

The height of lake Champlain above the given datum is 100.84 feet as established long since by the Northern Canal levels.

Lake George, determined by official United States surveys is 158 feet above mean level of lake Champlain. In Vol. VI., p. 115, I have mentioned the portage to be overcome at lake George as being 260 feet in height. These figures, taken as the record of the height above mean ocean level, are incorrect. The height of the portage to be overcome in about a mile is, generally speaking, the difference of the water level, 158 feet.

I have entered into these details from the conviction that the time has arrived when the heights of the lakes should be stated in accordance with the true elevation, not as they were incorrectly set forth half a century back, and that they should be referred to a common datum in use throughout the continent, the height of the mean ocean line in New York harbour. We all know that the United States mariners will navigate only according to the longitude derived from the meridian of Greenwich. At the international congress at Washington in 1884, at which Canada was represented by Mr. Sandford Fleming, M.I.C.E., the question arose as to the advisability of adopting a common central meridian in the determination of the question of universal time. It was resolved that longitude should be reckoned from the meridian of Greenwich, and that the solar passage of the anti-meridian of Greenwich should be the zero of time. The United States commissioners unanimously advocated this choice as due to the assured correctness and long continued astronomical investigation of Great Britain; especially from the advisability of the navigators of Great Britain and the United States following one common principle regardless of nationality. The International Congress consisted of the representatives of twenty-five nations, and their decision was almost unanimous.

Equally in Canada we are bound to accept with the United States one common basis, from which geodetic and other scientific data can be derived. Throughout the continent the height of the several lakes should be referred to one datum, and it can now be easily effected. Each province of Canada independently will be able to carry on its operations in accord with the established levels. In no long time the levels of the chain of lakes to be found between lake Superior and lake Winnipeg have to be authoritatively determined, and it is important that the work should be performed with precision.

In this view I take upon myself to bring the subject to the notice of the premier, Sir John Thompson, known to possess scientific tastes, so that his government may adopt measures for this state of confusion and misconception to cease, and that official recognition may be given by the Dominion government to the elevation of the lakes as established by the United States operations.

Difference in Canadian
Record. Excess above
true height.
Feet.

2.40
5.10
7.70
3.20

, is in no
use varies
relatively