

out the loss of considerable time. The station was then placed as near to the county-seat as circumstances would permit. Additional stations were added as opportunity offered, *e. g.*, while waiting for railroad or steamboat connections. Later, when the survey had extended over the entire state and it was known where stations were most needed, additional points were placed in those regions. From an inspection of the isogonic map it will be seen that the distribution of the stations is fairly uniform. Every county is represented by one or more stations. Stations need to be multiplied in Central and Western Maryland. The 1896 survey will be valuable in indicating where future stations can be placed to the best advantage.

The stations were not generally occupied in any logical order, the observer allowing his movements to be controlled entirely by the timetables of the railroad and of the steamboat companies. No time was therefore ever lost in waiting for a steamer or a train to carry the observer to a station which would logically come next. This explains some of his apparently erratic movements as indicated by the itinerary. Nor did he allow his movements to be checked to any extent by cloudy or rainy weather. Such observations were made as were possible, the observer then pushing on and returning to his base station in spells of continued bad weather. Such rainy spells were not unwelcome at times, for they gave the needed opportunity of working up the field notes. On the whole the weather was propitious.

On arrival at a station, the first cab or vehicle sighted was hired.¹ The driver was next questioned with regard to the large open places in the town. Usually such a place could be found around the court house, around a public school, or around a hotel, and the driver was directed thither. As the observer was an official representative of the State Geological Survey, he readily received the necessary permission from the authorities in possession of the grounds to be occupied. After a casual inspection and a few inquiries, *e. g.*, with regard to the presence of iron pipes, etc., the grounds were selected, if condi-

¹ In some cases, of course, no vehicle was to be had, but as the instruments were packed in an easily transportable shape, there was no difficulty in having them transported by a carrier.