FELKNER ISLAND, WABEE LAKE, KOSCIUSKO COUNTY, IND.

By J. P. Dolan.

Wabee Lake is in Kosciusko County, Ind., about one mile southeast of the town of Milford. A good description of its physical features is given by Prof. Blatchley (State Geological Report for 1900, pages 186-7). Quoting therefrom—"A small and very pretty island occurs in the southeast of the lake." When Profs. Ashley and Blatchley visited the lake, there was so little of the island above the water line that a title was deemed needless. However, the protracted drought of the past season has shrunken the lake away from the island, showing it to be of sufficient dignity to bear a title, temporarily at least.

"Felkner" is the name of its former owner and is associated with the best history and development of Milford and its environment.

The island at the highest point is six feet above the lake level and has a dry area of about one acre. It is destitute of vegetation save for a few tufts of stunted willows, a scraggy sycamore about five feet high, a small patch of Canada thistle numbering about twenty individuals, and five or six strong stalks of evening primrose besides a few species of grasses.

Its general appearance is that of a coarse, undisturbed gravel bed. There is no field of shallow water upon it. Its sides slope abruptly into water twenty-five to forty-five feet deep. One can stand at the water's edge and with an ordinary cane pole fish in deep water. This body of deep water extends almost to the shore on the north and west, while on the south and east it is found to be a few feet shallower. Taking a radius of five hundred feet and the island is surrounded by water forty feet deep. Thus Felkner Island is removed from shore influences.

In 1906 the Sandusky Portland Cement Company which is operating a cement mill at Syracuse, a town six and a half miles east, became the owners of the island. To satisfy themselves of the extent, character, and distribution of the marl and clay said to be found there, a careful survey was made of the lake, the island, and the adjoining marshes. The lake was cross-sectioned at intervals of 100 feet. At these several points

thorough tests were made measuring the depth of water, marl, muck, clay or other minerals that might appear. In making these tests a drill capable of being extended to forty feet was employed.

The general distribution of the marl and other minerals around the shore of the lake and the territory adjoining is reported in the Volume of Geol. Reports for 1900, fully and accurately.

The island, as far as could be determined, is a unit of granular marl. The 40-ft. drill failed to reach the bottom of the deposit at several places. The marl is accounted for by the presence of several strong springs at the west end of the island. One of them, about four inches in diameter, issuing at a point where the water was six inches deep, would push its way up intermittently so that one could see the disturbance at the surface standing a hundred feet away. These springs, doubtless have their origin in the clay and gravel hills near Dewart Lake three miles to the east and bring their burden of calcium carbonate from that rich field. This theory is borne out by the presence of a flowing well at the east end of the lake at an elevation thirty feet above the level of Wabee. It flows strongly through a two-inch pipe and reliable men of the town who tested its force say that it rose twelve feet above the present point of escape through a pipe of smaller diameter. It is known that Dewart Lake has an elevation of fifty-two feet above that of Wabee Lake.

The Mollusca found in the island deposit, below the upper portion thereof, are only a small fraction of the whole. This is all that distinguishes this island from the many other "beautiful" spots dotting the lakes of Northern Indiana, but it is a fine type of the island formed by springs. The Syracuse & Milford Railway transports the marl to the factory, delivering daily from four hundred to five hundred cubic yards. The small steel cars are loaded on the track by the dredging apparatus, an improved clam shell excavator having a 75-foot boom. Felkner Island will be loaded on the cars with the present dredging machine, pontoons being employed to carry up the train from the island to the shore.

Involved in this matter of removing the marl from the lake is the question of its effect upon the flora and fauna of the lake. This is a question which comes within the province of this association. If an answer is desired a biological survey of the lake should be made at an early date.