## 80 BULLETIN OF THE NATURAL HISTORY SOCIETY.

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me) a matter of considerable importance especially as regards setting nets for fishing, getting grounded vessels afloat and other such practical purposes. Hence, although my motive in this enquiry has been purely scientific interest, I have thought it worth while to give in Table VI the interval between high water in St. John harbor and high water at seventeen points of importance on the river. This table, together with a McMillan's Almanac, will enable a resident on the river to anticipate high water quite as accurately as a resident in St John can at the present time; for the figures in Table VI cannot be more than ten or twelve minutes in error, probably much less, and this is a smaller amount than the error incident to the prediction of high water in St. John harbor at present. It may be well to repeat that this table applies to either spring or neap tides during low summer level. It remains to be seen whether it will apply to the river when full, in the spring or early summer. I think it can be safely predicted that the difference will not be great; for, while the greater speed of the water will naturally retard the progress of high water, the greater depth of the river will cause a wave, whether up or down, to travel with greater speed; and the two effects, depending on the same cause, will tend to neutralize one another. This, however, is a point that should be settled by observations in springtime.

## XII. EFFECT OF NARROW OUTLET OF RIVER.

The most important tidal effect due to the remarkably narrow outlet of the river is the great delay of high water at Indiantown—two hours very closely,—although Indiantown is only a mile from the harbour. As the water rises in the harbour it must attain the level in the river above the rapids before much rise can occur at Indiantown. After that, as the supply of water from the harbor and bay is unlimited, while the large basins above Indiantown have a great capacity, the narrow outlet under the bridge is totally inadequate to keeping the levels above and below equal, so that for two hours after the water has reached its maximum level at St. John, and has be con nea lev ab lov as reg

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