

dead of winter. One of the correspondents reporting on material sent for examination, twice reported Rotifer eggs, and the second time as being furnished with hooked spines, and the young rotifer alive within the egg and its mastax in operation; while on December 5th the writer witnessed a *Macrobrotis ovipositing* in its peculiar style, which consists of depositing a dozen or more rather large eggs in the posterior portion of its skin and frantically scrambling out at the front end, and leaving the sack for the use of its young.

The first animals found were of various sizes, last February, and must have occupied the position in which they were discovered for several months at least; and to test their capacity for withstanding great and sudden vicissitudes of weather, both those in the lichen and those soaked out have been dried within six inches of a gas stove, running day and night for two weeks, and a portion of the Rotifers, Eels, Bear and Infusoria resumed life after soaking five to ten minutes. The thermometer indicated that they were withstanding the temperature and desiccation of 75° to 110°. Some of those washed out and put to dry (in a teaspoonful of water) were resoaked and redried four or five times at intervals of twenty-four hours.

Others were subjected to zero temperature for 2½ hours, and after being thawed over a gas jet a few Rotifers and Eels were resurrected in five to 10 minutes, but no Infusoria appeared to have withstood the ordeal.

A very surprising feature of the survey taken is, that of the thousands of minute living forms forced to pass in review, certainly not one in a hundred were of such as are commonly regarded as *terrestrial*. Insects were mostly represented by fragments.

In view of the facts cited the problem, from whence came these myriads? may not be solved, but it does seem clear that the "*germ-and-egg*" transportation theory of their distribution is insufficient.

NOTES ON THE BIOLOGICAL SURVEY OF MILAN POND. BY A. J. BIGNEY.

Milan Pond is situated in the eastern part of Ripley County, one-fourth mile east of the village of Milan. The pond is an artificial one, having been constructed by the old O. & M. Railroad in 1854 as a watering station. It is nearly one-half mile long and one-fourth mile wide. Its greatest depth is twelve feet. It receives water from four small streams, but is drained at a certain height, so that it keeps at the same stage most of the time, except in dry seasons. In the summer of 1895 it would have gone dry had not the railroad company kept it supplied with transported water. This is the only time it has been very low.

However, there was sufficient water in it during that season to prevent much interference with the life forms. Since then the life has been just as abundant.

Since the organization of the Biological Survey of Indiana I have thought it would be profitable to make a study of the plants and animals of this pond in order to discover the forms existing and to note any change in the organisms during a number of years and to record any facts of interest in biological lines.

This paper makes no pretensions of being exhaustive, but is merely intended to be preliminary, for I have not had an opportunity to make a thorough study of the forms of life.

I. *Botany*.—On the banks of the pond are found the ordinary hard-wood trees of Indiana and much shrubbery, such as the elder, willow, hazel and gum. Many of the smaller Phanerogams abound on the margin, but very few occur in the shallow waters. The pond is very rich in algæ, such as *spirogyra*, *zygnema*, *vaucheria*, *oscillaria*, *euglena*, diatoms, desmids and kindred forms. No classified list has yet been made.

II. *Animals*.—Among the vertebrates are to be found several kinds of snakes, wild ducks, several species of snipes, frogs in great abundance, sun-fish, cat-fish and carp. The insects have many representatives. The crustacea are really the most numerous. Crayfish, water-fleas, ostracods, copepods, isopods, and amphipods and rotifers are almost without number. Several species of worms occur, and among the mollusks *physa*, *limnæus* and *planorbis* are quite plentiful. It is the best place for hydra, both brown and green, that I have ever found anywhere. In the dry seasons the pond scums are almost filled with them. In even a small handful of the algæ I have found more than a hundred. Among the porifera is the fresh-water sponge, *spongilla*. This is the only place that it has ever been found in this section of the State. The pond is also rich in protozoans. All the forms will be classified and described during the coming year. The pond is very valuable for laboratory purposes.

SUICIDE OF A CROW. BY STANLEY COULTER.

The paper reported the finding of the body of a crow under the following circumstances: The head of the crow had been passed between the trunk and a strip of the bark of the ordinary shell-bark hickory. Its withdrawal was prevented by the projections of the occipital bone. The protruded tongue, the bulging eyes, and the position of the body showed that death had occurred by strangulation. The location of the tree in an unfrequented portion of the woods, and the fact that the crow was suspended much above the reach of any one furnished sufficient evidence that it was responsible for its own death.