

SAILING DIRECTIONS
FOR
THE GULF AND RIVER
OF
ST. LAWRENCE,
GIVING
A PARTICULAR DESCRIPTION
OF ALL THE
HARBOURS, ISLANDS, ANCHORAGES, ROCKS, SHOALS, AND
OTHER DANGERS.

CHIEFLY COMPILED
FROM THE APPROVED WORKS AND SURVEYS
OF
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ISLANDS

IN THE

GULF OF ST. LAWRENCE.

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ERRATA.

Page 2, line 37, *for* gives *read* joins.

Page 11, line 8, *for* 65 feet high *read* 75 feet high.

Page 28, line 46, *for* a mile *read* $\frac{1}{4}$ a mile.

Page 62, line 47, *for* sounding *read* rounding.

SAILING DIRECTIONS

FOR THE

Gulf & River St. Lawrence.

NOTE.—THE BEARINGS AND COURSES THROUGHOUT THIS BOOK, ARE BY COMPASS UNLESS THE CONTRARY IS EXPRESSED, AND THE SOUNDINGS THOSE AT LOW WATER SPRING TIDES.

THE GULF OF ST. LAWRENCE.

CURRENTS AT THE ENTRANCE OF THE GULF.—Capt. Bayfield, R. N. says—“It is a generally received opinion, that a current sets constantly to the south-eastward out of the Gulf of St. Lawrence, between the Island of Newfoundland and Cape Breton Islands, and also that it is frequently deflected to the southward, towards the shores of the island last named, by another current from the northward, which is said to enter the Gulf by the Strait of Belle Isle.

“I have myself observed that a current sets out, between Cape Ray and St. Paul Island, during westerly winds and in calm weather; but it is checked by easterly winds, and I believe that it may sometimes run in a contrary direction from the same cause. Northerly winds, and perhaps also the above-named current from the northward, may cause the stream to set to the southward towards Cape Breton Island. But the truth is, that winds, both present and at a distance, possess so powerful and irregular an action upon the set and strength of the currents and tides in this entrance of the Gulf, that I cannot say any thing certain or definite respecting them.

“The reality of a current inwards through the Straits of Belle Isle is confirmed by the presence of icebergs, which it transports into the Gulf every summer, against the prevailing S.W. winds; frequently carrying them as far as Mecatina, and sometimes even to the neighbourhood of the east point of Anticosti. Its strength is very much increased by a prevalence of N.E. winds: at such times it runs at the rate of two knots, through the Strait, and for 30 to 40 miles further to the westward; diminishing gradually in force as it spreads out in the wider parts of the Gulf. Usually, however, its rate is much less. At times, when S.W. winds prevail, it becomes very weak; and it has even been reported to me, that a current has been observed setting out of the Gulf, in a contrary direction, to the N.E. for days together, but this was never observed by us during either of the three seasons which we passed there. There is, however, no doubt that this current is extremely irregular, as might be expected at the narrow outlet of a great inland

sea, where winds, both within and without, must of necessity possess great influence.

“ After entering the Gulf, it runs along the north, or Labrador Coast, at the distance of two or three miles from the outer islands; leaving a narrow space in-shore, in which the streams of the tides, when uninfluenced by winds, are tolerably regular. Passing outside of Mistanoque, the islands of Grand Mecatina, and the South Maker’s Ledge, it pursues a direction given to it by the trending of the coast, till it is turned gradually to the southward, by the weak current which is often found coming from the westward between Anticosti and the north coast, during westerly winds, and which is set off to the southward from Natashquan Point. The united streams continue their southern course at a rate diminishing as they become more widely spread, and which seldom exceeds half a knot; and finally, joining the main downward current of the St. Lawrence, of which an account will be given immediately, they all pursue a S.E. direction towards the main entrance of the Gulf, between Cape Ray and the Island of St. Paul. It is this current, from the northward, which is felt by vessels crossing from off the Bird Rocks towards Anticosti: and which, together with neglecting to allow for the local attraction of the compass, has been the principal cause of masters of vessels so often finding themselves, unexpectedly, on the south coast. Many shipwrecks have arisen from this cause near Cape Rosier, Gaspé, Mal Bay, &c.

Effect of the Tides on this Current.—“ Both these currents, viz. that from the northward, and the main downward current of the St. Lawrence, are modified by the tides, but in a way directly contrary: for the northern current, in through the Strait of Belle Isle, is accelerated by the flood, and checked by the ebb; whilst the other is accelerated by the ebb and checked by the flood tide. These modifying causes, viz. the tides and winds, give rise to various combinations, and consequent irregularities, in the direction and strength of these streams, which it is extremely difficult at all times to estimate and allow for correctly.

Main Current of the River.—“ The current along the south coast appears to be superficial: at least we found it so in the lower parts of the Estuary, where observations upon the specific gravity of the water on the surface, and taken up from different depths, proved to us that the water of the St. Lawrence and its numerous tributary streams was widely diffused over the Estuary. It has also been observed that the current is strongest in spring, soon after the opening of the navigation, when the rivers are swelled by the recently dissolved snows of the winter. But, although, generally speaking, there seems no doubt that this current is the tribute of the St. Lawrence on its way to the ocean; yet, in the upper part of the Estuary, it is not alone, and at all times, caused by the discharge of the St. Lawrence, but depends also upon peculiarities, in the set of the tides. Thus, when our observations had confirmed the truth of the report, that the current always ran down on the south side of the Estuary from a few miles below Red Island towards the Island of Bic, we could not at first account for the fact; for it appeared impossible that this could be the comparatively fresh water of the St. Lawrence flowing on the surface towards the sea, when we knew that the whole body of water a few miles above, from shore to shore, on either side of Hare Island, and also in the Saguenay River, was running up during the flood tide. Attention, and numerous observations,

together with an examination of the temperature and specific gravity of the water, informed us that this was an eddy flood, which is thus explained.

“The flood tide ascends in a wide channel more than 100 fathoms deep: when it arrives at the comparatively narrow pass formed by Green Island, Red Islet Reef, and the extensive shoals off the entrance of the Saguenay River, it is obstructed thereby as well as by the shoalness of the channel to the southward of Hare Island. There is not room for so great a volume of water to pass, and part of it is in consequence turned back, and forms an eddy flood, setting from below Red Islet Reef, towards the Razade Islets. During the ebb tide, the stream of the Saguenay sets over to the southward in the same direction, hence the current on that side is always down.

“There is no upward stream of the tide (excepting so close in-shore as to be useless to ships) all along the south coast from Cape Gaspé to a few miles below Red Islet, in consequence of the union of this eddy flood with the main current of the river; and they have, therefore, so much influence on the navigation that I shall endeavour to trace their course more particularly.

“Commencing from a short distance below the Red Islet Reef, the current is there very strong—about 4 knots. It decreases in velocity as it proceeds to the south-eastward, slanting over towards the Razade Islets; off which its rate is from 2 to 3 knots. It runs strongly along the northern edge of the Bank of Soundings off the south coast, upon which, especially in spring tides, a weak stream of flood will be found flowing in the opposite direction, and the boundary of the two streams is usually marked by a strong ripple. From Father Point to Cape Chatte, the rate of the downward current varies from a $\frac{1}{2}$ to 2 knots, according to the tide, direction of the winds, and season of the year.

“During the ebb tide the stream runs down on both sides stronger on the south than on the north coast, and weakest in the middle of the Estuary. It is deflected, or turned off to the southward, by the Points Mille-Vaches, Bersimis, Manicouagan, and Point de Monts, and by the ebbing streams of the large rivers between them: a circumstance which should be carefully attended to by vessels coming up with a northerly wind; as they will infallibly be set over to the southward upon a lee-shore, if they do not make the necessary allowance by keeping their wind well over to the northward.

“During the flood tide this stream still continues to run down outside the Bank of Soundings off the south coast, although with diminished velocity, and is felt about half way over towards the north shore. In the middle of the Estuary there is usually slack water; whilst along the north coast the stream of flood is regular in its recurrence, increasing in force as we ascend the Estuary. The strength of the stream of flood is greatest in-shore, and diminishes as we proceed over to the southward, till at the distance of about 3 leagues it becomes insensible. These differences in the strength and direction of the stream produce strong ripples in various parts of the Estuary, but their position varies with the different times of tide, and perhaps from other causes, so that they cannot safely be trusted for any guidance to the seaman.

“Round Point de Monts there is little or no stream of flood excepting very close in-shore: the downward current is constant or nearly so off that point; and it requires a fast-sailing vessel to beat round it against

a westerly wind. Point de Monts turns this current over to the S.S.E. at a rate varying from 1 to 2 knots; so that a vessel, having a west wind, and standing over to the southward on the starboard tack, will be carried towards the south coast at a rapid rate, having the current on her weather quarter; during her board tack to the northward, she will be retarded, the current being then directly opposed to her course. When sailing at the rate of 4 knots, it will usually require only about half the time to go from Point de Monts over to the south coast, that it will take to return from the latter to the former. This is a most important circumstance, which it is necessary to carefully guard against, when beating up the Estuary in this part during dark nights, and, especially, in foggy weather.

“Below Point de Monts the current is no longer felt near the north coast, nor, indeed, anywhere to the northward of a line joining Point de Monts and Anticosti. It is confined to the neighbourhood of the south coast, which it follows in its curve to the southward, running strongly past Cape Gaspé, Flat Island, and Bonaventure Island; whence curving gradually to the south and S.E. it continues its course towards the entrance of the Gulf, with a rate very much lessened in consequence of the great space over which it is now spread. The usual breadth of this stream from Magdalen River to Cape Gaspé is 3 or 4 leagues; but this, I believe, is not uniform. When S.W. winds prevail, it appears that this current, or a branch of it, is driven over from the vicinity of Magdalen River towards Anticosti; part of the stream running round the west point of that island, sets across nearly towards Large Island, (one of the Mingans) whence turning gradually down outside the Mingan and Esquimaux Islands, and along the north coast, it sweeps round the curve to the westward of Natashquan Point, and is turned off to the southward, as has been already mentioned. The other part sweeps round the large curve, or bay, between the west and S.W. points of Anticosti, and is turned off to the southward by the latter point, frequently causing a great ripple off it, which has been mistaken for breakers on a much more extensive reef than exists there.

“I have noted the rate of this current, off different parts of the south coast between Capes Chatte and Gaspé, in the months of June, July, August, and September, and in different years, and scarcely ever found it the same. It varied between 1 and 2 knots in westerly winds. It was weaker, often nearly insensible, in easterly winds; and in one instance, off Mont Louis River, in a calm which was followed by a strong breeze from the eastward, it could not be perceived.

“Vessels beating up the St. Lawrence against westerly winds, usually experience little difficulty in making good way to windward, after having weathered the west point of Anticosti and arrived on the north coast; because there is seldom any current on that side, and the tides, although weak, are tolerably regular. It is in general very easy to beat from the Seven Islands to Point de Monts; for there the stream of flood is stronger than the ebb; the latter, as well as the current, being turned off to the southward by Point de Monts. There seems, at times, also to be an eddy current there, sweeping round the great bay or curve between the above-named Points. It sets off from above Egg Islet to the S.S.W.; and is the probable cause why vessels, which shape a direct course for Point de Monts with a leading N.W. wind off the land at night, so often find themselves obliged to haul up for or unable to fetch the light.”

CAPE DESPAIR TO GREEN ISLAND.

THE SOUTH COAST OF THE GULF AND RIVER ST. LAWRENCE.

CAPE DESPAIR, the N.E. point of the Bay of Chaleur, consists of red sandstone cliffs, without beach and of a moderate height above the sea. From this Cape, LEANDER SHOAL bears S.S.E. distant rather more than $1\frac{1}{2}$ miles. It is about a quarter of a mile in diameter, and has 16 feet least water on one spot. Between it and the Cape there is a clear passage. The leading marks are as follow: the line of the White Head in one with the inner or N.W. end of Percé Rock, passes just outside of the shoal, in 7 fathoms; therefore the whole of Percé Rock, well open to the eastward of the White Head, will lead clear outside of all. From a half to the whole of the Percé Rock, shut in behind the White Head, will lead clear between the Leander and Cape Despair.

BONAVENTURE ISLAND has bold and perpendicular cliffs of red sandstone, and conglomerate on all sides excepting the west. These Cliffs in some parts attain an elevation of 250 feet above the sea, and their ledges and fissures are the habitation of innumerable gannets. From the west side, shoal water extends to the distance of a quarter of a mile, and there is anchorage in 15 fathoms between it and White Head; but the riding is insecure and heavy in consequence of the swell, which, in bad weather, rolls round the island. Between Bonaventure Island and the Percé Rock the channel is about $1\frac{1}{3}$ miles wide and free from danger.

The PERCÉ' ROCK is 288 feet high, precipitous all round and bold to seaward. It is rendered remarkable by two large holes which have been perforated through it by the waves, and through one of which a boat can pass at high water. Between this rock and the White Head is the Bay of Percé having a reef at the distance of half a mile to the S.W. of the Percé Rock, and extending out nearly half a mile from the shore. Small vessels anchor on either side of this reef with winds off the land, but it is a dangerous place, and not to be recommended for large vessels. The town of Percé occupies the shores of the Bay, and Mount Percé or the Table Roulante, rises, immediately from it, to the height of 1230 feet above the sea. This mountain is very remarkable, and can be seen at sea from a distance of 40 miles. A reef joins the Percé Rock with Point Percé, and off the N.E. side of the latter small vessels anchor with westerly winds. There is generally a regular tide of flood and ebb, of about a knot, between Bonaventure Island and the mainland: the flood tide running to the S.W. round Cape Despair and up the Bay of Chaleur; and the ebb in the contrary direction. Two or three miles outside, or to the eastward of Bonaventure Island, the current to the southward out of the St. Lawrence will often be found running regardless of the tides.

