

1671. from the opposite direction, that is to say, the south, and at such times cakes of ice have been carried from the former lake into the latter with as much velocity as a vessel would have with wind astern. The same thing, it is known, is seen in the Bahama Channel.

Father Marquette also observes that in the strait by which Lake Superior empties into Lake Huron, there are under the surface of the water numerous currents, so strong as at times to carry off the nets of the fishermen, whence he conjectures that this great lake discharges part of its waters into Lake Michigan by subterranean channels, excavated in the same manner as those by which the Caspian is supposed to connect with the Black Sea, and the latter with the Mediterranean; and this is all the more probable, as Lake Superior receiving at least forty rivers, ten or twelve of them quite as large as the strait itself, would not discharge near as much water as it receives, if there were no other issue than this channel.

The same is apparently to be said of Michigan, which, besides the waters of the great bay, receives also a great number of rivers, some of them quite large, and coming from a considerable distance. For besides its visible discharge into Lake Huron, it must necessarily have excavated other subterranean ones as has been remarked of Lake Superior, as to which a discovery has been made corroborating the conjecture of Father Marquette. This is that all the rocks found at a certain depth in the channel at Sault St. Mary are pierced like sponges, and several of them hollowed out into grottos, apparently the work of the currents I have mentioned.¹

Singular phenomena. At the close of the preceding year and commencement of this, quite a singular thing occurred in this part of Canada. The winter did not begin till the middle of January, 1671, and ended in the middle of March. This was unexampled, and both periods were marked by phe-

¹ See Marquette's remarks on these tides: *Rel. de la N. F.*, 1671, p. 38.