

VARIATIONS IN THE LEADING FEATURES OF THE
TIDES IN DIFFERENT REGIONS.

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THE tides of the eastern coasts of Canada are very varied in character and thus exemplify several different types. They vary in range from the largest tides of the world, in the Bay of Fundy, to a tide which is almost inappreciable in the middle of the Gulf of St. Lawrence. In this they contrast with the tides on the Atlantic coast of the United States, which have a remarkably uniform character from Cape Cod to Florida. On our Pacific coast, the tide shows other features which supplement those of the Atlantic tides.

The object of this paper is to draw attention to the manner in which the tide is found to have some leading feature in each region, which is evidently dominated by some one element in the moon's movements: such as its declination or its distance or the period of its phases. As all our east coast tides, to their furthest limit in the River St. Lawrence, are propagated from the tide of the open Atlantic, it is evident that the influence of some one lunar factor must become more and more pronounced during the progress of the tide, until it stands out as the dominant feature. In this way, the declination effect may develop in one region, or the distance effect in another, until other features in the tide become relatively unimportant.