

ping out of the work of the present year. It will be interesting to trace the further progress of the line of equal magnetic inclination 71° . Special stress is to be laid this year upon the investigation of the regional disturbances.

It will be noticed that at present the declination is westerly over the entire area of the state, ranging from a little over 6° west in the northeast to about $3\frac{1}{2}^\circ$ in the extreme west. The distribution of the declination has, however, not always been thus.

ISOGONIC CHARTS FOR 1700 AND FOR 1800.

[Plate XVII.]

With the aid of the table, XII, giving the approximate values of the magnetic declination at the various county-seats from 1700 to 1900, and with the aid of the long series of observations in the adjoining states, I have been able to construct isogonic charts for 1700 and for 1800 with a fair degree of accuracy. *It will be seen that for 1700 the lines of equal magnetic declination are about the same as those for 1900.* In other words, in the first decade, approximately, of the eighteenth century the needle pointed in precisely the same direction as at present. But this did not occur simultaneously over the entire state; hence the isogonic chart, while closely approximating the 1900 chart, would not be exactly the same.

The lines for 1800, however, present a vastly different appearance. We now have a central line—the so-called *agonic line* (line of no declination)—along which the needle was “true to the pole.” East of this line the needle bore by a small amount *west* of true north, while west of the line the needle pointed *east* of true north.

THE SECULAR MOTION OF THE AGONIC LINE OVER MARYLAND.

When did the line of no declination enter the state and when did it leave it? Was its position in 1800 the extreme easterly one? These are questions that we can again answer with the aid of the table XII. Turning back to it we obtain the following facts:

	Lat- tude.	Longi- tude.	Needle true to pole approximately in
Oakland.....	39.4	79.4	1769 and 1850
Cumberland.....	39.6	78.8	1781 1836
Hagerstown.....	39.6	77.7	1792 1828
Frederick.....	39.4	77.4	1797 1820
Washington.....	38.9	77.0	1790 1810