MAL BAY is between 5 and 6 miles wide, by 4 miles deep, and entirely open to the S.E. A fine broad sandy beach extends right across the head of the Bay and incloses a shallow lagoon. A considerable river, and several small streams discharge their waters into the lagoon, which has an outlet in the N.W. corner of the Bay, called the Tickle, admitting boats at high water and in fine weather. There is anchorage all round

the shores of Mal Bay, but as a heavy sea and thick fog often precede a S.E. gale, and render it difficult for a vessel to beat out, it cannot be recommended. There is an open cove or small bay on the N.E. side, in which a vessel can be occasionally moored close to the shore, and in 3 fathoms water, but this is of no use for the general purposes of navigation.

POINT PETER is the N.E. point of Mal Bay, and the south point of Gaspé Bay. It is of low sandstone, and thickly covered with the white houses of the fishermen.

FLAT ISLAND lies about 400 fathoms off Point Peter; and is small, low, and of sandstone; between the island and the point, there is a clear channel, but no good anchorage: for although vessels occasionally anchor to the northward of the island, yet the ground is so foul, that there is great danger of losing an anchor from its hooking the rocks. From Flat Island to Cape Gaspé, across the mouth of Gaspé Bay, the course is N.N.W. $7\frac{1}{4}$ miles.

GASPE' BAY possesses advantages which may hereafter render it one of the most important places, in a maritime point of view, in these seas. It contains an excellent outer roadstead, off Douglas Town; a harbour at its head, capable of holding a numerous fleet in perfect safety; and a basin where the largest ships might be hove down and refitted. The course up this Bay, from Flat Island to the end of Sandy-beach Point, which forms the harbour, is N. by W. $\frac{1}{2}$ W. rather more than 16 miles. From the Flower-pot Rock to the same point, the course is N.W. $\frac{1}{2}$ N. and distance nearly $11\frac{1}{2}$ miles. From Point Peter, the land rises in undulations to the chain of mountains about 5 miles inland, from the south-western shore of the Bay. The south-western shore of Gaspé Bay, from Point Peter to Douglas Town, a distance of 12 miles, presents a succession of precipitous headlands: shoal water extends nearly a third of a mile from the cliffs, and vessels beating should beware of this, since the water shoals too rapidly to allow of much warning by the lead.

CAPE GASPE' is a remarkable headland, of limestone, having on its N.E. side a range of cliffs, which rise from the sea to the height of 692 feet. Flower-pot Rock lies close off the S.E. extremity of the Cape, and is also a very remarkable object; the base of it being worn so small by the waves, that it appears astonishing that it can resist their force, or the pressure of the ice. It is sometimes called the "Ship's head," at others the "Old Woman," by the fishermen, and is so bold that vessels may haul round into the Bay within the distance of a quarter of a mile. Boats may pass between it and the Cape, when there is no surf. The limestone of Cape Gaspé dips to the S.W.; so that the cliffs within the bay are much lower than those on the outside of the Cape. There is an anchorage with good holding ground, but in not less than 17 fathoms, except within a quarter of a mile of the shore, abreast of St. George Cove, Grande Grève, and Little Gaspé. This side is bold, and free from danger in every part with the exception of the Seal Rocks, which are the only detached danger in the Bay.

THE SEAL ROCKS are $6\frac{3}{4}$ miles within Cape Gaspé, one mile S.E. by S. from Cape Brulé, and half a mile off shore. The length of this reef, in a direction parallel to the shore, is half a mile; and its breadth a quarter of a mile. The least water is 4 feet, and there are $3\frac{1}{2}$ fathoms between it and the shore. When on the outer edge of the Seal Rocks,

Cape Brulé is in one with the next clifty point up the bay, bearing N. 35 W. by compass, and this only mark is sufficient for the safety of vessels beating, for the rocks are out of the way with fair winds. At Grande Grève, $3\frac{1}{2}$ miles within Cape Gaspé, the ridge of land dips and narrows, so that there is a portage across it, leading to the settlements at Cape Rozier. On the N.W. side of the portage a range of mountains commences, and they continue along the N.E. side of the bay, and the N.W. arm, till they are lost to view in the interior of the country.

DOUGLAS TOWN is a village of fishermen and farmers, standing on the rising ground at the south side of the entrance of the River St. John. The roadstead off the town is extensive, vessels may anchor in any part of it, and in any depth from 11 to 6 fathoms, over sand and clay bottom; but the best berth is in 7 fathoms, with the entrance of the River St. John bearing N.W. by W. $1\frac{1}{4}$ miles. The course and distance from Cape Gaspé to this anchorage is N.W. by W. $7\frac{3}{4}$ miles. There is, however, no shelter from winds between S.E. by E. and S.S.E. which blow directly into the bay, and roll in a heavy swell. The riding is, nevertheless, much less heavy on such occasions than might be expected; and, as the ground is excellent for holding, a vessel may safely anchor here during the summer months. Water may be obtained by ascending the River St. John to the islands, a distance of 2 miles. In the spring of the year, there is often 9 feet of water in the entrance of this river, which is between two points of sand; and there are 12 feet of water in the narrow channel for some distance within. At the islands the river becomes shallow and rapid. Two miles northward of Douglas is Cape Haldimand, a bluff point of cliff, and the south-eastern termination of the range of hills which separates the harbour, basin, and S.W. arm, from the valley of the River St. John.

GASPE' HARBOUR. From the N.E. side of Cape Haldimand, Sandy-beach Point runs out to the northward, and forms the Harbour of Gaspé. It is a very low and narrow point of sand, convex to seaward, on which side the water deepens gradually from high water mark to the depth of 3 fathoms, a distance of nearly half a mile: on the inside it is as bold as a wall. Thus this spit, apparently so fragile, becomes a natural dam or breakwater, upon which the heavy swell, which often rolls into the bay, can produce no effect, expending its strength in the shoal water before reaching the beach. The water deepens immediately outside of 3 fathoms, all along the outside of Sandy-beach Point, and also of its north extremity; so that it is both dangerous and difficult to beat in or out of the harbour at night; the lead giving little or no warning.

To the northward of Sandy-beach Point, at the distance of nearly a mile, is the Peninsula, which is a low sand covered with spruce trees, and it has several whale sheds near its west point. Between the shoal water in the bay to the eastward of the Peninsula, and that which extends from the extremity of Sandy-beach Point, is the narrowest part of the entrance to the harbour, which is 420 fathoms wide and upwards of 11 fathoms deep in the centre.

To run into the Harbour of Gaspé, attend to the following directions and remarks. On the N.E. side of the N.W. arm there is wooded point with low clay cliff $2\frac{3}{4}$ miles above the Peninsula. This appoint appears as if it were the extreme on that side, when seen over the end of the

Peninsula from a vessel approaching the entrance of the harbour, and is called Point Panard. Now this point (seen over the Peninsula) in one with the inner or north side of the whale sheds before mentioned, is the mark for the northern extreme of the shoal off Sandy-beach Point. The extremity of the spruce trees is as far within the whale sheds, as these last are from the sandy extremity of the Peninsula. On the inner side of the Sandy-beach Point, and near to its junction with the mainland, stands a wooden windmill. Keep Point Panard in one with that extremity of the spruce trees on the Peninsula, bearing 47° W. until the windmill just mentioned, comes in one with the west or inner side of the end of Sandy-beach Point, bearing S. $\frac{1}{2}$ ° W. when you may haul into the anchorage under the point, or steer for the basin. When beating in, tack by the lead from the N.E. side of the bay, and in the board towards Sandy-beach Point, put the helm down the instant the marks for leading in, just given, come in one.

At night, when neither Sandy-beach Point nor the Peninsula can be seen, it becomes rather a difficult affair to take a vessel into the harbour. The only guide then is the lead, soundings should be first struck on the N.E. side of the bay, about two miles outside of the entrance of the harbour, and the edge of the shoal water on that side should be followed, in from 5 to 7 fathoms, until you judge, by the distance run, and the change which takes place in the direction of the edge of the bank which you are running upon, that you are approaching the Peninsula and have passed Sandy-beach Point, and can in consequence venture to haul to the southward into the anchorage. To form this judgment accurately is the difficult part of the process, and as to fail in this would probably cause the loss of the vessel, if the usual heavy swell should be rolling into the bay with S.E. winds, Captain Bayfield recommends a vessel rather to trust to her anchors off Douglas Town than to make the attempt. In case of a vessel which has lost her anchors, the directions which have been given may prove of use. Within Sandy-beach Point, the shelter is complete from all winds; the bottom is mud, and the depth nowhere exceeds $11\frac{1}{2}$ fathoms.

Off Cape Gaspé there are several rocky patches, frequented by the fishermen. They all lie in the same direction from Flower-pot Rock, S.S.E. $\frac{1}{2}$ ° E. The first is a small patch with 8 fathoms least water, the second has 16 fathoms, and the third 10 fathoms. Their distance from the Rock are seven-eighths, $1\frac{1}{2}$, and 13 miles respectively. There is deep water and irregular soundings between them.

CAPE GASPE' TO CAPE CHATTE. Between Cape Gaspé and Cape Chatte, a distance of 117 miles, the Coast is bold and high, free from danger but quite destitute of harbours.

CAPE ROZIER lies N. $\frac{1}{2}$ ° E. distant 7 miles from Cape Gaspé. It is low and of grey-wacke and slate rocks. Off it the shoal water does not extend above one-third of a mile, but in the bay to the southward of it, at the distance of $1\frac{3}{4}$ miles, there is a reef which runs out half a mile from the shore. Vessels may find shelter under this Cape from N.W. winds, but the ground is not very good, and the easterly swell that frequently rolls in renders it a dangerous anchorage.

GRIFFIN COVE and RIVER, are $6\frac{1}{2}$ miles N.N.W. from Cape Rozier. In it are from 2 to 3 fathoms of water, over sandy bottom. It is of no use to shipping except to obtain supplies of water, wood, and occasionally, fresh provisions.

GREAT FOX RIVER is $11\frac{1}{2}$ miles N.N.W. from Cape Rozier. It is a mere brook which enters a small bay about three-quarters of a mile wide, and half a mile deep. Off each point of the bay there are reefs which diminish the breadth of the entrance to less than a quarter of a mile, and afford shelter to boats and small schooners, in from 2 to $2\frac{1}{2}$ fathoms, over a bottom of fine dark sand. Round the head of the bay there is a fine sandy beach. Outside the reefs, there are 15, 18, and 24 fathoms, over a bottom of sand and broken shells. In fine summer weather a vessel might anchor off this place, and obtain water, wood, and supplies of fresh provisions; but it is otherwise of no use to shipping.

GREAT POND lies 16 miles N.W. $\frac{1}{2}$ N. from Great Fox River. It is a small creek which affords shelter only to boats, and will be known by the houses and stages of the fishermen.

MAGDALEN RIVER is 24 miles N.W. $\frac{1}{2}$ W. from Great Pond. The mouth of this river is on the N.W. side of a sandy bay and close under Cape Magdalen, its N.W. point, which is rocky, with cliffs of moderate height, and juts out a very short distance from the range of hills which forms the coast line. A reef of rocks, which partly dry at low water, extends from Cape Magdalen, about 200 fathoms to the S.E. parallel to the coast, and shelters the entrance of the river from the northerly winds. The river is 30 yards wide at the entrance, and 7 feet deep at low water; within, for a very short distance, there are 10 feet over a clean bottom of fine sand. Further up, the river becomes shallow and rapid, winding its way between the mountains. Thirteen feet of water can be carried into this river at spring tides, so that it is a considerable stream, and is occasionally visited by schooners from 30 to 80 tons, which warp in when the sea is smooth and the weather fine. The bay is not deep, being merely a gentle curve with a sandy beach for about a mile to the S.E. of the river. Vessels may anchor here in 7 fathoms, over a bottom of sand, fine gravel, and broken shells, at the distance of three-quarters of a mile from the sandy beach, and from the N.W. point bearing W.N.W. The shelter is from W.N.W. round by S.W. and S. to E.S.E. but it is only a fine weather anchorage, which may be of use to vessels wanting wood and water.

MONT LOUIS RIVER is a much smaller stream than the Magdalen River. It is 16 miles further along the coast to the W.N.W. There are 7 feet in the entrance at high water, and for a short distance within. The small bay with sandy beach at its head, is a mile wide, and nearly three-quarters of a mile deep. Vessels may anchor in it during fine weather, in from 8 to 16 fathoms, mud bottom, nearer the west than the east side. The holding ground is excellent; but since a vessel ought not to be more than 300 fathoms distant from the west side of the bay, there is not much room to work out, and therefore it would be dangerous for a large vessel to be caught there by a wind on the land. Small vessels, or ships having occasion to stop for a few hours for wood or water, may safely anchor there in fine weather, and will find shelter in all winds, from W.N.W. round by S. to E.S.E. Mont Louis may be thus recognised. In a vessel off this part of the coast, four well marked openings will be seen in the high land in a space of 10 miles. The eastern opening is Grande Malte River; the next, westward, is Mont Louis River; and the two others, Claude and Pierre Rivers. None of them affords good anchorage, excepting Mont Louis. On approaching near the shore, an attention to the cliffs will point out Mont Louis River and a doubt.

