

fringes the coast of Admiralty Island. They lie S.S.E. a little over 3 miles from Observatory Islet and E. by S.  $\frac{1}{2}$  S. nearly 4 miles from Moseley Point, and form a good mark for entering through the east channel into Nares Harbour, as they lead, when bearing S.  $\frac{3}{4}$  E., midway between the east extremity of D'Entrecasteaux Reef and Challenger Shoal.

To the northward of these rocks, at a distance of half a mile, there is a narrow shoal with 4 fathoms on it, and 20 to 28 fathoms just outside.

*Carpenter, Browne, and Tracey Islands* are connected by a reef. They lie in a N.W. by W. direction from Moseley Point, and between that point and D'Entrecasteaux Island. There is a channel 9 cables in width between the reef surrounding them and the reef off Moseley Point, which appears, so far as explored, to be safe and deep, and there is probably also deep water between D'Entrecasteaux Island and this reef, as well as between it and Maclear Island, where one sounding of 19 fathoms was obtained. The space between these three islands and Maclear Island appears an excellent position to anchor in if the water should be found of a suitable depth, but this has not yet been ascertained. The three islands are all uninhabited, and like most others in the vicinity of the harbour are low, flat, and thickly wooded.

*Anchorage.*—In that part of Nares Harbour sounded by the Challenger, viz., from Suhm Island eastward to the Challenger Shoal, a distance of 6 miles, and from the inner edge of D'Entrecasteaux Reef to the reef fringing Tracey, Browne, and Carpenter Islands and the coast of Admiralty Island, the depth varies from 10 to 30 fathoms, with patches having less water near the edge of the reefs; and the depth in the channel entering the harbour between D'Entrecasteaux Reef and Challenger Shoal varies from 20 to 40 fathoms. The centre of the harbour is much encumbered by a chain of coral knolls extending from the middle of Carpenter Island northeastward to the edge of D'Entrecasteaux Reef. These knolls have from 1 to 2 fathoms over them, but are separated by channels of deep water  $1\frac{1}{2}$  to 3 cables in width, either of which may be used if required; but as there are no good marks for leading through, it is requisite either to buoy the knolls between which it is intended to pass, or to pilot the ship from aloft, when these patches are distinctly visible. To the eastward of these shoal patches is the anchorage, 3 miles long by  $1\frac{1}{2}$  miles in width, and the only dangers in it with the exception of Havergal Shoal, are close to the edges of the reef.

*Havergal Shoal*, a small patch of 4 fathoms, lies on the western side of the eastern channel into Nares Harbour. From it, Observatory Islet bears N.W. by N.  $6\frac{1}{2}$  cables, and the east point of Wild Island W. by N.  $\frac{3}{4}$  N.  $1\frac{1}{4}$  miles, and between it and Challenger Shoal the channel is 9 cables in width. Vessels should on no account attempt to pass between Havergal Shoal and D'Entrecasteaux Reef, as some shoal heads may exist there which have not been examined.

*Directions for the Eastern Channel.*—If bound from the westward, steer along the edge of D'Entrecasteaux Reef at a distance of a mile until Observatory Islet bears south, when haul to the southward and bring Failure Rocks, which may be easily distinguished, to bear S.  $\frac{3}{4}$  E., and steer in with them on that bearing, which will lead mid-way between Challenger Shoal on the east side of the channel, and the point of D'Entrecasteaux Reef and Havergal Shoal on the west side. When the whole of Suhm Island is open to the southward of Wild Island, the ship will be inside Havergal Shoal and should haul to the westward, steering towards Browne Island, until the west point of Wild Island bears from N. to N.N.W.; then steer in slowly towards Wild Island, and anchor as convenient in 18 to 20 fathoms about half a mile from the shore.