr. Milbank Johnson, prominent physician and civic leader of Pasadena, and a friend of Dr. Kendall, knew of his experiments and learned Dr. Rife had perfected a microscope which magnified from 5,000 to 17,000 diameters. The greatest enlargement giving good detail under other available microscopes was about 1,500 diameters.

Dr. Kendall and Dr. Rife were brought together at Dr. Johnson's home here. In experiments performed by them Dr. Kendall was able to follow the typhoid bacteria through numerous filtrations with the new microscope, and confirmed his belief that they changed form in the filterable state.

Numbers of contagious diseases are believed to be caused by "filterable" bacteria which have not yet been cultivated and had not been seen under microscopes heretofore available, Dr. Kendall said. These diseases include infantile paralysis, measles, smallpox, influenza and common colds. They have been produced experimentally in animals with infected material but the microbes themselves have been invisible.

Dr. Kendall said he hoped the Rife microscope would open the door to the discovery and complete study of the filterable or hitherto invisible bacteria.