

THE LAKE MICHIGAN AND MISSISSIPPI VALLEY WATER SHED. BY T. H. BALL.

Commencing near the headwaters of the Des Plaines River in Wisconsin, but a few miles from the shore of Lake Michigan, then passing southward, winding slightly, passing within eight miles of Lake Michigan, and then, just west of the city of Chicago, passing the south arm of the peculiar Chicago River, still going southward, this line passes west of Blue Island, eight miles west of the Indiana State line. It then passes southwest around the headwaters of Rock Creek, and then, southeastward, around Thorn Creek, which is its most southern point in Illinois, and is near Eagle Lake, two miles west of the Indiana line and directly west of the Lake County village of Brunswick and twenty three miles south of the State line monument on the shore of Lake Michigan. This line then passes northward and enters Indiana and Lake County in section 36, township 35, range 10 west of the second principal meridian. It then bears southeastwardly around the headwaters of West Creek, to a high, wooded ridge about a quarter of a mile north of Red Cedar Lake, and then passes along a low, curving ridge on which was once a wagon road, the most beautiful and best marked portion of the line in Lake County. It passes eastward three miles over a timbered table-land, and running south of the center of Crown Point about two miles, it passes across section 17, on which was laid an "Indian float," and the south part of section 16, township 34, range 8 west, and then south on the east side of the old Stoney Creek, and east across sections 35 and 36, in township 34, range 8, and into section 31, range 7 west, where is now the village of Le Roy, and where it turns northward, having reached its extreme southern limit in Indiana. Here it winds around the head of the south branch of Deep River, passing between that and Eagle Creek, and bearing eastward, south of Deer Creek, it leaves Lake County almost due east of the center of Crown Point, distant from that town seven miles and a mile and a half, nearly, south of its point of entrance into the county. It then passes north of a little lake, and then east, and then in a northeasterly direction across Porter County, running barely south of Valparaiso and north into Liberty Township in township 36, range 6, then east across Jackson Township into Laporte County. Passing the city of Laporte and running eastward near the line of the Lake Shore Railroad, distant a few miles only from the north line of Indiana, it turns again southward till it comes into Portage Township in St. Joseph County, a little west of South Bend. And here on this noted portage between the St. Joseph and Kankakee Rivers, this notice of this watershed line will close.

It may prove a matter of interest to some, in another generation, to have this line traced with even this much definiteness, although, of course, it has not been given with the entire accuracy of a surveyor's field notes; for the drying up of water courses and the drainage by means of large ditches have already almost consigned to oblivion the names and the winding beds of some of the small streams that were well known to the Illinois and Indiana pioneers.

SOME NOTICE OF STREAMS, SPRINGS, WELLS AND SAND RIDGES IN LAKE COUNTY, INDIANA. BY T. H. BALL.

Some of the natural features of Lake County, Indiana, are rather peculiar, and are quite surely of interest to students of physical geography.

Bounded on the north by Lake Michigan, on the west by Illinois, on the south by the Kankakee River, if the waters of Lake Michigan ever passed southward into the Mississippi and the Mexican Gulf, as some suppose, the outflow was quite surely over a part of what is now Lake County.

Of the two most southern points of the Lake Michigan basin, as stated in a former paper, one is in Lake County, eighteen miles south of Lake Michigan, and the other is distant about fifteen miles, almost exactly west, not far from the Illinois line.

North of the water shed the beds of the streams have an easterly and westerly direction mainly, or northwesterly and northeasterly, while south of this line the streams flow mainly southward. The Calumet, the largest northern stream, is quite peculiar in this respect, that it flows across the county nearly twice, one stream known as the Little, the other as the Grand Calumet. The windings of the bed of Deep River, the second in size, are quite remarkable, and this stream, for some two miles of its course, flows due north.

While not a region of brooks, there are, nevertheless, in this county, some interesting and remarkable springs, about twenty in number, that are quite well known. Three of these are near Crown Point, and in the Deep River Valley. One has excellent, healthful, mineral properties, and one will furnish water sufficient, so its owner believed, to supply the wants of a thousand head of cattle each day. A fourth of these springs is near Creston, in the Cedar Creek Valley, affording a large amount of water, and covering several square yards of surface. A fifth one, furnishing quite a flow of water, is on the west side of Red Cedar Lake, north of Paisley, at the base of the low bluff. The sixth is on the east side