There is nothing worthy of remark for 26 miles further westward to Cape St. Anne, after which the mountains begin to recede a little from the shore, and to diminish in height.

ST. ANNE RIVER, which is 6 miles west of the high cape of the same name, and 10 miles east of Cape Chatte, can be entered by small schooners at high water. It flows into the sea through the sandy beach of a bay, which affords very indifferent anchorage, the depth of water being too great, excepting at a less distance from the shore than would be considered prudent for any but small vessels.

CHATTE RIVER, $2\frac{3}{4}$ miles eastward of Cape Chatte, is much smaller than the River St. Anne, and enters a much smaller sandy bay affording no anchorage for ships. The east point of this bay is a low spit with a reef, off it half a mile. Small coasting schooners occasionally anchor under it in westerly winds.

CAPE CHATTE, when seen from the eastward or westward, can easily be distinguished, being a round hill separated from but of less height than the land behind it. The long line of coast between Gaspé and Cape Chatte, though so free from danger, has nevertheless to be guarded against in dark foggy nights, since the water is every where along it too deep to afford sufficient warning by the lead for the safety of vessels. The shore along its whole extent excepting in some of the bays, is of highly inclined slate and grey-wacke rocks, which would cut through a vessel's bottom in a very short time; and such is the impracticable nature of the country, that those who might escape to shore would run great risk of perishing from want before they could reach a settlement.

CAPE CHATTE TO GREEN ISLAND.

The south coast of the River St. Lawrence, from Cape Chatte to Matan, is straight, bold, and of the same rocks as that which has been already described. Although not a high coast, it is still of considerable elevation above the sea, and the St. Anne Mountains continue in the rear of it, at the distance of about 5 leagues, to their south-western termination, which is 15 miles south of Cape Balance, the last being 25 miles westward of Cape Chatte. Several detached hills will be seen further to the westward, which are also at a considerable distance from the coast. Two of these have been named the Paps of Matan, though they can with difficulty be made out when bearing S.W.; on any other bearing it is still less easy to distinguish them, but they are of no use except to enable a vessel, obtaining a sight of the land, to judge how far she is up the River St. Lawrence.

The RIVER MATAN is a fine stream, 33 miles W. $\frac{1}{2}$ S. from Cape Chatte, the depth of water over the bar is usually 4 feet at low water, and 15 at high water spring tides. The channel is very narrow, and there are several large boulder stones in it lying on the sand, which diminish the depth 2 feet, and are extremely dangerous when there is any swell. The bar is continually shifting from the effects of gales of wind, so that no directions can be given for sailing in. There are pilots residing here, and no vessel should attempt the entrance without one. Inside the bar, the entrance between two sandy points is not more than 30 fathoms wide, and a very rapid current runs out during the ebb tide. There is not room enough for a vessel to lie safely afloat inside; but, nevertheless, considered as a tide harbour, it is a useful place to coasting

schooners, which ground at half tide on a good bottom of mud and stone. To a vessel which had lost her anchors, or which had received injury, this river would afford a place of refuge in which she could be safely repaired and refitted. The sandy beach extends about $\frac{1}{2}$ of a mile to the eastward of the entrance, and incloses a large space, dry at low water, with the exception of the narrow and rapid channel of the river which is full of stones. The tide ascends about a mile, to a rapid over a ledge of rocks, above which the stream is swift, shallow and navigable for canoes. Outside the bar there is anchorage in 5 fathoms half a mile off shore, and in 10 fathoms a little further out, the bottom being of sand and clay. The coast from Matan to Metis is low, rocky, wooded, unbroken, and may be approached with care by the lead, the bank of soundings becoming gradually wider as you proceed to the westward.

LITTLE METIS BAY is 23 miles W. $\frac{3}{4}$ S. nearly, from Matan. It is small and divided into two rocky coves which are open to the eastward and dry at low water. Little Metis River is at the head of the southern cove. There are several buildings, and a fishing establishment on Metis Point, the outer point of the bay. A reef which is very bold on its north side, runs out from this point nearly three-quarters of a mile to the eastward, and enables small vessels to remain at anchor, in 3 fathoms, over mud bottom, with the wind as far to the northward as N.W. Some of its rocks are always above water. In this berth vessels lie midway between the eastern end of the reef and a large round rock near the shore on the S.E. side of the bay. Larger vessels may anchor further out in 5 or 6 fathoms of water, but not in the stream of the reef, where the ground is foul and rocky.

The east end of the reef may be passed by the lead in 4 fathoms, or with the round rock bearing S.E.; but large vessels had better not bring it to bear to the eastward of S.S.E. This rock which is about $1\frac{1}{2}$ miles E.S.E. from the reef off the outer point of the Bay, will serve to point out Little Metis to strangers. It cannot be mistaken for Grand Metis, since there is no resemblance in the shapes of the bays. Neither place can be easily made out from a greater distance than 5 or 6 miles, because the points are very low.

GRAND METIS BAY is separated from Little Metis by Metis Point. Grand Metis River lies 5 miles westward of Little Metis; it is near the west end of the Bay, and is nearly dry outside of the very narrow entrance at low water. The bay is about 3 miles wide and nearly a mile deep, but it is all shoal; small vessels may anchor in $3\frac{1}{2}$ or 4 fathoms, under its east point, close to the edge of the shoal water, and in tolerable shelter from winds along the coast, but there is no shelter for shipping. Nevertheless, vessels lie here all the summer months for the purpose of taking in timber. They are usually moored in 6 fathoms, at low water, over mud bottom, and with the river bearing about S.S.W. distant $1\frac{1}{2}$ miles.

COCK COVE affords good anchorage in 3 fathoms, at low water. The summit of Mount Camille bears from the west point of Cock Cove S.E. by S. 8 miles, and will serve to point out its position.

RIMOUSKY ROAD. From the west point of Grand Metis Bay, Father Point bears W. by S. $14\frac{1}{2}$ miles. It is low, covered with houses, and the regular rendezvous of the Pilots. The eastern point of Barnaby Island is 3 miles W. by S. from Father Point, and between them is the

anchorage or Road of Rimousky, where vessels ride throughout the summer to take in cargoes of lumber. They lie moored in 4 or 5 fathoms, at low water, with excellent holding ground, and sheltered from W. by N. round by S. to E.N.E. The best sheltered berth is with the eastern point of Barnaby Island bearing W. by N. Rimousky Church S.S.W. $\frac{1}{2}$ W. and Father Point E.N.E.; the depth will there be 4 fathoms at low water spring tides, over mud bottom. Small vessels may anchor further to the westward, in 3 fathoms at low water, with the east end of the rocks, off the eastern point of Barnaby Island, bearing N.W. by W. and distant a quarter of a mile. The reef does not extend above a quarter of a mile off the eastern point of Barnaby Island, and may be passed by the lead in 4 fathoms.

BARNABY ISLAND is $3\frac{1}{2}$ miles long, and very narrow. It is low, wooded and uninhabited. In the interior of the Island there is a long pond of fresh, but not good water, which last must be obtained from the River of Rimousky. Between the Island and Rimousky the channel is dry at low water; from 7 to 12 feet can be carried through it at high water, according as it is neap or spring tide, but at no time should a vessel drawing more than 8 feet attempt this passage, since there are rocks and large stones here and there, and also fish stakes. Off the outside of Barnaby Island there is a 3 fathom shoal, extending nearly a mile out, and the reef of its western end runs out in the direction of the island more than three-quarters of a mile. Between the western end of Barnaby Island and the main land there is a large, high, and Bare Rock, which is distant from the island about two-thirds of a mile. Midway between the western points of the island and Bare Rock, bearing north and south from each other, there are 2 fathoms at low water, in Barnaby Road, over muddy bottom, affording good anchorage to small vessels in all but westerly winds. Rimousky Church, in one with the eastern end of the rock, will lead over the tail of the reef off the west end of Barnaby, and into this anchorage.

From the eastern point of Barnaby Island to the eastern point of Bicquette Island, the course is west, and distance $14\frac{3}{4}$ miles. From the western point of Barnaby Island to the eastern end of the S.E. reef off the Island of Bic, the course is also west, and distance $8\frac{3}{4}$ miles. From the western point of Barnaby Island to the N.W. extremity of Cape Arignole, the course is W. by S. $\frac{1}{4}$ S. and distance 10 miles.

HA-HA BAY. There are bays on either side of Cape Arignole, but they dry at low water. The bay on the west side of the Cape is named Ha-Ha Bay. With easterly winds, there is excellent anchorage off its entrance, in 4 fathoms at low water, and further in for small vessels in 3 fathoms; but it is seldom used, because the equally safe and more roomy anchorage under Bic is justly preferred. Arignole Reef consists of two rocks lying across the mouth of the bay, on the east side of the Cape. The west end of the western rock of this reef is always above water, and bears south nearly 3 miles from the east end of the S.E. reef of Bic, and E. $\frac{1}{4}$ N. $1\frac{1}{4}$ miles, from the N.W. extremity of Cape Arignole; but it is distant only a quarter of a mile from the rocks off the east side of the Cape. This western rock is a quarter of a mile long, and very narrow. The eastern rock is small, covered in high tides, and one-third of a mile east from the other. These two rocks are very bold to the northward, and there are 5 or 6 fathoms of water between them; vessels may pass between them and

the main by keeping close to them, but can seldom have occasion to try so dangerous a passage.

The west point of Old Bic Harbour E.S.E. $\frac{1}{2}$ E. 1 mile from the east end of the reef. This harbour dries at low water, and has many rocks in it. Two round and high rocky islets, called the Bicoques, will be seen extending to the westward of its east point, and diminishing the breadth of the entrance to two-thirds of a mile. Midway between these rocky islets and the west point of the harbour, small vessels may anchor in Old Bic Road in 3 fathoms, at low water, with muddy bottom, and with the point bearing west, and distant one-third of a mile. To run into this anchorage from the N.W. keep the westernmost of the two rocky islets its own breadth open to the eastward of the west point of the harbour, and you will clear the eastern rock of the Cape Arignole reef, which is the only danger.

BIC ISLAND lies off Cape Arignole, distant $2\frac{1}{4}$ miles. It is about 3 miles long, and 1 mile broad. Water can only be obtained from the bay between the east and S.E. points of the island, and not always there in dry seasons; but vessels may supply themselves from the river in the S.E. corner of Old Bic Harbour, or from a stream on the west side of a small bay of the main land 4 miles westward of Cape Arignole.

BICQUETTE ISLAND lies three-quarters of a mile to the northward of Bic; it is half a mile long, by a quarter of a mile broad, and about 100 feet high above the sea. Large rocks above water extend one-third of a mile to the east and S.E. of the island, and diminish the breadth of the channel between it and Bic to little more than half a mile. Off the west end of Bicquette, in a S.W. by W. $\frac{1}{2}$ W. direction, there are two large rocks always above water, and a third which covers at high water; these lie nearly in a line, and extend to the distance of a mile from the island.

THE N.W. REEF OF BICQUETTE is the greatest danger, lying due west from the west end of the island, and at the distance of $1\frac{1}{4}$ miles. The cross mark for it is the west end of Bic in one with the N.W. point of Ha-Ha Bay, bearing S.S.E. $\frac{3}{4}$ E.; but this last named point can seldom be plainly made out, in consequence of the high land behind it. In approaching this reef from the westward, the north extremity of Cape Arignole should not be shut in behind the west point of Bic. This reef is composed of two rocks about 150 fathoms long, and which just cover at high water; both it and Bicquette are very bold to the northward. There is deep water all along the line from the north side of Bicquette to this reef, and also between the latter and the rocks to the S.E. of it; but these are dangerous passages, which ought not to be generally tried, though it is useful to know of their existence in case of emergency.

BICQUETTE CHANNEL. The south-western reef of Bicquette is most in the way, and there are also two small round rocks on the Bic side, 200 fathoms off shore, and bearing nearly south from the west end of Bicquette. To avoid the first of these dangers, do not bring the south extremity of the rocks off the S.E. side of Bicquette to bear to the east of E.N.E. $\frac{1}{2}$ E.; and if you do not bring the north side of Bic, near its east end, to bear to the northward of E. $\frac{1}{2}$ N. you will clear the second, which however, always shows, excepting in very high tides. These directions are, however, insufficient without the chart, which must be carefully consulted, for this is an intricate and dangerous place. The best time to run through is at low water, when all the dangers show,

and a vessel, keeping in mid-channel between them, will have from $9\frac{1}{2}$ to 5 fathoms, with irregular soundings and foul ground occasionally.

Bic Island has another set of dangers of its own. The first of these dangers is the S.E. REEF, which extends out from the S.E. point of the island to the distance of nearly $1\frac{3}{4}$ miles in an E. by S. direction. The outer part of this reef is formed of three rocks lying in a straight line, and always above water. The two easternmost are the largest, and are nearly joined together, whilst the westernmost of the three is detached, so as to leave a channel through the reef 150 fathoms wide, and 5 fathoms deep. Large vessels should not attempt to pass between these rocks, or between them and Bic, for the tides are rendered irregular by the uneven bottom, and there is much foul ground about. Small schooners can pass on either side of the western rock, keeping close to it, if they pass to the westward. The shoal water does not extend beyond a cable's length from the east end of the S.E. reef: the rocks above water are bold, both on their north and south sides. The inner part of the reef, extending under water from the S.E. point of Bic, reaches further to the southward than the direction of the rocks, and must be avoided by not bringing the south side of Bic to bear to the southward of W. by S.

