until the reaction was completed. The most decided deflection of the instrument occurred in those cases where the reagent was permitted to act more vigorously about *one* electrode than the other.

To test as to the possibility of the phenomenon being due to a difference in concentration at the electrodes, the cell was nearly filled with water and a saturated solution of NaCl was introduced into the water about *one* of the electrodes. While a very slight deflection of the needle was manifest, it was not in any case comparable with the result mentioned above, being not greater than one scale division.

Another possibility is, of course, a thermal effect. To test this the cell was again filled with water and concentrated H_2SO_4 was introduced about *one* of the electrodes. A slight deflection was noted—in magnitude about the same as in the last-mentioned case, one scale division.

In addition to the above evidence against a possible thermo effect might be mentioned the fact that the magnitude of the current did not appear to be a function of the heat of reaction.

The above would seem to indicate that the current is not due to a difference in concentrations at the electrodes or to a thermo-effect. However, the data at present at hand would scarcely justify a definite conclusion in this respect.

As to the ultimate cause of the current observed I am not at the present writing prepared to venture an opinion. I make this communication in order that other investigators may test the matter for themselves.

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PEAR-LEAF BLISTER-MITE (ERIOPHYES PIRI NAL.).

As with many of our orchard pests, this is an introduced species, and was undoubtedly brought into the United States in importations of nursery stock. Since its introduction it has, largely through the nursery trade, been widely distributed in the pear-growing sections, where it is usually a familiar pest of this kind of fruit. Within the past few years added interest has been shown towards this species in this state because of its attacks upon apple foliage. In 1902 the attention of this station was directed to its work in two widely separated orchards, but during the past two years it has been very conspicuous in many orchards in various parts of the state where it promises to be an important pest of this fruit.

In the study of the habits and distribution of *Eriophyes piri* in the state of New York, two other European species have been found upon pear and apple leaves. These have been recorded by Dr. Nalepa by the names of *Epitrimerus piri* and *Phyllocoptes schlechtendali*. The latter are distinguished from *Eriophyes piri* in that the abdominal rings on venter are nearly twice as many as on dorsum. *Epitrimerus piri* differs from *P. schlechtendali* by having two longitudinal furrows on dorsum of abdomen. The former is found upon apple and pear leaves, while the latter has so far been detected only on apple foliage.

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QUOTATIONS.

THE METRIC SYSTEM.

THE American people have a world-wide reputation for their ingenuity in devices to save time and labor. It is an anomaly that such a progressive people has failed to see the enormous loss of time and labor incurred in the retention of medieval and confusing weights and measures.

Three fourths of the enormous foreign trade of the United States last year was with countries having the metric system—the system now in use among four hundred and fifty millions of people. Merchants import liquids by the liter, textiles by the meter, foods and drugs by the kilogram, and the innumerable consignments must be calculated into and sold by different measures of volume and of length and by avoirdupois weight and troy weight and apothecaries' weight. In exporting commodities, on the other hand, quantities, weights and measures must be laboriously converted