

Newport, (R. I.) —

Sir:—I have the honor to inform you that I have completed the survey of Narragansett Bay, made agreeably to your orders of the 16th May last, and a chart is now preparing on a large scale, which will be forwarded to the department as soon as it can be finished. A chart, on a smaller scale, that will comprise the whole survey in one sheet, will accompany this—not finished, however, in all the details, for want of time, but sufficiently so for reference, and showing accurately the position of all the shores, and the depth of water generally throughout the bay. The survey having been ordered with the view to ascertain the practicability and expediency of establishing a naval depot therein, it has been carefully made, and those points which appeared to promise the most suitable locations, have been minutely examined.—The positions of the principal points of land around the bay have been determined trigonometrically—the series of triangles commencing from a measured base of about 1 1-2 miles, and proved to be correct by a verifying base of 4217.6 feet measured at the other part of the bay. The form of the shores between the several points of triangulation has been ascertained by the chain and compass, and the depth of water is also placed on the chart by angles measured at the point of sounding, or by ranges of the

different signal stations, and reduced to the level of the lowest tides.

The two positions in the bay which appear to present the greatest natural advantages for the establishment of a naval depot, are the one on the southeast part of Prudence Island, and the other at the entrance of Mount Hope Bay, between the Bristol ferry and Mount Hope.—Near both these positions there is most excellent anchorage, and with sufficient depth of water for any purposes. The water is bold in both places, close in with the shore, so that much length of wharves would not be required; and it is believed that the land in either place is suitable for a depot. Charts of both these sections of the bay are now being prepared on a large scale, which will show the elevation of the land, as well as the depth of water, and will be accompanied by a more particular description. Your instructions not appearing to require from me any opinion, either as to the practicability or expediency of establishing a naval depot in Narragansett Bay, I shall confine myself to a general description, presuming that, in addition to this, the chart, particularly the larger one, will give you all the information required.

The bay is of easy access; the entrance sufficiently wide to enable vessels to beat either in or out, with bold shores, and free from hidden dangers or shoals. The course in, is to the northeast—an advantage, on this coast, peculiar to the bay.

tor, and well known and highly appreciated by mariners during the prevailing westerly winds of winter. After passing the line of deep water between Fort Adams and the Dimplins, good and safe anchorage may be had on either side, and in almost every part of the bay; indeed, the whole bay may be considered an excellent man of war harbor, with the exception of a few spots of foul ground, easy to be avoided, and other places where the water is too deep for convenience. The tide generally is not rapid, and in most parts of the bay there is working room for vessels of any class. The entrance to Mount Hope Bay, however, is narrow, but quite safe. Of the effects of ice in winter, I am unable to speak from my own observations. I believe, however, that it never, or very seldom freezes so far down as the southeast part of Prudence Island. The harbor of Bristol, and in the bay above, towards Warren and Providence, is generally frozen; but I am informed that they are enabled, without much difficulty, to keep the channel open at Bristol for the entrance and departure of vessels during the winter.—The passage past the Bristol Ferry to Mount Hope Bay is, I understand, seldom closed; and the large body of ice in that bay is detained so long by its narrow entrance, that it becomes too weak, when it breaks up, to do injury. I learn that the entrance of vessels from sea to a safe anchorage, is never obstructed by ice.

There are three entrances into this bay from the sea. The principal one is between Rhode-Island and Conanicut, already mentioned. In the Western channel, between Conanicut and the Narragansett shore, there is sufficient depth of water for any vessel. The channel, at one point, however, is narrow, and might be filled up, if required, so as to admit only the passage of vessels of a light draft of water. The Eastern channel is closed near its northern end by a stone bridge, except for very small vessels, through the draw, where the tide is very rapid, and where there is at present but eleven feet of water. This channel does not afford a good harbor for large vessels.

I have been much assisted in making this survey, by Lieutenants Gedney, Wilkes, and Blake, and cannot forbear mentioning them with commendation to the department for their zealous and indefatigable exertions, as well as for their skill in the performance of this duty.

Very respectfully,

I have the honor to be,

Your obedient servant,

ALEXANDER S. WADSWORTH.

Hon. Levi Woodbury,

Secretary of the Navy.