

ize the survey to be continued over the remaining portions of the State, by means of a triangulation and the requisite plane table work, our citizens can in a few years be supplied with a complete and accurate map of the State.

It has been deemed necessary in order to illustrate the present report in a proper manner, to construct a preliminary map, and I have availed myself of the kindness of Dr. Alexander, in the use of a smaller map, constructed by him some years since, the scale being one-third that of the large map.

Upon this I have delineated the prominent geological features of the State with as much minuteness as is practicable in the present state of the work, and the small scale of the map.

Information is so frequently desired by intelligent farmers, as well verbally as by letter, which it is difficult to give without an aid of this kind to refer to, that I have been encouraged to construct this *preliminary map*, it being the first attempt of the kind for our State.

As I am unwilling to apply the term "Geological map" to any other than one embodying results of a detailed and *final* survey, the title I have applied to it is "Geological Illustrations, &c."

These "Illustrations" will be readily understood with the aid of the "Key" on the right hand side of the sheet.

The formations are numbered, beginning with the older rocks, formerly called "Primary," and following in the inverse order of the relative ages of the formations up to the most recent, which is the post tertiary No. 24. I have added the names applied to the same formations in the final reports of the surveys of New York and Pennsylvania. Each color or shade indicates a distinct formation, with the exception of 14, 15 and 18. Each of these embraces two formations, which run through the State in belts too narrow to be separately shown on a map of this size.

The sections show the relative position of the formations, each of which is believed to be of more recent origin than the one on which it rests.

In order that the "Illustrations" may be published with the report, for the use of the Legislature, I have caused it to be engraved on stone by the Messrs. Hoen, the eminent lithographers of Baltimore, so that it may be printed in colors. To effect this eight separate stones are used, each with one color, but yet by a skilful application of these, one upon the other, we have with eight impressions each of the twenty-four divisions shown by a different shade or color. This is a recent and beautiful improvement in color printing. The Pennsylvania geological map was engraved and printed in Edinburg, Scotland; but the sample here presented shows that we have