

their measuring instruments as well as the variations of the magnetic needle, would save, in the future, to the citizens of our several counties, much needless litigation and expense, and our surveyors much labor and perplexity.

The great difficulties that have been experienced heretofore in the practical work of surveyors in tracing old lines, and in which not only the surveyors, but the community at large, is deeply interested, are entitled to our serious consideration, to see whether there cannot be devised some method by which this difficulty shall be much abated, if not in the progress of time wholly removed.

It will be admitted by almost all practical surveyors, that much the larger portion of these difficulties arise from the angles of the survey referring to the *magnetic meridian*, which is constantly changing its place, and not in a constant ratio, rendering it difficult, if not in many cases impossible, to know what variation of the needle should be allowed.

Eminent mathematicians of our country are almost uniformly of one mind, that surveys should return the angle of a *true meridian* instead of a magnetical one, which would give a constant angle instead of a variable one.

To make this effective will require an Act of the Legislature, and much care and deliberation are necessary in framing a law that will carry out the objects intended in such a way as that the citizens at large may be benefited by it.

We believe with proper care it may in time be accomplished.

The law to be efficient and accomplish the objects desired should, in our opinion, embrace the following provisions:

1st. The erection, at the county seat of each county, of an accurate and substantial meridian line to be protected by law from mutilation or disturbance of any kind.

2nd. The preservation in the Clerk's office of each county of an accurate standard of measurement, by which surveyors' chains shall be, by the provisions of the law, regularly tested.

3d. A provision in the law making it the duty of every surveyor, under a penalty, to attest his compass by the county meridian line, and to return with the certificate of survey in each case a true statement of the variation of his compass from the true meridian at the time of making the survey, and to deposit a copy of the same with the county clerk.

4th. To require the latitude and longitude, reckoning from Washington, of each meridian to be inscribed upon the pillar or stone upon which the meridian line is established.

This subject having never been regulated by statutory enactment, your Committee have hesitated to make report of any law which would be binding in its operations upon every county of the State. We have, therefore, framed a bill embracing the features above enumerated, but leaving the adop-