THE N.E. REEF OF BIC is a small patch of black rocks, which shows at low water, lying N.E. by E. 400 fathoms from the N.E. point of the island, and N.W. $\frac{1}{2}$ W. rather more than one mile from the east end of the S.E. reef. To clear this reef to the eastward, keep both the rocky islets on the east side of Old Bic Harbour open to the eastward of the S.E. reef, bearing nothing to the eastward of S.E. by S.

THE WEST GROUNDS OF BIC partly dries at low water. The outer point of these Grounds, in 3 fathoms, bears W. $\frac{1}{2}$ S. from the west point of the island, distant nearly three-quarters of a mile; and they may be approached by the lead, as nearly as 5 fathoms, at low water.

THE ALCIDE ROCK is extremely dangerous, and lies much in the way of vessels passing through the Bic Channel, between that island and the main land. It is a small rock, about 6 feet long and 2 feet wide, having 4 feet water on it at low water, and standing on a small rocky shoal, 100 fathoms long, parallel to the coast, and about half as wide. This shoal is so bold all round that there is no warning whatever by the lead; it lies due S.W. from the west point of Bic, at the distance of nearly $3\frac{3}{4}$ miles. From the N.W. extremity of Cape Arignole, it bears W. $\frac{1}{2}$ S. distant 5 miles; and it is rather more than $1\frac{3}{4}$ miles distant from the shore to the southward. There is no close leading mark for clearing this Rock, but if Mount Camille be not entirely shut in behind Cape Arignole, vessels will be in no danger from it.

The above mark, together with the bearings given, will be a sufficient guide to vessels beating through between Bic and the main, in their board to the southward; in their board to the northward, towards the West Grounds of Bic, vessels must not shut in the S.E. reef behind the south side of Bic. All along the south side of Bic, and the S.E. reef, they may safely stand into 7 fathoms at low water, not, however, without remembering what has been said respecting the inner part of the latter. Cape Arignole and its reef are quite bold to the northward, and further to the eastward, between Old Bic Harbour and Barnaby Island, vessels may safely stand in to $4\frac{1}{2}$ fathoms at low water: the ground is all clean sand and mud bottom, with excellent anchorage in every part.

There is excellent anchorage under either end of Bic, and also between it and the main land, according to the wind; and vessels which may be met by an easterly wind had better anchor than attempt to beat down the River St. Lawrence in the long and foggy nights of the fall of the year. More shipwrecks have arisen in consequence of vessels obstinately endeavouring to beat down against an easterly gale, with its accompanying fog, than from any other cause; and yet all that they can gain by such a course might be run in a few hours of fair wind.

A vessel being to the north-eastward of Bic, with the first of an easterly gale, should bear up before the weather becomes thick, and steer for Bic Channel. The S.E. reef will be seen, and vessels may pass a quarter of a mile to the southward of it, or by the lead, coming no nearer to it and the south side of Bic than 7 fathoms at low water. Having run to the westward $1\frac{1}{4}$ miles past the west end of Bic, haul to the northward with the lead going, and taking care not to approach the West Grounds nearer than 6 fathoms at low water, until the south side of Bic bears E. $\frac{1}{2}$ N. and the north side N.E. by E. With these bearings, anchor with 7 fathoms at low water over muddy bottom. In this position you will have the S.E. reef shut in behind the south side of Bic: Bicquette and its rocks will be all open to the N.W. of Bic: the N.W. reef of Bicquette will bear N. $\frac{1}{2}$ E. rather more than $1\frac{3}{4}$ miles: you will be fully half a mile to the westward of the 3 fathom mark on the outer extremity of the west of Bic, and consequently will have plenty of room to get under weigh with the first of the westerly wind, when you should cast to the southward and run through Bic Channel to the eastward. A wind from the southward, together with the set of the ebb tide, might perhaps render it preferable to run out to the northward, round the N.W. reef of Bicquette; in which case do not go to the eastward into less than 8 fathoms, at low water, nor shut in the north extremity of Cape Arignole behind the west point of Bic.

If it be night, and yet not so dark but that the principal feature of the land can be made out, although it might be dangerous to attempt to make the low S.E. reef, another mode of proceeding may be adopted, under the circumstances above contemplated, and supposing the position of the vessel to be known. In that case, run in to the southward, towards the main land, half way between Barnaby Island and Bic, until you shoal to 5 fathoms, at low water; then steer west by compass, but corrected for deviation, and you will deepen your water gradually. When you arrive at 9 fathoms you will be past Old Bic, and will probably see the opening of that harbour to the southward of you. When you arrive at 11 or 12 fathoms, you will be past the Cape Arignole Reef, and will soon begin to shoal again on the Bic side of the channel. If it be too dark to see the island, go no nearer than 7 fathoms. When you judge yourself far enough to the westward, haul gradually to the northward into the stream of the island, and anchor as near the position previously pointed out as you can. It is not, however, necessary that you should be in that position, although it has been recommended as the best sheltered; for you may anchor, and will ride easily, anywhere under and within 3 miles of the island, in 8, 9, or 10 fathoms, at low water; and large and heavy ships would, perhaps, wish to lie further off.

In the case of a vessel to the northward of Bic, and wishing to run to the same anchorage from the N.W. so as to pass to the westward of the N.W. reef of Bicquette, run to the westward, going no nearer to

Bicquette and the N.W. reef than 30 fathoms, till the extremity of Cape Arignole becomes open to the S.W. of Bic, bearing S.E. $\frac{1}{2}$ E.; then haul to the southward, going no nearer to the reefs of Bicquette than 8 fathoms, and anchor as before directed.

Vessels running down from the westward to anchor under Bic, should keep Mount Camille open to the northward of Cape Arignole, to clear the Alcide Rock. Then running along the south side of Bic, and the S.E. reef, they should haul round the east point of the latter, no nearer than a quarter of a mile, nor than 8 fathoms, and anchor, with the east point of the S.E. reef bearing S.W. $\frac{1}{2}$ S. three-quarters of a mile, in 10 fathoms, at low water, over clay bottom. The N.E. point of Bic will then bear west a little southerly, the N.E. point of Bicquette W. $\frac{3}{4}$ N. and the whole of Cape Arignole will be just open to the southward of the S.E. reef. Large ships may anchor further off to the eastward, if they please, but in the berth before recommended a vessel will have plenty of room to cast to the southward, and weather the S.E. reef, in case of a sudden shift of wind. Should she, however, prefer going to the northward round Bicquette, let her beware of the N.E. reef of Bic, the position of which has been already described; and also, particularly if the wind be light, of the in-draught of the flood tide between Bic and Bicquette. With northerly winds vessels may anchor anywhere in Bic Channel, but the best berth is off a small sandy point nearly in the middle of the south side of Bic Island, in $8\frac{1}{2}$ or 9 fathoms at low water, over muddy bottom, at three-quarters of a mile off shore.

TIDES. To the westward of Bic, the first of the flood comes from the N.E. but there is very little stream of flood in neap tides between Bic and the main land, excepting close to the latter. In spring tides, it runs through the channel at the average rate of $1\frac{1}{2}$ knots, being strongest near the main land. It also runs between Bic and Bicquette, but the stream extends only a very short distance outside the latter island.

The stream of flood continues its course close along the main land, passing inside, and also very close outside, of the Razades, Basque, and Apple Island; but nowhere extending a sufficient distance off shore to be of use to ships beating to the westward much below Green Island. That part of the stream of flood which passes further out towards Bic, and also that which passes between Bic and Bicquette, runs at its full rate only until half flood, after which it becomes gradually weaker, turning to the N.W. round the west end of the island, and finally to the north and N.E. towards the end of the tide.

The stream of flood becomes weaker, and of less duration as you proceed to the westward of the islands. Half way between Bic and the Razades, there is slack water for about an hour at the end of the ebb; after which a weak flood makes during the first quarter of that tide, at the rate of a quarter of a knot; and this is succeeded by the eddy flood, at the rate of $1\frac{1}{2}$ knots, or $2\frac{1}{2}$ at the edge of the Bank of Soundings, which comes from the westward, running in the same direction as the ebb during the remainder of the flood tide.

The set of the latter part of the flood to the northward, past the west end of Bic, should be remembered by vessels weighing from the western anchorage, or approaching the island with light winds, especially in the night, or thick weather.

The first of the ebb sets off shore, or from the southward, and this is more particularly remarkable at the eastern anchorage, but it only lasts

for a very short time, after which the stream runs fairly between the islands and along the coast to the eastward for the remainder of the tide. Its rate, in westerly winds, varies from 2 to $2\frac{1}{2}$ knots, according as it is neap or spring tides, but it does not run so strongly in easterly winds.

The South Bank is both to the eastward and westward of Bic and Bicquette, and the assistance which the soundings on it may afford to vessels at night, or in fogs, will be evident. If vessels, on approaching those islands from either direction, will but use their leads in reference to the soundings in the Chart, and attend to the directions given, they can scarcely run foul of Bicquette, or its reefs, as has so often occurred in times past. The 30 fathoms edge of the south bank is 7 miles north of Barnaby Island, and $1\frac{1}{2}$ miles north of the N.W. reef of Bicquette. Between those points, the edge of the bank continues in a slightly undulating line. Every where within that line there is much less water, and to the northward of the south bank, in every part, there is no bottom with from 60 to 80 fathoms of line, quite over to the north coast. The 30 fathoms edge of the bank is $4\frac{3}{4}$ miles north of the N.E. Razade Islet, and is nearly straight from that point eastward to off the N.W. reef of Bicquette.

To the westward the south bank becomes gradually wider, its northern edge pursuing a direction from off the Razades towards the north side of the Red Islet Reef. There is nowhere more than 36 fathoms at low water upon it, until you arrive within 2 miles of the line joining the N.E. extremities of the Red Islet and Green Island Reefs, and this increase in the depth of water is a valuable indication to a vessel approaching that dangerous pass in thick weather, when the Green Island light cannot be seen. There is anchorage in 10 or 12 fathoms, with good holding ground, all along the south coast from Bic to Green Island.

Between Bic and the Razades the coast of the main land is high and rocky, with the exception of the Alcide Rock, which is free from danger to small vessels, that may stand close in: but ships should not stand in further than 7 fathoms at low, and 9 fathoms at high water, because of a long ridge of rocky ground extending 5 miles to the E.N.E. from the N.E. Razade Islet, with 17 feet water near its eastern end. To clear every part of this ridge, keep Basque Island its own breadth open to the northward of the N.E. Razade.

The RAZADE ISLETS are two large rocks, which bear from each other S.W. $\frac{1}{2}$ W. $1\frac{1}{2}$ miles. The north-easternmost of these Islets bears from the N.W. reef of Bicquette S.W. $\frac{3}{4}$ W. nearly 15 miles, and is distant $1\frac{1}{2}$ miles from the main land to the southward; between them and the shore there is no passage for vessels. W.S.W. from the N.E. Razade Islet, distant 5 miles, is BASQUE ISLAND, about $1\frac{1}{4}$ miles long, and 200 fathoms wide. It is rocky, and there is no passage for ships between it and the shore, from which it is distant 2 miles. Near the S.W. end of this Island a sandy spit runs out, a quarter of a mile to the southward. Close off the end of this spit, there is a long and narrow hole 4 or 5 fathoms deep at low water, in which small craft may be secured. The shoal water extends half a mile to the northward of Basque Island, and there is a reef of rocks to the N.W. and W. of its west point. On the western extremity of this reef, and about 600 fathoms distant from the island, is a round rock which shows at half tide.

APPLE ISLAND is W.S.W. $\frac{1}{4}$ W. nearly 3 miles from Basque Island. Between it and the shore there is no passage for ships, but its north

side is very bold, there being 4 fathoms at the distance of a cable's length.

GREEN ISLAND. The east end of this Island is a long and narrow point of rocks, always above water, and running out more than half a mile from the trees towards Apple Island, which is distant from it $2\frac{3}{4}$ miles in an E.N.E. direction. Half this distance towards Apple Island is occupied by reefs of slate, which dry at low water. In the remainder, there are a few feet of water, affording a passage for small schooners, which run in between Green Island and the main at high water.

GREEN ISLAND LIGHTHOUSE stands on the north point of the Island, nearly 2 miles from the eastern extremity of the rocks above water off its east point: and W.S.W. $\frac{1}{4}$ W. $4\frac{3}{4}$ miles from Apple Island. It shows a fixed light 60 feet above the sea, and can be seen in clear weather from the distance of about 12, 14, or 17 miles, according as the height of the observer's eye is 10, 20, or 60 feet. The tower is square, white, and 40 feet high. Behind the Lighthouse, at the distance of about a quarter of a mile, and bearing S.S.E. $\frac{1}{4}$ E. from it, there is a white beacon for leading clear of the tail of the Red Islet Reef.

