which the height of high water can be calculated in terms of two series of variables. One of these is in the period of the synodic month, and the other affords a plus and minus correction in the period of the anomalistic month. The problem of tide tables for Nelson which will be reasonably accurate, may thus be considered as solved ; although further observations are desirable to improve the accuracy of the values used in the calculations. Tables giving the time of the tide have already been published for the season of 1914.

TIDES OF HUDSON STRAIT

In this strait the tide has an unusually large range, the average at Ashe inlet, in the central part of the strait, being $30\frac{1}{2}$ feet at the springs and $15\frac{1}{4}$ feet at the neaps. The duration of the rise and fall is almost equal, and there is very little diurnal inequality ; but the semi-monthly variation with the moon's distance, is extremely large. The spring range is twice the neap range, as above indicated ; and the variation in the anomalistic month from perigee to apogee may occasion a difference of almost *seven feet* in the range of successive spring tides.

With these variations and tide curves for only half the day, their completion by interpolation was too uncertain to be attempted, as a basis for harmonic analysis. But for comparison with any reference station, the broken character of the record was relatively unimportant.

Among the ports selected for comparison, as most similar in their characteristics and nearest in range, those found to be best were Liverpool, Port Talbot in the Bristol Channel, and St. John, N.B., in the Bay of Fundy. The outstanding variation in the difference of time between Ashe inlet and these harbors, was chiefly in the period of the anomalistic month. St. John was chosen as the most suitable of these three ; as the range is nine-tenths as much as Ashe inlet, and the anomalistic variation is the same, absolutely, which makes it slightly greater in proportion. The comparative features at the two places are shown in the following table :—