an epitome of his it cost does, for the reason that his reports of progress have had but a limited circular tion in the United States, and for the additional reason that they tend to elucidate the geology of our own district.

EXPLANATION OF THE GENERAL SECTION.

The General Section appended to this report has been constructed for the purpose of hibiting not only the different systems of stratified rocks which prevail in this diffrict, and the relative positions of the granitic and trappean formations; but is also designed to represent a geognostic profile of the route traversed, in which the relative heights of the most prominent points above the level of Lake Superior are given. We have, also, constructed a ground plan on which the topographical features of the region, along the line of the section, are delineated—a feature not hitherto introduced into works of this character, but which is calculated to afford the inquirer essential aid.

This section commences at the head of Thunder Bay, on the north-west coast of Lake Superior, and terminates at the mouth of the Menomonee river of Green Bay, pursuing a course of about N. 18° W. and S. 18° E. Its entire length in a direct line is nearly 260 miles. The scale of height has been made to conform as closely as possible to that of length, with a due regard to the representation of all the phenomena.

We have not attempted to represent the drift deposits which are plentifully distributed over nearly the entire region.

We propose to give a brief explanation of the phenomena delineated on the section.

Commencing a few miles inland from Thunder Bay, we meet with a range of granite, belonging to the oldest system of upheaval, around which the upper beds of the azoic system are deposited in a horizontal position. At Thunder Cape and Pie island, these slates are exposed in a nearly vertical section a thousand feet in thickness, with a crowning overflow of trap of about 300 feet.

The greater portion of Isle Royale is composed of trappean rocks of the Silurian epoch, which do not rise in great irregular masses, but present a bedded structure. On the southern slope of the island, we meet with intercalations of sandstone and conglomerate, dipping with considerable uniformity to the south-east. The southern margin of the island, between Siskawit Bay and the point south of Washington Harbor, as well as the various reefs, consists of conglomerate passing into sandstone; and we have no evidence of the invasion of the trap between this line and the southera coast.

Keweenaw Point is the counterpart of Isle Royale, except that the dip of the sedimentary rocks is reversed; thus, rendering it highly probable that between these two points there is a great curvature in the strata, caused by an elevation along the trees of two volcanic fissures. The alternations of conglomerate and trap are and the more numerous on the northern slope of Keweenaw Point than of the hore numerous on the northern slope of Keweenaw Point than of the hore numerous on the northern slope of Keweenaw Point than of the hore numerous on the northern slope of the trap, although in many instances the fissures traverse the conglomerate. This conglomerate is not, strictly speaking, a sedimentary rock, but in the nature of a tuff or peperino, and is due to the joint action of fire and water. On the southern slope of the axis, the sandstone which is here a purely sedimentary

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