The **GREEN ISLAND REEF**, which is very dangerous, runs out from the Lighthouse N.N.E. $\frac{1}{2}$ E. $1\frac{1}{4}$ miles to the 3 fathom mark. From its N.E. extremity, it trends E. by S. till it joins the shoal water connecting Green and Apple Islands. Its N.W. side is straight, running S.W. by S. from its N.E. extremity to the shore close to the westward of the Lighthouse; off which it extends only 200 fathoms to the N.W.; the rocks on it dry at low water, nearly three-quarters of a mile out from the high water mark. On the eastern side, this reef may be safely approached by the lead to 7 or even 6 fathoms at low water; but on the north, N.W. and west sides, there is no bottom with the hand lead until close to it. Half a mile north, and N.W. of it, there are between 20 and 30 fathoms of water; at the distance of 1 mile N.W. from its N.E. extremity, there are between 40 and 50 fathoms; and at the distance of $1\frac{1}{2}$ miles in the same direction, there is no bottom for a short space with 50 fathoms of line.

Deep as the water is to the northward of this dangerous reef, there is no other guide, in a thick fog when the light cannot be seen, but the soundings: yet it will never do to lose command of the vessel by rounding to, in the rapid ebb tide, (which sets upon the reef at the rate of 5 knots) for the purpose of getting bottom in the usual way by the common deep sea lead.

To clear Green Island Reef, in the day time and clear weather, keep the summit of the high land to the southward of Cape Arignole, (or the high land of Bic) open to the northward of Basque Island.

There is excellent anchorage in westerly winds under the Green Island Reef; it is the general rendezvous of vessels waiting for the flood, to beat through between Green and Red Islands. But as the first of the flood comes from the northward, and sets on the shoals, vessels had better not anchor with the light bearing to the westward of S.W. $\frac{1}{2}$ W. or in less than 7 fathoms at low water. With that depth, on that bearing, they will be $2\frac{1}{2}$ miles from the light, one mile from the eastern edge of the reef, and the same distance from the shoal water to the southward. If they wish still more room, they may choose their berth in 9, 10, or 11 fathoms, and will find a bottom of stiff mud in either depth.

TIDES. When lying at anchor, with the light bearing S. 55° W. and distant 3 miles, and in 8 fathoms at low water, Capt. Bayfield observed, that the first of the flood came from the northward; the vessel then tended gradually round with her head to the N.E. east, and S.E. at the end of the tide. The vessel continued to go round with the first of the ebb, which came from the southward off the shoals, to the S.W. west, and N.W. which latter point she reached at about 2 hours ebb; and she continued with her head in that direction, from which the tide came, until near the end of the tide. She then began to tend again, with her head to the north and N.E. as before, going completely round the compass in 12 hours. It was never entirely slack water, the stream continuing to run more or less, during the whole time. The rate of the ebb was 3 knots, and that of the flood 2 knots. This occurred in a perfectly calm day.

ST. JOHN'S RIVER TO THE SAGUENAY. THE NORTH COAST OF THE GULF AND RIVER ST. LAWRENCE.

From the River St. John to the River Moisie, the course is W.N.W. $\frac{1}{4}$ W. and the distance 69 miles. The whole of this long line of coast is not by any means so bold as it appears from a distance, for there are many rocks along it both above and under water, several of which are very dangerous and nearly 1 mile from the shore. There are soundings off every part of this coast, but it is not advisable for those who may not be fully acquainted with it to approach the shore between Magpie and Basin Rivers nearer than 20 fathoms. Still greater caution becomes necessary between the last named river and Point St. Charles, where 40 fathoms is as near as a large ship can approach with prudence, for that depth in several places will be found within 1 mile of the rocks.

THE RIVER ST. JOHN is a large stream, with a depth of water varying from 1 to 3 fathoms at low water. The course of the river, for several leagues up from the entrance, is between high cliffs of sand and gravel, over clay with small sandy islands occasionally. At the entrance, the river is 130 fathoms wide, the breadth increases to nearly half a mile immediately within the entrance, and then decreases again gradually, being nowhere less than 100 fathoms wide in the first 6 miles. There are two log houses on the west bank, half a mile within the entrance, where a party of men occasionally reside to fish for salmon; and vessels may lie close to them in 2 fathoms at low water.

An extensive bar of sand, half a mile out from the entrance, shifts with every gale of wind, and has seldom more than 3 or 4 feet over it at low water; at high water there are 7 or 10 feet on the bar, according as it may be neap or spring tide. Southerly and westerly winds cause so heavy a surf as to render the bar impassable. There is good anchorage outside the bar, which may be safely approached by the lead, the soundings decreasing gradually from 20 to 3 fathoms, over sand and clay bottom; the greater depth being at $2\frac{1}{2}$ miles, and the lesser at three-quarters of a mile from the river's mouth. The entrance of the river lies nearly $6\frac{1}{2}$ miles N. 31° W. from the Perroquets, which are the westernmost of the Mingan Islands; and Mount St. John, an

isolated saddle-backed hill, 1416 feet above the sea at high water, bears N.E. $\frac{3}{4}$ N. 11 miles from the entrance.

MAGPIE RIVER lies 5 miles N.W. $\frac{1}{2}$ N. from the River St. John. It is a large and rapid stream, with several rocks above and under water off its east point of entrance, and one-third of a mile off shore. The entrance of this river is only 10 fathoms wide, and the ebb tide rushes out of it in a torrent 5 fathoms deep. One hundred and fifty fathoms within this narrow entrance, the river falls about 30 feet over granite rocks. There are from 7 to 9 feet at low water over the bar outside, but as this river is of no use either to vessels or boats, it is unnecessary to describe it further. Nearly a mile to the westward of the river, and one quarter of a mile off shore, on the west side of Magpie Bay, there is a rocky shoal on which the sea always breaks at low water.

The course and distance across Magpie Bay, from the River St. John to Magpie Point, is W.N.W. 8 miles. There is good anchorage, with winds off the land, in Magpie Bay; and vessels may stand in to 7 fathoms at low water, in every part of it, but the southerly and westerly winds roll in a very heavy sea. Three and a half miles W.N.W. $\frac{1}{2}$ W. from Magpie Point is Ridge Point, from which a long and narrow ridge of rocky ground, with from 4 to 6 fathoms at low water, extend $4\frac{1}{2}$ miles to the westward, across a bay wherein there is one large and several small rocks above water. The western side of this rocky ground is nearly 1 mile off to the southward of Thunder Point. There is a very heavy sea upon this ridge at times, and it then becomes dangerous to large ships. There are 20 fathoms of water close outside of it in some parts, and 30 fathoms is quite near enough to its west end.

SAWBILL RIVER is situated in the bay, between Sheldrake and Ore Points, and $23\frac{1}{2}$ miles westward of the River St. John. It may be distinguished by the clay cliffs immediately within the entrance, and by the peculiar hills on either side of it, which are barren, and thickly studded with small round mounds. This river affords shelter to boats and small coasting craft, but it can only be entered in fine weather, in consequence of the heavy surf. It has scarcely any bar; but the entrance, at the western extremity of a long and narrow spit of sand, which extends across the river's mouth, is very narrow, and from 4 to 11 feet deep, according to low or high water in ordinary spring tides. At high water neap tides there is seldom more than 9 feet of water. The same depth continues only for a short distance within the entrance. Nine miles S. by E. from the entrance of this river, there is a bank of sand, gravel, and broken shells, on which cod-fish abound, and there are upwards of 60 fathoms between it and the shore.

SHALLOP RIVER lies $7\frac{1}{2}$ miles further to the N.W. by W. It affords shelter only to boats, and can only be entered when there is no surf. There are several rocks, both above and under water, off this river, and also off Sandy River, a small stream about $2\frac{1}{2}$ miles further westward. The outermost of these rocks lies fully half a mile from the shore.

MANITOU RIVER is $4\frac{1}{2}$ miles N.W. by W. of Shallop River. It may be readily distinguished from a vessel several leagues off the coast, by two remarkable patches of Clay Cliff, one of which is close to the eastward, the other about 1 mile to the north-westward of its entrance.

To enter this River, keep close along the rocky west side of Manitou Point, leaving on the larboard side the sandy spit close within it, which stretches out from the sandy west point of the entrance. The channel

is always in this position, but it is more or less wide and deep according to the season, and the winds which may have recently prevailed. In general, the channel is about 30 fathoms wide and 5 feet deep at low water, whilst at high water 9 feet in neap tides, and 12 feet in spring tides, may be carried in. Strong southerly and westerly winds cause a heavy surf, and render the entrance impracticable. A short distance within the entrance there are 9 feet at low water, deepening gradually to 5 fathoms, at the first rapid, 1 mile up the river. Half a mile further up, the river falls 113 feet perpendicularly, in one broken sheet of water, forming one of the most beautiful cascades in Lower Canada.

There is good anchorage off this river. Ships may safely anchor in fine weather with the wind off shore, having the entrance of the river bearing N.E. $\frac{1}{2}$ E. $1\frac{1}{2}$ miles, where they will have 15 fathoms over mud bottom, and be more than 1 mile distant from Manitou Point, the nearest point of the shore. If they require water, they will find it at a small stream on the western shore, a short distance within the entrance; or they may row up the river until they find the water fresh. Small vessels may anchor further in-shore to the westward of the bar, and in the bay between Points Manitou and Buchan, which are 3 miles from each other; for the soundings decrease regularly in towards the shore, with sand and clay bottom, and there is no danger but a small rocky shoal which bears W. by N. $2\frac{1}{4}$ miles from the entrance of the river, S.E. $\frac{1}{2}$ S. nearly a mile from Point Buchan, and which is about three-quarters of a mile off shore. Within this shoal, there are 7 fathoms and 9 fathoms close outside of it, so that it should be guarded against by vessels beating along the coast.

BASON RIVER lies W.N.W. $\frac{1}{4}$ W. $10\frac{3}{4}$ miles from Manitou River. It has a spit of large stones extending 150 fathoms out from its east point of entrance. The entrance is very narrow, with a varying depth, which is less or more according to the prevalence or infrequency of the S.W. winds; but there is in general enough water for small coasting craft, or large boats. There are rapids a quarter of a mile within the entrance.

CAPE CORMORANT, $1\frac{1}{4}$ miles west of Bason River, is a small peninsula, on the inner side of which there are log-huts of a trading port not always occupied, and which cannot be easily seen from the sea.

BLASKOURTZ POINT is nearly 6 miles W.N.W. $\frac{1}{2}$ W. from Cape Cormorant. Between them are the Cormorant Islets, joined to the shore at low water. A small and dangerous reef, called the CORMORANT REEF, lies off those islets, and about a mile from the shore. It has 12 feet water, and bears W. $\frac{1}{2}$ N. $2\frac{1}{2}$ miles from Cape Cormorant. On it Points Blaskourtz and St. Charles are in one, bearing W.N.W. nearly, so that vessels approaching this part of the coast should keep the latter point open. The coast between Cape Cormorant and Point St. Charles is broken into coves, two of which are nearly 1 mile deep, full of rocks, and afford shelter only to boats. The shore is here fringed with rocks, both above and under water, and should not therefore be made too free with.

POINT ST. CHARLES will readily be known by the cove on the east side of it, and by the trending of the land on the west side northward towards Trout River. *The Reef* off Point St. Charles is extremely dangerous, being so bold that there is no warning by the hand-lead, and very little with the deep sea lead. It is composed of a great number of rocks near to each other, but having a considerable depth of

water between them; some of them always show, but the outermost patches are always covered. These last lie rather more than three-quarters of a mile to the S.S.W. from the southern extremity of Point St. Charles; and the reef continues to the first cove $1\frac{1}{2}$ miles to the north-westward of the point, but does not there extend so far off shore as off the point itself. Vessels beating to the westward should take care not to be becalmed to the westward of this reef, lest the heavy swell from the S.W. so frequent on this coast, should heave them towards the reef, for the water is too deep to anchor until close to the breakers.

Between Point St. Charles and Moisie River, is **MOISIE BAY**; the course across it is west, and distance 11 miles, with a depth of between 50 and 60 fathoms nearly all the way. Trout River is in the centre of this bay, and $6\frac{1}{2}$ miles N.W. $\frac{1}{2}$ W. from Point St. Charles. Here the rocky shores terminate, and the bold sandy beach, which extends $6\frac{1}{2}$ miles S.W. by W. to the River Moisie, commences. Seal House Cove, on the east side of the bay, and $2\frac{1}{2}$ miles from Point St. Charles, affords shelter only to boats. The soundings are regular in the bay, with deep water, over clay and sand bottom.

THE RIVER MOISIE is a larger river than the St. John, discharging a great quantity of water in the spring after the melting of the winter snows, and bringing down from the interior great quantities of sand, which so obstruct its wide and shallow channel in the first $2\frac{1}{2}$ miles from the sea, that boats cannot ascend at low water. The river becomes shallow immediately within the entrance, expanding into a wide place, full of sand-bars, dry at low water. In the above-named distance from the sea, the breadth of the river decreases from $2\frac{1}{2}$ miles to half a mile, and at the end of that distance the sand-bars cease. The river has then a clear channel of 9 feet deep, between steep sandy shores or cliffs, for 1 mile further, where its breadth is a quarter of a mile. The bar, which is of sand, dry at half-tide, runs out from the long, low, and narrow east point of entrance, nearly half a mile to the south-westward, and nearly parallel to the east side of the west point of entrance.

