

FIRST REPORT UPON MAGNETIC WORK IN MARYLAND.

INCLUDING

THE HISTORY AND OBJECTS OF MAGNETIC SURVEYS

INTRODUCTION.

A detailed magnetic survey of Maryland was conducted during 1896 by the writer under the auspices of the Maryland Geological Survey. The matter herewith presented forms the first part of a complete report on this work.

As it was made a special object to obtain the data that would be of direct benefit to the practical needs of the land surveyor of Maryland, this first report has been prepared with this object in view. The present communication must therefore treat primarily of the magnetic declination, its variation with time and locality. The requirements of a magnetic survey as regarded from the standpoint of the geologist and of the magnetician have, however, not been neglected. The presentation of the complete observations, their final reduction and discussion must be reserved, however, for future reports.

In addition to the funds provided by the Geological Survey, a small grant was made by the American Association for the Advancement of Science at the Buffalo meeting of 1896, for the purpose of "carrying on investigations on terrestrial magnetism in connection with the magnetic survey of Maryland." Additional data were also obtained in connection with the establishment of meridian lines at some of the county-seats, the cost of such lines being, according to the laws of Maryland, defrayed by the several counties themselves.

The entire instrumental outfit was courteously furnished by the