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The present investigation on the conductance of sodium iodide and ammonium iodide in isoamyl alcohol and of sodium iodide in propyl alcohol was undertaken for two purposes: primarily to determine whether in these solvents, somewhat similar in nature to water, salts conform to the mass-action law at very small concentrations; and secondarily, to test further the applicability of Kraus' empirical equation throughout the fairly wide range of concentration employed in the work.

EDWIN BIDWELL WILSON MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SPECIAL ARTICLES

A NEW MITE FROM THE HAWAIIAN ISLANDS

RECENTLY, while visiting the Hawaiian Islands, my attention was called to a Chinese Litchi (Litchi chinensis Sonn.), growing on the grounds of the United States Experiment Station at Honolulu, which was very seriously infested by an apparently new species of mite. The injury caused by this mite is of the familiar erinose type, being produced on the lower side of the leaf. In many instances practically the entire lower surface of a leaf was covered with a light brown erineum, but more often distinct patches of variable size were produced. Badly attacked leaves assumed the general characteristics of peach leaves infected by the leaf-curl fungus (Exoascus deformans).

So far as could be learned, the infestation seemed to have been more or less sudden; at least, none was noticed until the injury had become very marked. The tree is considered very valuable and the infestation was so serious as to greatly endanger its life.

It was readily determined that the mite belonged to the genus *Eriophyes*. Specimens of infested leaves were referred to Dr. Nathan Banks through Dr. L. O. Howard, chief of the U. S. Bureau of Entomology. Dr. Banks indicates that the mite is a new species of *Eriophyes*. He also states that, so far as he can find, no mites have ever been recorded from the Litchi, and, further, that very few mites have been recorded from China. There

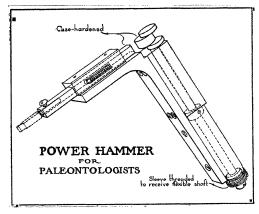
is, therefore, a possibility that the Litchi, although imported from China, later became infested by a mite of Hawaiian origin.

P. J. O'GARA, Chief in Charge

DEPARTMENT OF AGRICULTURAL INVESTIGATIONS, AMERICAN SMELTING AND REFINING COMPANY, SALT LAKE CITY, UTAH, March 16, 1916

A POWER CHISEL FOR PALEONTOLOGIC LABORATORIES

The extremely slow, laborious and difficult task of separating fossils from the enclosing matrix, in the old manner, led W. W. Kelley, a senior student of marked mechanical ingenuity, to devise a power chisel, which has been installed in the geologic laboratories of Washington University. Thus far the device has proved so satisfactory to the members of the department that it is thought best to pass the information along to other toilers in the profession.



The chisel proper is extremely simple, consisting of an L-shaped frame in one arm of which is a shaft bearing a balanced eccentric head and, at right angles, in the other, a square plunger holding the chisel point. One blow during each revolution (1,800 a minute) is dealt by the protruding part of the eccentric striking the head of the plunger. A spring holds the plunger away from the eccentric when not in use. The eccentric shaft of the chisel is connected directly to the armature shaft of a one eighth horse-power motor by a