

of Lake Erie, and that the whole region about Lake Simcoe has had, over a period of many years, a less westerly declination than one would expect from that which prevails in the country adjoining it.

It is principally for this reason that I think the conclusions of Mr. Fletcher may have considerable value, though many of the individual observations are doubtless not very trustworthy; and this is also one of the reasons why I attach some importance to the determinations which form the subject of this communication—because they are a series, and consistent with each other. Moreover, rude as the method was by which they were made, it could only have been practised on shore, and they are therefore free from the disturbing effects of local attraction, which, without the greatest precautions, are liable to occur on board ship.

Their early date is also an important feature. In Europe trustworthy observations are recorded from a somewhat earlier period, though not in any great number; but in the list given by Hansen, from which his map for 1600 is compiled, there are none recorded in this part of North America nearly so far back. The earliest in the list is that of Bressani for Quebec, which is evidently taken at second hand, for the date is not quite correctly assigned, whilst the declinations as recorded by him on the Great Bank, and in the country of the Hurons, are omitted.

Indeed, when Champlain explored the coasts of North America, in the very commencement of the 17th century, the subject was only just commencing to attract attention amongst navigators and men of science. It is often stated that the variation of the compass was not known until it was noticed by Columbus, and that the discovery that the needle no longer pointed to the north, almost gave rise to a mutiny amongst his crew. This, however, is a mistake, for the variation is distinctly alluded to by Petrus Peregrinus, in the latter part of the 13th century, and the amount of it is mentioned, though too vaguely to base any conclusions upon it. It is probable that we do owe to Columbus the first distinct information, that the variation is not the same in all parts of the