The entrance of the River, between this bar and the west point, is from the S.W. and continues for 600 fathoms with a breadth of a quarter of a mile, and a depth varying with the seasons and the winds which prevail; those from the southward and eastward having a tendency to block up the channel. There is seldom a less depth than 9 feet at low water, the same as inside close under the west point of entrance, which is the only place where a small vessel can find shelter, close to two log-houses, occasionally employed as a salmon fishery by the people of the Hudson's Bay Company. The shelter here is extremely imperfect in gales of wind from the southward and eastward, which send in so heavy a sea that, after breaking completely over the bar and across the entrance, it still retains power enough to seriously affect a small vessel. The tides rise from 5 to 8 feet.

Although the bar of the River Moisie is so bold that there are 50 fathoms of water at the distance of three-quarters of a mile from it to the south and S.E. yet the shallow water continues from it to the westward $3\frac{1}{2}$ miles past Moisie Point, in such a manner as to form an extensive triangular sandy shoal, with from 3 to $1\frac{1}{2}$ fathoms on it at low water. The S.W. extremity of this shoal, near which there is a patch of rock with 9 feet water, bears W. by S. $\frac{1}{2}$ S. $2\frac{3}{4}$ miles from Point

Moisie, and is nearly $1\frac{3}{4}$ miles from the shore. This is an extremely dangerous shoal, being as bold as a wall. There are 25 fathoms of water alongside of its S.W. edges, and upwards of 30 fathoms at the distance of two cables. There is no close leading mark for avoiding this shoal, so that the only direction that can be given to a vessel standing towards it, is to tack when the northern side of the Manowin Island comes on with the southern point of the Great Boule Island: she will then be $1\frac{3}{4}$ miles from the edge of the shoal, and in upwards of 30 fathoms water.

THE EAST ROCKS, which are low, and always above water, lie in Boule Bay, between this shoal and the Boule Islands. They are out of the way of vessels, which ought not to go into this embayed place, since there is generally a heavy southerly swell rolling in, which would render it difficult to beat out. The south point of Great Boule Island bears west, and is distant $9\frac{1}{2}$ miles from Point Moisie.

THE SEVEN ISLANDS are high and steep, and can be made out from a distance of 7 or 8 leagues, being unlike any thing else in the Gulf. The easternmost of these islands are the Great and Little Boule, the former of which is the highest of them all, its summit being 695 feet above the sea at high water. Next, westward, and parallel to these two, are the Little and Great Basque Islands; Manowin and Carousel lie to the S.W. of the Basques. The West Rocks lie between Manowin and the Peninsula, which forms the Bay of Seven Islands.

SEVEN ISLANDS BAY is a magnificent bay, $2\frac{3}{4}$ miles wide, at the entrance between Point Chassé, the east end of the peninsula and Sandy Point, which is opposite the northern end of Great Basque Island. From the entrance the Bay of Seven Islands extends 6 miles to the northward and westward, being so nearly land-locked as to resemble a lake, sufficiently extensive for the largest fleets to lie in perfect safety: the bottom is of clay, and there are no shoals, excepting the mud banks which fill up the northern part of the bay. A fine broad, bold, sandy beach extends for 3 miles northward, from the east point of the Bay to the entrance of the principal river, near which stands the Hudson's Bay Company's trading port. To the northward of the bay, at the distance of a few miles, there are two parallel ranges of mountains. These mountains, the high peninsula, the bold and hilly islands, and the other features around the bay form a beautiful panorama.

The narrow passes between the two Boule Islands, the two Basque Islands between Manowin and Carousel, and between Manowin and the West Rocks, require no further notice than to remark, that the tide sets strongly towards and through them; the flood to the west, and the ebb to the eastward, a circumstance that should be attended to when becalmed at night, or when tacking in their entrances. The first and last of these channels have water enough for the largest ships; but the one is subject to sudden and baffling flaws of wind round the Boule Islands, and the other is rendered intricate by rocks which nearly cover at high water.

EASTERN CHANNEL. There are three channels leading into Seven Islands Bay, viz. the eastern, the middle, and the western channels. The eastern channel, between Great Basque Island and Sandy Point, is seldom used, having a rock in its centre, which is covered only in high tides. A reef, with from 6 to 9 feet of water, extends to the eastward of this rock. The passage on either side of it is from 13 to 15 fathoms

deep and 200 fathoms wide. Vessels should only attempt it with a fair wind, and should keep within a cable's length of Basque Island, or as near to the sandy point of the main land: this narrow eastern channel may be approached from between the Boule Islands and the East Rocks, or from between the Boules and Basques Islands, both routes being entirely free from danger, for the islands are so bold that a vessel may approach them within a cable's length in every part.

MIDDLE CHANNEL. This is the principal and best channel, and is upwards of $1\frac{3}{4}$ miles wide, and so free from danger that the largest ships may approach the shore within half a cable's length in every part, excepting at Point Chassé, where a reef runs out 120 fathoms from the shore. This channel, between the Basque Islands on the east, and Carousel, Manowin, the West Rocks, and the peninsula on the west, is preferable in every wind, excepting the north and N.W. with which to save beating (since they blow out of the bay) it might be desirable to enter by the west channel. The course through the middle channel into the bay is due north by compass.

The **WEST CHANNEL**, between the west rocks and Point Croix, at the southern extremity of the peninsula, is three-quarters of a mile wide, and quite free from danger. There are a few rocks a cable's length to the northward of the islets, called the West Rocks, but they always show, excepting in very high tides and the smoothest sea. The only direction necessary, therefore, is not to go nearer to the West Rocks than 2 cables' length; the peninsula side is quite bold. There is, however, a caution necessary here respecting the ebb tide, which is turned off by Point Croix towards the West Rocks, a circumstance which must be attended to in taking this channel with a scant northerly wind. The water is too deep for anchoring in any of these channels, and the bottom generally rocky, excepting to the eastward and northward of the Boule Islands. The ground is not fit for anchoring until well into the bay.

The best berth for a large ship to lie at anchor in Seven Islands Bay, is with Sandy Point and the north side of Little Boule Island in one, and with Point Chassé on with the west side of the West Rocks. The N.W. extremity of the sandy beach near the entrance of the river, will then bear N. by E. $\frac{1}{2}$ E.: the vessel will be in 9 fathoms at low water, over clay bottom, nearly 1 mile from the sandy beach to the eastward, and nearly three-quarters of a mile from the 3 fathoms edge of the shoals, which occupy the northern part of the bay. Smaller vessels may lie closer to the shore, in 6 fathoms at low water, which is as near as a vessel ought to anchor. In this anchorage there is a considerable swell with a strong southerly wind, but never enough to endanger a vessel, although sufficient to prevent boats from landing. Those that may wish to lie perfectly smooth, may anchor in the S.W. part of the Bay, in 13 fathoms, soft clay bottom, where they will be perfectly land-locked.

TIDES. The rate of the stream of the tides in the Bay, and in the principal channels between the Seven Islands, seldom amounts to a knot; but in the narrow channel between the Boule Islands, the Basque Islands, and in the east and west channels, it may amount to 2 knots in spring tides, or even more in the narrowest of these channels, when accelerated by strong winds. The flood, coming along the coast from the eastward, strikes the Boule Islands and passes between them, and

also between the two Basque Islands. It is turned off by the Great Boule towards Carousel Island and the west channel; but the greater part of the stream, which passes within the Boule Island, enters the Bay by the east channel, between the Great Basque Island and the main land. There is very little flood in the middle channel, excepting an eddy outward stream, close along the shores of the peninsula and the narrow stream between the Basque Islands, which sets across towards the west channel. The ebb sets fairly out of the Bay, part of it by the east channel, and part by the middle channel, where it meets the stream through the west channel, which turns it to the eastward, past the southern points of the Basque and Boule Islands.

The course from the S.E. point of Carousel, the southernmost of the Seven Islands, to Point de Monts Lighthouse, is S.W. by W. $\frac{1}{2}$ W. and the distance 60 miles. There are no detached dangers off the coast, which is much more bold than its appearance would promise; and although the water is deep off every point of it, yet in general, and with few exceptions, there are sufficient soundings with the deep sea lead, to give warning to a vessel of her approach to the shore. The course from Carousel Island across St. Margaret Bay to Point St. Margaret, is W. by N. 14 miles, with very deep water all the way.

ST. MARGARET RIVER is nearly in the centre of the bay of the same name; being 6 miles N.W. by W. from Point Croix. This river affords shelter only to boats. A bar of sand extends three-quarters of a mile out from the entrance, with several small channels through it, with only 3 feet at low water. Within the entrance, there are 6 feet, and only 3 feet can be carried up to the low falls, which are $3\frac{1}{4}$ miles from the entrance. The water deepens gradually outside the bar, with sandy bottom, to 18 fathoms, at the distance of a mile from the 3 fathom mark. There is a sandy beach for a considerable distance on either side of the River's Mouth. St. Margaret Point is rocky, and has a round hill a short distance within its extremity. Several rocks, which cover at high water, extend to the distance of nearly one-third of a mile off this point.

From St. Margaret Point to Great Cawee Island, the course and distance is S.W. by W. $\frac{1}{2}$ W. 16 miles, across a bay in which are Rock River, and many other streams; the coast in this distance is low, and fringed with small Islets and rocks close to the shore, which may with prudence be closely approached by the lead; but 20 fathoms is near enough to it, for those who are not acquainted.

THE CAWEE ISLANDS are two small and hilly islands, which are as bold as a wall to seaward, but there is a small and high round rock a quarter of a mile S.W. from the south point of the Great Cawee, and this is the only danger between the islands, being, like their southern sides so bold that a large ship might lie alongside of it. Great Cawee Island, which is the largest, and most to the eastward, is about three-quarters of a mile in diameter, and estimated to be about 250 feet high. Little Cawee Island, lying a mile further to the south-westward, is composed of two contiguous islets, which occupy a length of half a mile parallel to the coast; it has several rocks above water close off it, to the S.W. and a reef of 120 fathoms to the north and N.W. of its west point.

On the N.E. side of the Great Cawee, there is a secure boat cove, with plenty of water, but too small and narrow in the entrance for vessels. Off the mouth of this cove, to the N.E. there is a rocky shoal with 15 feet water. The mark for this shoal is the north side of Great

Cawee, and the point of the main land to the westward in one, bearing W.S.W. $\frac{1}{2}$ W. Half a mile N.E. by N. from this shoal is a small round ledge, a wash at low water, and one-third of a mile from the main land. The marks for this ledge are the south side of the large rocks, between Great Cawee and the main, on with the point of the main to the westward; and the south side of Little Cawee just shut in behind the north side of Great Cawee Island. At the distance of 200 fathoms from Great Cawee, between it and the main, there are two large rocks close together, which are 150 fathoms from the main land, and have a reef off them, 200 fathoms to the S.W. by W. Nearly half a mile N.E. by E. from these rocks, and at the same distance from the main, there is a small rock which always shows.

On the inner or N.W. side of the Great Cawee Island, there is a bay in which there is anchorage, in 7 fathoms, muddy bottom, and at the distance of a cable's length from the island. The shelter is complete, with winds from W. by S. round by north to N.E. and tolerably so with all easterly winds, although some swell rolls round the island; but the S.W. winds blow right in, and send in a very heavy sea. To run into this anchorage from the eastward, steer N.W. past the N.E. side of Great Cawee Island, going no nearer than half a mile (to avoid the shoal off the mouth of the cove) until the point of the main land to the westward opens clear of the north side of the island. Then steer for the point of the main land, keeping in midway between the north side of the Island and the large rocks to the northward of it. When you arrive between the rocks and the Island, haul into the mouth of the small bay which you will see on the N.W. side of the latter, and anchor in 7 fathoms at low water. There are 12 or 13 fathoms in the middle of the channel, and upwards of 9 fathoms can be carried through.

In running for this anchorage from the westward, a vessel may pass between Little Cawee and the main, keeping in mid channel; but the better and safer way is to pass between Little and Great Cawee Islands, hauling close round the west point of the latter into the anchorage. By this route there is nothing in the way, excepting the round rock to the south-westward of the south point of the island, which can always be seen. The tides run fair through between the islands and the main land, at a rate which seldom exceeds $1\frac{1}{2}$ knots, and which is in general much less.

The anchorage between Great Cawee and the main is too small for large vessels, the channel being only 200 fathoms wide; still this anchorage, although too small for an occasional place of shelter, excepting for small vessels, may nevertheless, be of great use as a place of refuge for a vessel in distress, for the ground is so good that a vessel well moored there, would ride out any gale which occurs during the summer months.

Point Sproule, three-quarters of a mile to the north-westward from Little Cawee Island, is the eastern point of Lobster Bay. A reef extends off its south side, a cable's length towards Little Cawee; but the principal reef off it runs out 400 fathoms to the west and S.W.

LOBSTER BAY is between Point Sproule and the Crooked Islands, which are a group of small islets and rocks running out from the shore 3 miles to the westward of Point Sproule. All the N.E. part, or head of Lobster Bay, is occupied by an extensive flat of sand and boulders, dry at low water and on which lobsters abound; but it is an excellent open

roadstead, with plenty of room for the largest ships. The Crooked Islands are bold to the southward and eastward, leaving the mouth of the Bay clear of all danger across to the reef of Point Sproule. Vessels may anchor midway between the reef and the islands, choosing their depth from 5 to 12 fathoms, according as they may wish to lie, at the distance of half a mile or of one mile from the 3 fathom edge of the flats in the head of the Bay. The bottom is of fine sand over clay, and the shelter from S.W. round by west and north to east, but all winds from east round by west and north to east, and all winds from east round by south to S.W. blow right in, with a heavy sea and thick weather.

