

1603, as given in the photograph and engraving suggested a late insertion, as did also its exact coincidence with the year of Champlain's first voyage to New France. It was, without question, a genuine old astrolabe, but it might have slipped out of the baggage of any of the many parties that, since the time of Champlain, have passed and repassed along the Ottawa route on exploration, traffic, mission-work, or war, intent. A careful examination of the instrument itself, however, soon dissipated all suspicions. The brass of which it is composed is of a very close, hard texture, like bell metal: probably it is statutory brass, compounded so as to be proof against atmospheric influence. The date, 1603, stamped on the side of the disc is certainly of contemporary workmanship with the rest of the instrument. The recording of a date without the addition of a maker's name and place of abode, which at first sight likewise seemed strange, may in some degree be accounted for thus: the figures towards the circumference of the disc denoting the degrees are all not engraved, but stamped on. With punches in his hand it would be a simple thing for the maker to affix the date of the current year; while to do the same with his name and place of business, consisting perhaps of many words, would be another matter. Whether inserted by means of punches or the graving tool, the process would occupy time which the thrifty workman might think ought to be more profitably employed.

Champlain certainly had with him an instrument for taking latitudes during his expedition up the Ottawa in 1613. It can also be shown that he probably lost that instrument during the journey. Champlain kept a journal which is now to be seen in print in his 'Works' edited and published at Quebec in three volumes in 1870, by the Abbé Laverdière, of Laval University. Not having access to Laverdière's books, I avail myself of the *résumés* of this part of the journal given by Mr Russell, of Ottawa, and Mr Marshall, of Buffalo, in their respective pamphlets on 'Champlain's Astrolabe.'

Champlain records that he reached the Falls of the Chaudière on the 4th of June, 1613, the Rapides des Chats on the 5th, the island of St Croix and the Portage du Fort on the 6th. At or near Portage du Fort he turned off westward from the line of the Ottawa, and entered on what is now known as the Muskrat Lake Portage. Part of June 6th and the whole of June 7th were here passed. 'We were greatly troubled,' Champlain writes, 'in making this portage, being