

Other fresh-water forms such as Oscillaria, Chroococcus, Cosmarium, Closterium, Desmids and Diatoms were not killed in a solution of strychnine sulphate containing one gr. in 1,000,000 cc. of water. The movement of the protoplasm even did not stop. I have not yet determined the exact lethal concentration of strychnine sulphate for these forms.

Marine forms of the Cyanophyceae (as Oscillaria and Rivularia); also Diatoms; Chlorophyceae, as Cladophora and Enteromorpha; Brown Algae, as Ectocarpus; and Red sea weeds, as Polysiphonia and others were not killed in a solution of strychnine sulphate having one part in 100,000 of water. Nor was the movement of the protoplasm stopped by this concentration. A solution of the same having one part in 10,000 also had no effect.

A solution of the same having one part in 1,000 also had no effect. A solution of the same having one part in 250 killed all the plants in twenty-four hours, but the animals which happened to be present were killed in seven hours.

There are only a few animals that can bear transferring from salt to fresh water and vice versa. One of these is the form *Artemia salina*, which may bear such treatment, but in so doing it assumes a somewhat different size and shape. As a rule animals that are transferred from salt to fresh water or vice versa, show at first accelerated movements, but these become rapidly slower and slower, death ensuing in most instances in a few seconds.

All the marine forms experimented with were killed in two hours by a solution of strychnine sulphate containing .5 of a grain in 100 cc. of water.

The above mentioned marine forms were killed in a solution of cocaine containing .5 of a gram in 25 cc. of water, in two and one-fourth hours.

#### A SPECIMEN OF KIRTLAND'S WARBLER, SECURED MAY 13, 1905.

BY D. W. DENNIS AND LOREN C. PETRY.

This specimen was secured May 13, 1905, rather late in the afternoon, probably 5:30 p. m. The place was the northern end of a thicket on the farm of W. W. Kirkpatrick, about five miles east of New Paris, Ohio.

This part of the thicket is composed principally of second growth, with no trees more than 25 or 30 feet in height. The particular place where the specimen was secured is near the edge of the thicket within a few feet of an open field.

At no time while the bird was seen did it go more than from eight to ten feet from the ground. It flitted about the branches of the bushes in the usual manner of warblers, and after going over one, would fly directly to the next, and in a similar manner, go over it.

A feetering motion of the tail was constantly kept up, and was very noticeable. In fact, it was this that first attracted our attention. While moving about the branches, the tail was almost constantly moving up and down. This motion was not a motion of the body, as in the sandpipers, but of the tail alone.

The bird was not shy, and permitted us to approach within 20 or 25 feet, without flying or showing any alarm. At this distance it was easily possible to see the black spots upon the yellow underparts, without a glass.

The specimen taken was a female, and is preserved in the private collection of D. W. Dennis. Not more than 25 specimens of this bird have been seen; its biography is nearly a blank.