PENTECOST RIVER enters the sea on the S.W. side of a rocky point, $1\frac{1}{2}$ miles to the westward of the Crooked Islands; the opposite point of entrance is of sand. Two miles S.W. from the mouth of the River, there is a remarkable round and wooded hill. The entrance of the River is only 15 fathoms wide, with a depth of 7 feet at low water, and there are 9 feet within for a short distance. At high water from 12 to 16 feet can be carried in, so that this River is capable of affording shelter to coasting schooners as well as boats; but it would be very difficult to take a sailing vessel in through so narrow an entrance, and could never be done in the ebb tide, which runs out with great rapidity.

ENGLISH POINT is $1\frac{1}{2}$ miles to the northward and eastward from the north rocks of Egg Island, and has a shoal of large stones extending off it to the distance of one-third of a mile. On the S.W. side, or towards Egg Island, this shoal may be approached to 6 fathoms at low water, but on the S.E. and east it is very bold, there being 15 fathoms at the distance of one-third of a mile, and 30 fathoms at the distance of a mile from the 3 fathom mark.

EGG ISLAND bears from the south point of Great Cawee Island S.W. $\frac{1}{2}$ W. 14 miles. It is low, narrow, without trees, and three-quarters of a mile long in a N.N.E. $\frac{1}{2}$ E. direction. The North Rocks, always above water, are 400 fathoms distant from the island to the N.N.E.; they form a low, narrow, black reef, bold towards the main land, and also towards English Point. A reef under water runs out from these rocks, in the direction of S.S.W. leaving only a very narrow 3 fathom channel between them and the Island. The N.E. reef runs out to the distance of 600 fathoms from the N.E. point of Egg Island, and is the greatest danger between Seven Islands and Point de Monts. Some of the rocks upon the N.E. reef show in low tides, and the sea generally breaks on them at low water. This reef prevents the swell from rolling in between the north rocks and Egg Island, and thus assists in sheltering the anchorage. The whole, that is the island, rocks, and reefs, form a natural break-water, which is $1\frac{1}{3}$ miles long in a N.N.E. direction. The northern end of this break water is distant from the main land nearly three-quarters of a mile, and the southern end more than a mile; but extensive flats extend from the main, and diminish the navigable breadth of the channel to 370 fathoms in the narrowest, which is nearly opposite the northern end of Egg Island. The best anchorage is, however, to the S.W. of this narrow part, where the breadth, from the 3 fathom edge of the shoal off the main to Egg Island, is 600 fathoms.

All along the inner sides of Egg Island, and of the reef under water to the S.S.W. of the North Rocks, as well as of the North Rocks, themselves, excepting near their northern end, the water is very deep, there being from 17 to 24 fathoms at low water close to them. The

depth decreases gradually towards the main land, and the best depth to anchor in is 9 or 10 fathoms, according to the time of tide. The bottom is of clay in the deep water towards the Island, and of sand from the depth of 9 fathoms towards the main land. There is little danger of dragging an anchor up hill towards the main; but with violent squalls off the land, vessels should have a good scope of cable out, for should the anchor start they might be on the rocks before they could bring up again. In order to have as much room as possible, with moderate depth of water, vessels should not anchor to the north-eastward of a line joining Roadstead Point and the centre of Egg Island. The best position is with the S.W. end of Egg Island bearing S.E. by S. and the inner side of the North Rocks N.E.; English Point will then be open half a point to the westward of the latter. In this anchorage, vessels will lie sheltered from N.E. round by north and west to S.W. by the main land, and from S.E. to N.E. by the island, with its rocks and reefs. The winds from the remaining points, namely, those between S.W. and S.E. seldom blow strong, and even with them a vessel may find some shelter by shifting her berth to the eastward, where she will find 7 fathoms over sandy bottom.

No directions are necessary for running into this anchorage from the southward and westward, since the S.W. end of Egg Island is quite bold. But if it be intended to run through between the Island and the main, stand in to the northward to 8 or 9 fathoms, or until English Point is open half a point to the northward of the North Rocks; then steer for English Point, giving the inner side of the North Rocks a berth of a cable's length, until you have passed the North Rocks a full quarter of a mile; you will then be in about 7 fathoms at low water and may haul out to sea, going nothing to the southward of S.E. by E. to avoid the N.E. reef. There is no danger between the rocks and reefs of Egg Island and English Point, excepting the reef already mentioned.

The anchorage at Egg Island is too small to be a favourite resort for large vessels, but in time of need, or as a place of refuge, it would be found of great value on a coast so destitute of good harbours. There is no water on Egg Island, but it may readily be obtained from small streams on either side of Roadstead Point.

CALUMET RIVER is a small stream $2\frac{1}{2}$ miles W. by S. from the S.W. end of Egg Island; along the shore for a mile to the south-westward of its entrance, there are reefs of large stones, having 15 fathoms off them at the distance of half a mile to seaward. To the S.W. of these reefs as far as Trinity Bay the coast is free from danger, and may be approached with safety if due caution be used. There are 20 fathoms at the distance of from half a mile to 1 mile, and 40 fathoms from 2 to 3 miles from the shore. S.W. by S. from Egg Island, distant $8\frac{1}{2}$ miles, is *Caribou Point*, a small rocky Peninsula, having sandy coves on either side of its isthmus, in which pilot boats find shelter, and often remain on the look out for vessels.

TRINITY BAY is 5 miles further along the coast to the southward and westward. It is 2 miles wide, and nearly 1 mile deep, with a fine sandy beach extending from its S.W. point to Trinity River, which is a small and rapid stream where water can be had only at high water, because of the large stones about its entrance. The S.W. point of the Bay is rocky, and off the N.E. point there are two low black rocks. The depth of water between the points of the bay is from 5 to 7 fathoms at

low water over sandy bottom. This bay affords excellent anchorage, in a moderate depth of water, with good ground, and plenty of room to get under weigh in any wind.

In running down along the land for Trinity Bay, either from the N.E. or S.W. come no nearer than 15 fathoms until the Bay opens; then haul in and anchor in 7 fathoms at low water, with the lighthouse on Point de Monts (seen just within a small rock about $1\frac{1}{2}$ miles to the south-westward of the Bay) bearing S.W. by W. the outer of the two rocks of the N.E. point of the Bay N.E. $\frac{1}{2}$ E. and the entrance of the river N. by W.; the vessel will then be rather more than three-quarters of a mile distant from the S.W. point of the Bay. Large vessels may anchor further out, and in deeper water, if they think proper, and small schooners close under the S.W. point.

POINT DE MONTS LIGHTHOUSE is 5 miles to the south-westward from Trinity Bay: it stands low down and close to the sea, is of a conical form, nearly white, and 75 feet high. The lantern is elevated 100 feet above the sea at high water, showing a bright fixed light, which can be seen in clear weather at the distance of 15 miles. The extreme of the land to the north-eastward, near Caribou Point bears N.E. $\frac{1}{2}$ E. from the light, which can be seen over the Point; and that bearing continued will pass little more than $2\frac{1}{2}$ miles outside of Egg Island, at the distance of 20 miles from the light.

Vessels being to the eastward in a dark night, when the land cannot be seen, had better tack when the light bears W.S.W. or even W. by S. will be near enough, if they be as near to it as Trinity Bay. They may however stand in nearer, using due caution by the lead. Vessels to the westward of the light should tack as soon as it bears E. $\frac{1}{2}$ N.; it cannot be seen to the southward of east, in consequence of high land which interposes. When it disappears, a vessel off Goodbout River will be only 1 mile from the bar. S.W. from the light, S.E. from the extremity of the Point, and half a mile off shore, lies a ledge of rocks with 9 or 10 fathoms least water. S.S.W. $\frac{1}{2}$ a mile from the light, is another rock with 2 fathoms least water, and there is a third with little more water and nearly as far off from the light to the E.S.E. These dangers should be carefully guarded against in making the light in thick weather, or when keeping close to the land with a northerly wind, and 15 fathoms is quite near enough to them for a large vessel at any time, being no more than 2 cables' distant from the first, and about twice that distance from the two last of them.

ST. AUGUSTINE COVE, $1\frac{1}{2}$ miles westward of Point de Monts, affords shelter only to boats; and pilots are generally found here with easterly winds.

GOODBOUT RIVER, $8\frac{1}{2}$ miles westward from Point de Monts, enters the sea at the extremity of a sandy point, and has a bar of sand which extends out from the eastern point of entrance to the distance of nearly half a mile, dries in great part at low water, and is extremely bold to seaward. There is usually at low water not more than 4 or 5 feet over this bar, on which a heavy surf very frequently breaks, and the river is only of use to boats because of the difficult and narrow entrance, although there are 15 or 16 feet of water over the bar at high water spring tides.

ST. NICHOLAS HARBOUR is 14 miles W.N.W. from Point de Monts, and 3 miles N.E. by E. $\frac{1}{2}$ E. from the Cape of the same name. It is a

narrow inlet, between hills from 500 to 700 feet in height, $1\frac{1}{2}$ miles in the direction of N.W. $\frac{1}{2}$ N. This harbour is so perfectly secure, that a vessel might be laid on shore and repaired as if she were in a dock; on the S.W. side, a vessel may lie alongside of the rocks as alongside a wharf. There is $9\frac{1}{2}$ fathoms at low water, in the deepest part of the harbour, and the bottom is of mud. The shoals on the east side of the entrance dry out so far as to leave a channel between them and Cross Point only 30 fathoms wide, and 5 feet deep at low water spring tides. The depth that can be carried in at high water is from 14 to 17 feet according as it may be neap or spring tides. The bottom in the entrance is of sand, with some few large stones upon it, which can be seen and avoided, if the tide be not high enough to pass over them.

The entrance is situated in the centre of a small bay, three-quarters of a mile wide, and rather more than one-quarter of a mile deep, to the rocky point on the west side of the entrance to the harbour, which will be readily seen projecting out into the bay, and is named Cross Point, from a small wooden cross upon it. An extensive shoal of sand and boulders, which dry at half-tide, extends from the east point of the bay to the W.S.W. and continues northward to the entrance of the Harbour. This shoal can always be seen, is quite bold, and completely shuts out the sea from the Harbour in southerly and easterly winds. The shoals on the west side extend across a small bay on the west side of Cross Point, and continue out to seaward, extending off shore to the distance of 100 fathoms.

The anchorage between these shoals, in the bay off the Harbour's mouth, is only 300 fathoms wide, and consequently too small to be considered a roadstead for large vessels, but the ground is good, and the depth convenient for anchoring preparatory to warping into the harbour.

TO ENTER ST. NICHOLAS HARBOUR, bring the end of Cross Point to bear N.N.E. then steer so nearly for it as to leave it not more than 50, nor less than 30 yards distant on the larboard hand. If the wind will allow, continue to run in at the same distance from the shore on the west side until you deepen your water; but if you lose the wind, or be met with light baffling flaws out of the harbour, as often happens in westerly winds, send a line on shore on the west side, or drop your anchor underfoot as soon as your vessel loses her way and warp into deep water. The shoal water, which may be called the bar, and commences at Cross Point, continues for 200 fathoms within it, and the channel is rendered narrow by shoals of the eastern side for an equal distance further up the harbour. In order to have as much room as possible, a vessel should anchor further in than the three large rocks which will be seen on the eastern side of the harbour. To run out again a vessel must wait for a N.W. wind, or take advantage of the land wind in the early part of the morning, which often occurs in fine weather when westerly winds prevail; or lastly, she must warp out, in a light breeze or calm, to the entrance of the bay outside, and to a position from which she can make sail.

South-east winds blow right into the harbour, and are consequently most favourable for running in, but with a strong wind in that direction, and at high water when the shoals are covered, there is generally some sea outside the narrow entrance, an accident at such a time might be attended with serious consequences; and, therefore, it is only in very fine weather that the entrance should be attempted with a S.E. wind.

North-west winds blow right out of the harbour, and often with great violence. A W.S.W. wind is the safest for running in, for the entrance and bay outside are then quite smooth, the sea being turned off by Cape St. Nicholas; but this wind will seldom take a vessel completely in, it will usually only enable her to shoot so far within Cross Point that a line may be sent ashore, or a kedge a-head, for the purpose of warping in the remainder of the way, which may be quickly done if due preparation has been made before hand. The entrance should be attempted in the last quarter flood, then if the vessel touches the ground she will receive no damage, and there will be time for her to warp in before the tide begins to fall.

ST. PANCRAS COVE, 9 miles W.N.W. from Cape St. Nicholas, being only 160 fathoms wide, between steep rocks, and open to the southward, with very deep water, is of no use to vessels. The sea is never heavy in it, and a vessel might be saved there in time of need. It affords shelter to boats.

ENGLISH BAY lies between Point St. Pancras and St. Giles Point; it affords no good anchorage, in consequence of the great depth of water. A heavy sea rolls into it in easterly winds, and its shores are high and rocky. A vessel might anchor close to the shore on its west side, in 16 or 17 fathoms at low water, and be well sheltered from all but easterly winds; but she would be in great danger if a strong wind from that quarter came in, since there would be no possibility of weathering the eastern side of the Manicouagan shoals during the flood tide.

