

mosaic-infested tobacco plants. Then the dead plants were put under heavy pressure, squeezing out their juice.

Samples of this juice, filtered free of large particles, caused leaf mosaic when injected into healthy plants. The virus was thus evidently in the juice.

The next step was to separate the juice into its various constituents, and find which of these could cause the disease and which could not. This Dr. Vinson did by adding acetone to the cold juice. This brought down a solid precipitate. The liquid left after precipitation could no longer cause the disease, but a solution of the precipitate could do so. The virus was thus evidently in the precipitate.

Concentrated by Steps

Dr. Vinson's further work has been in the greater refinement and purification of the precipitate, each step obtaining a more concentrated form of the virus. He states that analyses indicate its chemical makeup to be that of a protein or of some compound very similar to proteins. It is regarded as probable, however, that not the whole protein molecule is the real mischief-maker, but some relatively simple group of atoms that is attached to it or a part of it. Such an atom-group could conceivably attach itself to other protein molecules in healthy protoplasm, thus providing a mechanism of infection and propagation.

Science News Letter, September 24, 1932

SEISMOLOGY

Earthquakes at Opposite Ends of Pacific Ocean

THE ALASKAN coast in the vicinity of the city of Cordova was shaken early Wednesday morning, Sept. 14, by an earthquake of moderate severity. This is indicated by records of seismological stations transmitted through Science Service, and interpreted by the Jesuit Seismological Association headquarters in St. Louis. The time of origin was 3:42 a. m., eastern standard time, and the epicenter was in latitude 60.8 degrees north, longitude 145.6 degrees west.

The bottom of the South Pacific Ocean, at or near Hawkes Bay, New Zealand, received a jolt from an earthquake on the morning of Thursday, Sept. 15. This was also announced by the Jesuit Seismological Association, after examination of data transmitted through Science Service.

Science News Letter, September 24, 1932

Something YOU HAVE MISSED

HAVE FAMOUS scientists ever told you about fascinating accomplishments in the particular fields in which they work? Wouldn't you like to sit in your home and, at the hour of your choice, listen to Dr. Millikan discuss the rise of physics, or Dr. Welch tell the story of the conquest of the tubercle bacillus? And if a point were not clear to you, wouldn't it be splendid to have that part of the talk repeated?

All these wishes may be yours—made possible by the cooperation of seven great scientists with Science Service in a pioneering venture. On subjects which fired their imaginations, each scientist made a five minute talk recorded on the new process Durium phonograph records.

In addition to the talks by Dr. Robert A. Millikan, Nobel prize winner and head of the California Institute of Technology, and Dr. William H. Welch of Johns Hopkins University, "Dean of American Medicine,"—Dr. John C. Merriam, authority on fossil animals of western America, president of the Carnegie Institution of Washington, speaks on "*The Record of the Rocks*;" Dr. Edwin G. Conklin, Princeton University biologist, one of the world's greatest authorities on life processes, on "*The Mystery of Life*;" Dr. Karl T. Compton, eminent physicist, president of the Massachusetts Institute of Technology, on "*Science and Engineering*;" Dr. Leo H. Baekeland, industrial chemist and one of America's industrial pioneers, inventor of bakelite, velox, etc., on "*Chemistry and Civilization*;" and Dr. William M. Mann, director of the National Zoological Park of the Smithsonian Institution, leading authority on animal life, on "*Our Animal Friends*."

Durium Products, Inc., made a price on a set of these seven records low enough to be attractive to purchasers. We had portraits of the scientists reproduced in photogravure process, each on a sheet of beautiful white gravure paper, size 8½"x9". On the reverse side of each picture we printed a brief biography of the scientist, together with his complete speech as recorded on the record.

Then we packed pictures and records in a compact mailing carton and found that they could be sold for \$3, postpaid. Seven recordings of seven great scientists with seven photogravure pictures, \$3. We invite your order—send \$3 to Science Service, Inc., Washington, D. C., and ask for a set of "GREAT SCIENTIST" RECORDS.

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