

as salt as that of the ocean. This is well known likewise to be the case in the Baltic at some seasons of the year; and Ellis says, in respect to the Chesterfield Inlet, that when the boats first saw it, they found the water so fresh 10 leagues within the entrance, as to give them no hopes of a passage, for which reason they neglected searching it any further, and it was not till the year 1761 that it was found to extend upwards of 200 miles to the westward. The freshness of the water here must evidently be from the great quantity of melted snow which is brought down by innumerable rivulets, the same as in the Baltic, because the tide was found to flow to the very extremity of the inlet, and further in the water is salt.

Another objection against the authenticity of the narrative, and which appears to have had considerable weight, is, that the tides which enter the rivers Haro and Los Reyes, flow only 22 or 24 feet, whereas the Rio Parmentire has falls in it measuring 32 feet perpendicular, independent of the declivity which is necessary to form a current, before it enters the Lake De Fonte(n).

Could

(n) Buffon has made some observations on this subject worth attending to. He says, "the celerity of running waters is not in exact proportion to the declivity of their channels. A river with an uniform declivity, and double to that of another, ought not, it would appear, to run with more than a double celerity; but its celerity is much more quick, being sometimes triple, sometimes quadruple, &c. The celerity depends more upon the quantity of water, and the weight of the superior waters, than upon the degree of descent. In digging the bed of a river or drain, it is unnecessary to make the descent uniform through its whole extent. A quick motion is more easily produced by making the declivity much greater at the source than at the mouth, where, like the beds of natural rivers, it is almost imperceptible, and yet they preserve their celerity, which is more or less, according to the quantity they contain;