

*The purposes of such lines are:*

(a) To enable the surveyor to readily determine himself at any time the declination or the "variation of the compass" at the county-seat and thus to provide the means for determining the amount of secular change.

(b) To furnish a common line whose magnetic bearing as well as its true one has been accurately determined, on which surveyors can from time to time test and compare their compasses.

If such lines had been established long ago at the various county-seats the re-running of old lines would have been greatly simplified; for in addition to the secular change being now accurately determinable, the condition of the compass used in the early survey would have been known. The law provides, namely, that every surveyor shall duly file with the county clerk the "amount of variation" or magnetic bearing given by his instrument on the authoritatively established county meridian. It is well known that compasses may differ greatly from each other by reason of the fact that the proper care is not, in general, bestowed on them. A magnetic needle poised on a fine pivot point is a delicate instrument and must be carefully handled if it is to settle in the right place when it comes to rest.

Nine counties have thus far availed themselves of the privilege of having their meridian lines established in connection with the magnetic survey. These counties are: Baltimore, Dorchester, Charles, Frederick, Harford, Kent, Queen Anne's, Talbot and Wicomico.

The method used in the establishment of the lines was that of altazimuth observations on the sun before and after noon. When for some reason, which only occurred once, observations could not be made on both sides of noon, then special observations for a sufficiently accurate determination of the latitude were made. The accuracy aimed at was, that the established line should be correct within one minute of arc. The instruments employed were those used in the magnetic survey.

The line was permanently marked by two granite monuments about four feet long and seven by seven inches square. The monuments were generally imbedded in several courses of concrete and were