

(theoretically) that the variations experienced by Cabot cannot possibly have been inferior or superior to one point and a half west, or eastwardly, or *nil*; which assumption, whether expressed or implied, is entirely unwarranted.

The learned Canadian likewise argues as if we were as well posted regarding the particulars of Cabot's voyage as we are concerning that of Columbus. He forgets that we know nothing whatever about Cabot's course, beyond the naked fact that he sailed west from some undetermined point on the western coast of Ireland and "wandered a good deal :—*hævendo assai errato*." How can a reflective and investigating mind build upon such vague data, were it partly only, the asseveration that Cabot's course was west magnetic, and that the corresponding true course was this magnetic course west, corrected by one point and a half of variation?

As a sort of apology, Dr. Dawson at present informs his readers that the "increment of variation was not intended to be, and could not be, an argument in the least degree amenable to mathematical treatment." Why then did he take it as the basis of his postulate, when stating that John Cabot "with a variation of one point and a half would have dropped 360 miles to the south," or that if the bold navigator "laid his course to the west by compass from latitude 53° N., a variation of one point and a half would have carried him clear of Cape Race?" Was not this alleged consequence predicated upon mathematical treatment?

Driven away from this position, Dr. Dawson appeals to "the uniformity of the laws of nature, by which we are led to assume that in whatever way the magnetic pole and curves of variation are shifting now they were shifting then, in that slow change which is still going on from year to year."

Dr. Dawson confuses two very distinct things, viz. : the uniformity of the laws of nature, by virtue of which occur around us the movements which we observe, and the uniformity of these movements. Because a movement is produced by the uniform laws of nature, it does not follow that this movement must necessarily be uniform. In nature, on the contrary, movements are exceedingly varied; as is shown constantly in astronomy, natural philosophy, and all the sciences in which movements are studied.

It is therefore inexact and unscientific, from beginning to end, to maintain that the magnetic variation at Cape Race in 1497 can be determined from the fact that "it is at present 30° west, and that the variation now at the Admiral's point of observation in 1492, is 20° west." The relative positions of the curves of equal variation between the coast of Ireland and Newfoundland at the time of