

had, in the prosecution of the State geological survey over the extensive territory of the southern peninsula, found how great an amount of labor and how large a corps of geologists would be required, were the whole ground to be gone over by the geological parties, and had availed himself of all the information which could be obtained from the linear surveyors who had directed the United States surveys in various sections of the State. He had engaged them to notice the rocks which they should cross with their lines, and, if practicable, to procure specimens of them, so that he might thus obtain a general idea of a region which he had neither time nor means to explore fully himself. In the course of these inquiries he received a great amount of valuable information, especially from Mr. Burt; and he was thus led gradually to the idea of adopting a system which should connect the two surveys, so that they might be executed under the authority of one person, and then a systematic arrangement of a great number of observations be brought to perfection. The survey of the northern peninsula was arranged on this principle. The township lines were to be run by Mr. Burt, or under his supervision, while the subdivisions were to be made by other deputy surveyors—Dr. Houghton having the especial control of the whole. All rocks crossed by lines were to be examined, specimens taken, and the exact locality noted, while at the same time as much information as could be obtained was to be collected in relation to the geological and topographical features of the country. The detailed arrangements with regard to the collection of specimens, and the plan of accompanying the surveyors along the lines by a special barometrical observer, were admirable. This system had been fairly organized, and the field-work of one season nearly completed, when his melancholy death, by drowning, on the night of October 13, 1847, occurred. Most of the results of his extended personal observations were thus lost to the world, and the system was gradually abandoned; though for some time the linear surveyors were required to make geological observations; yet, as they were not systematized by any person familiar with the science of geology, the results were never laid before the world in an available form, although much information of value was placed in the possession of the department.

Dr. Houghton was a man of indomitable energy and perseverance, and fervently devoted to the cause of science. Had he lived to complete this great work, he would have erected an enduring monument to perpetuate his name. He died in the discharge of his duty, prematurely for the cause of science, prematurely for his own fame.

The lands composing the Lake Superior district were acquired by the United States by virtue of the following treaties:

1st. With the Ottawas and Chippewas, concluded March 28, 1836—ratified May 27, 1836—by which were ceded the lands bounded on the north by Lake Superior, on the east by the St. Mary's river, on the south by Lake Michigan, and on the west by the Escanaba and Chocolate rivers.

2d. With the Monomonees, concluded September 3, 1836—ratified February 15, 1837—by which was ceded a tract bounded on the east by the Escanaba river, on the south by Green Bay, on the west by the Monomonee river, and on the north by an irregular line extending from the mouth of the Brulé to the head-waters of the Escanaba.

3d. With the Chippewas of the Mississippi and Lake Superior, con-

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