San Diegan's Super-Microscope Gives First View Of Filtered Bacteria

Instrument Praised As New Aid To Science

PASADENA, Dec. 4. — Using the new "super-microscope" invented by Dr. Royal Raymond Rife of San Diego, Dr. Arthur Isaac Kendall of Northwestern University Medical School has seen for the first time the exceedingly minute moving bodies that apparently carry the life of bacteria when these are induced to "dissolve" into a form that will pass through the pores of the finest porcelain filter and still remain alive.

The work was done at the Pasadena hospital, and will be reported in the official publication of the California Medical Association, California and Western Medicine.

Bacillus Used

The material used by Dr. Kendall was a culture of the typhoid bacillus, ordinarily a fairly large germ, easily visible under the higher-powered lenses of a compound microscope. By feeding it on his recently-evolved "K medium," which apparently has the power of causing all visible bacteria to pass over into an invisible, filterable phase, Dr. Kendall induced the bacilli to go through this change. Under the highest power of the ordinary microscope, he could see nothing moving in the fluid, except a swarm of rather active little granules that could be seen only as tiny motile points.

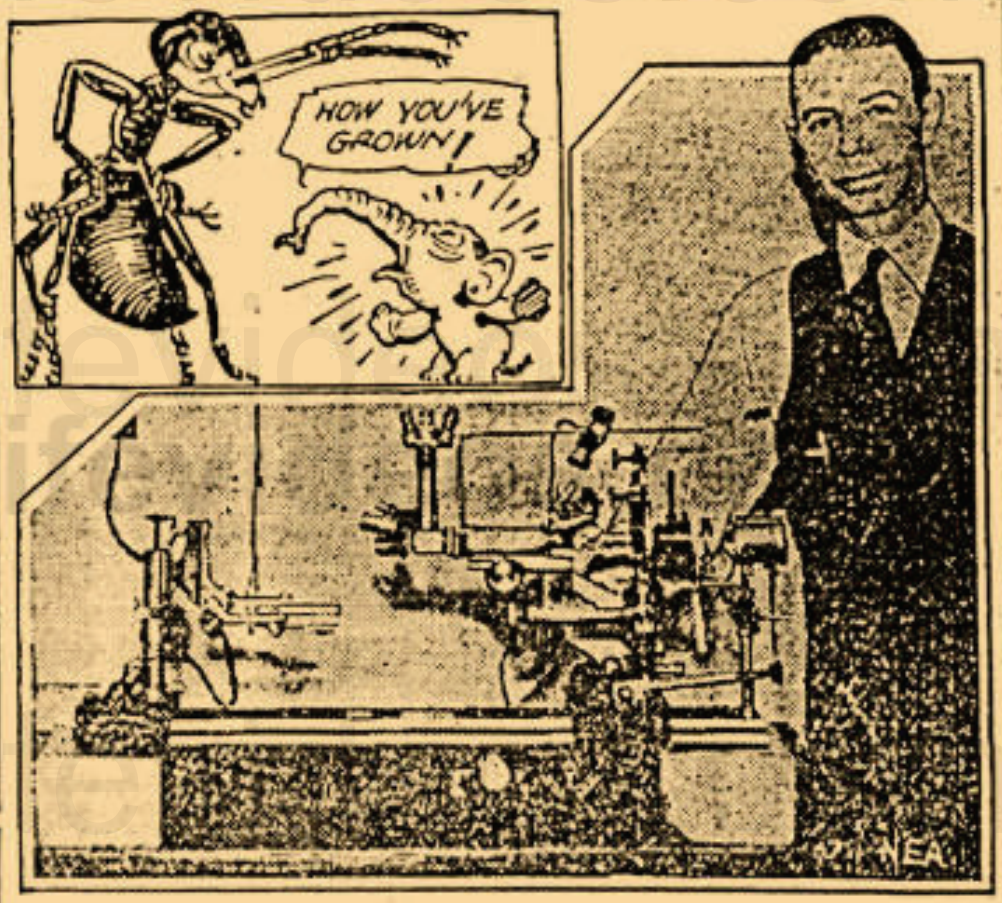
Examination with the Rife microscope, however, these points became plainly visible as small, oval, actively moving bodies, turquoise blue in color. These appeared in all the cultures, and could be transferred from one culture to another through the fine-pored filters; so Dr. Kendall considers them to be the actual filterable forms of the typhoid bacillus.

Microscope Praised

This visual demonstration of the hitherto invisible, living and moving particles of the filterable phase of a bacillus, is hailed editorially by California and western medicine. Of Dr. Rife's microscope, the editorial says:

"Whereas, our present microscopes magnify from one to two thousand diameters, in this new microscope we have an instrument for which a magnification as high as 17,000 diameters is claimed.

"This is certainly a long stride from the initial efforts of Van Leuvenhock, whose simple instrument may be said to have laid the foundation for the science of bacteriology which later came into being; and by means of which science much of the world's progress in man's conquest of the infective and other diseases has been made possible."



A new superpower microscope which magnifies objects to 5000 times their normal size has been perfected here by Dr. Royal Raymond Rife, shown above with his invention. Six quartz lenses are used in the powerful new instrument, which magnifies on a scale which would make an ant appear larger than an elephant. Another unusual thing about the microscope is that objects seen through it are shown in true perspective, rather than in reverse focus, as is the case with previous microscopes.