Point St. Giles is $13\frac{1}{2}$ miles W. by N. from Cape St. Nicholas, and is high and rocky, like the coast to the eastward; while Manicouagan Point, which is $17\frac{1}{2}$ miles W.S.W. $\frac{1}{2}$ W. from Cape St. Nicholas, is low and thickly wooded with a broad sandy beach, like the rest of the coast westward to Outard Bay. This complete change in the character of the coast, points out to a vessel her approach towards the dangerous Manicouagan shoals.

The entrance of Manicouagan Bay lies between the above two points, and is all dry at low water, with the exception of the narrow channels which lead up to the river.

MANICOUAGAN RIVER. The principal channel is on the north side, and there is a deep place, or large hole in it, $1\frac{3}{4}$ miles long, from half to a quarter of a mile wide, and from 3 to 5 fathoms deep at low water, with muddy bottom. This large hole is close to Point St. Giles, and extends $1\frac{1}{4}$ miles within it. Although this place appears completely open to easterly winds, no swell of consequence rolls into it, and a vessel well moored on its north side, within Point St. Giles, would be in safety. But to get in there, it is necessary to pass over a bar formed by the eastern part of the Manicouagan shoal.

This Bar extends out 2 miles to the eastward from Point St. Giles. It has 7 feet over it at low water, and from 14 to 19 feet at high water, according as it may be neap or spring tides. The outside of the Bar is extremely bold, there being 30 fathoms sandy bottom close to it, and 50 fathoms mud bottom at the distance of 1 mile. The Bar then sweeps round till it joins the Manicouagan Shoal, which consists of sand with occasional boulders, and which is dry at low water for nearly 5 miles out in an E. by N. direction, from the northern end of Manicouagan Peninsula.

Directions for the Anchorage Hole. Bring Point St. Giles to bear

W. by S. with Point St. Pancras, the eastern point of English Bay bearing N. at the same time. Then steer directly for Point St. Giles; and when the head of English Bay bears north, and Point St. Pancras N.E. you will be close to the bar. Continue to run over the bar on the same course, W. by S. until the points on the west side of English Bay bears north, and Point St. Pancras N.E. you will be close to the bar. Continue to run over the bar on the same course, W. by S. until the points on the west side of English Bay bear N. by E. $\frac{1}{2}$ E.; you will then be within 1 mile of Point St. Giles, and must keep away a couple of points to the southward along the southern edge of the shoal, which dries at low water off that point, until you open out the points on the north side of Manicouagan Bay to the southward of Point St. Giles; then haul up again so as to pass that point at the distance of a cable's length, and anchor $\frac{1}{2}$ a mile within it, in 3 or 4 fathoms at low water. Six miles west from Point St. Giles, the shallow channels between the shoals unite in the inner entrance of the River, which is there narrow and 4 fathoms deep.

The ebb runs out over the Manicouagan Bar to the eastward at the rate of about $1\frac{1}{2}$ knots, and the flood is nearly as strong.

THE MANICOUAGAN SHOAL is of sand, with many large boulders scattered about its eastern and southern parts. The most eastern point of this dangerous and extensive shoal is distant $2\frac{1}{2}$ miles from Point St. Giles, in an E.S.E. direction, and $5\frac{1}{4}$ miles E. by N. from the N.E. end of Manicouagan Peninsula. The bearing of S.W. by S. from Pancras Cove passes along the eastern side of the shoal, which is so bold that there are 60 fathoms of water at the distance of little more than $1\frac{1}{4}$ miles, and 40 fathoms at half that distance from the breakers. On this side, the shoal dries nearly out to its edge in low tides. The south point of the shoal extends $2\frac{1}{2}$ miles to the southward of Manicouagan Point, and here only is there any sufficient warning by the deep sea lead. With the extremes of Manicouagan Point bearing from N. to N.W. by N. 60 fathoms over a bottom of very fine sand will be found, at the distance of $3\frac{1}{2}$ miles from the 3 fathom mark, to which the water shoals gradually, till close to it, where there are 17 fathoms. The shoal dries out in low tides, in this part, and also further to the westward, from 1 to $1\frac{1}{2}$ miles from the beach.

The shoal continues from its south point to the westward for a distance of 16 miles, the outline of its edge corresponding to the shape of the sandy shore as far as Outard Point, off which it extends to the southward $1\frac{1}{2}$ miles, and filling up all the eastern part of Outard Bay, stretches out its western point fully $3\frac{1}{2}$ miles W. by S. from Outard Point.

There is often a very heavy sea, particularly in a weather tide off this shoal; but all the terrific accounts, says Capt. Bayfield, which have been circulated of "strong and irregular eddies," in which vessels will not answer their helms during a fresh gale of wind, "and can with difficulty be kept from running on the bank, or driving against each other," are entirely unfounded. But, without that exaggeration, a shoal which extends so far from a low part of the coast, which is difficult to be made out at night, and which has such deep water close to it, must be sufficiently dangerous to demand the utmost prudence and vigilance of the seaman without alarming him with imaginary perils. The tides are tolerably regular, and not very strong along the shoal; but great rippings are met with occasionally, both near the shoals and

in the offing, where they are caused, as in the other parts of the Estuary, by the unequal velocities or the opposing directions of the streams, as will be readily imagined, when it is remembered that the current is always down on the south side, slack in the middle, and up during the flood on the north side of the Estuary. These rippings are very common off the eastern and southern parts of the Manicouagan Shoal, where they have been observed to run much faster than the stream of the tides, as was evident by their passing by the vessel in a calm. They often give to the tides the appearance of a rapidity which does not exist.

OUTARD POINT is 11 miles to the westward of the south extremity of Manicouagan Point and the shore between, is of low sandy cliffs, with a sandy beach.

OUTARD RIVER is on the north side of the Point, and can be ascended by boats to the Falls, which are 7 miles N. E. by E. from the Point. These Falls are only $1\frac{3}{4}$ miles from the Manicouagan River. The two rivers, therefore, form the low sandy country, between Points Outard and Manicouagan, into a great peninsula.

OUTARD BAY, between Outard and Bersimis Points, has three small rocky islands in it, which appear as two from seaward, and serve to distinguish the Bay to strangers; they are far within the edge of the shoals, which extend quite round the bay, and occupy the greater part of it, being a continuation of the Manicouagan Shoal. The water in this Bay is too deep close to the shoal for convenient anchorage, which is quite exposed to easterly winds. The anchorage is on the west side of the Bay, in 14 fathoms at low water, over muddy bottom, with Bersimis Point bearing S.W. by S. $3\frac{1}{2}$ miles. Manicouagan Point will then be open 3 or 4 degrees to the southward of Outard Point, the south side of which will bear E. by N. and the vessel will be nearly half a mile from the 3 fathom edge of the shoal, on the west side of the Bay; small vessels may lie closer in 7 or 8 fathoms.

In standing in for this anchorage with a westerly wind, beware of the bar of Bersimis River, which is extremely deep. If you can make out the first rocky point to the north-eastward of the River, and which bears from its entrance N.N.E. $4\frac{1}{2}$ miles, take care that it does not bear to the eastward of north, and you will clear the bar. When you have passed it, you may haul in to the northward into soundings, going no nearer than 10 fathoms. Vessels may anchor for a distance of three-quarters of a mile on either side of the position which has been pointed out, either further out to the S.S.W. towards Bersimis Point, or towards the small islands to the N.E.; but the berth which has been indicated is the best. The tides are not strong in Outard Bay.

BERSIMIS RIVER enters the sea to the eastward, and $1\frac{3}{4}$ miles N.E. from the south extremity of the Point of the same name. The south side of the entrance of the River, for more than three-quarters of a mile, is of low and bare sand. The opposite point of entrance is also of sand, and bears N.N.W. at the distance of rather more than a mile from the south point, but this wide mouth of the River is closed by sands, dry at low water with the exception of a very narrow channel. The River within for the first 3 miles is wide and full of sand shoals. The Bar is of sand, which dries in parts at low water, and shifts frequently, being completely exposed to southerly and easterly gales. It extends nearly $1\frac{1}{2}$ miles to the eastward of the south point of entrance. Directions for entering the River must, therefore, be useless; but it may

be as well to remark, that within the bar the channel is always close to the south point of entrance, and keeps on that side through the wide part within with a depth of 9 feet at low water. The depth that could be carried in over the bar, in the month of July, was 6 feet at low water, and from 13 to 18 feet at high water, according as it might be neap or spring tides.

The Bersimis River is navigable to the Falls, which are 30 or 40 feet high and over granite rocks. These Falls are distant 30 miles N.W. $\frac{3}{4}$ N. in a direct line from the south point of entrance; but the distance is nearly 40 miles by following the windings of the river. The breadth of the river varies from 100 to 300 fathoms, and its depth is usually from 2 to 5 fathoms: there is a place in which the depth amounts to 12 fathoms; but 2 fathoms is as much as could be carried up to the foot of the Falls.

TIDES. The stream of the flood tide is felt 10 miles up the River; and 6 miles up the channel is contracted by shoals of sand and boulders to the breadth of 50 fathoms, for the distance of 1 mile. Through this narrow part, the ebb runs 4 knots; above it, the rate of the current is from 1 to $2\frac{1}{2}$ knots. Boats could row up this River to the foot of the Falls, and a steamer could ascend it with ease; but the winds are generally too light and baffling between its high banks for a sailing vessel.

BERSIMIS POINT is low, wooded with spruce trees, and difficult to be seen at night. On its east side, the low south point of the river extends to the distance of 2 miles from the trees, and the Bar is $1\frac{1}{4}$ miles further; and to the southward, the sand shoal extends three-quarters of a mile from the sandy beach, yet it is so bold that the lead affords no warning, there being 60 fathoms muddy bottom at the distance of a mile from the edge of the shoal. On the east and west sides of the Point the shoals are equally steep, so that this Point is very dangerous, especially to vessels beating at night or in foggy weather. From the south extremity of Bersimis Point, Manicouagan Point bears E.N.E. $\frac{1}{2}$ E. 21 miles; and Point Mille Vaches S.W. by W. 29 miles.

The tides are regular, but the flood is rather stronger than the ebb within 6 miles from the shore, where the rate of either never exceeds $1\frac{1}{2}$ knots, and is often much less.

JEREMY ISLAND lies S. $\frac{3}{4}$ E. from Bersimis Point, distant $5\frac{1}{2}$ miles. It is small, rocky, and close to the shore. Vessels may stand in by the lead, and anchor off this place; but it is a bad anchorage, and the shoal water extends a mile out from the shore. Cape Colombier, 5 miles from Jeremy Island, along a rocky and broken shore, in a S.W. by W. $\frac{1}{2}$ W. direction, is a rocky peninsula, with a small islet on its west side.

THE GULNARE SHOAL, discovered in 1830, is a narrow ridge of rock nearly 2 miles long, parallel to the shore, and having from 2 to 3 fathoms over it at low water. The S.W. end of this shoal bears S. by E. and its N.E. end S.E. by E. $\frac{1}{4}$ E. from Cape Colombier, from which they are distant $1\frac{3}{4}$ miles. The inner or north side of Laval Island, nearly on with Point Orient, the east point of the Baie de Laval, and bearing west, leads clear outside of this shoal, at the distance of 2 cables' length, and in 20 fathoms of water. It is very dangerous, there being 23 fathoms close to the S.W. end, and also along its southern side. There are 4 or 5 fathoms between it and the shore.

WILD FOWL REEF, S.W. by W. $\frac{1}{2}$ W. 4 miles from Cape Colombier, is a large bed of rocks, extending three-quarters of a mile from the

shore between Plongeur Bay and the Baie de Laval. There are 9 fathoms off this Reef at the distance of one-third of a mile.

PLONGEUR BAY, between that Reef and Cape Colombier, may be known by a round and rocky peninsula on its west side. The inner part of this bay is full of rocks, dry at low water; and the whole bay is shoal out to the line joining Wild Fowl Reef and Cape Colombier. Vessels should be careful, in standing in towards the part of this coast from Wild Fowl Reef to the Gulnare shoal inclusive, 30 fathoms is quite near enough. But to the south-westward of the Reef, until within 2 miles of Port Neuf, they may stand in to 6 fathoms at low water with safety.

THE BAIE DE LAVAL, 4 miles west from the Wild Fowl Reef, and $8\frac{1}{2}$ miles N.E. by N. from Port Neuf, will be known by the rocky island in its mouth, and by the clay cliffs which commence $1\frac{1}{2}$ miles to the S.W. of it, and continue to within the same distance of Port Neuf. This Bay within the Island is all dry at low water. Vessels may safely stand in towards it, the water shoaling gradually from 10 fathoms, which is at the distance of $2\frac{1}{2}$ miles from the shore. There is good anchorage in 6 or 7 fathoms, over clay bottom, off the clay cliffs above-mentioned.

At Port Neuf there is a fur trading and salmon fishing establishment, belonging to the Hudson's Bay Company. At this port, there is a small wooden church for the Indians, and several small buildings. These can be seen readily by a vessel off the coast.

S.S.E. from the church, and nearly three-quarters of a mile, is the S.W. end of a low and narrow sandy peninsula, with a clump of pine or spruce trees upon it, and which extends nearly 2 miles to the N.N.E. where it joins the sand and clay cliffs before-mentioned.

The entrance to Port Neuf River is from the S.W. and between this sandy peninsula and the port on the main land, but is so shallow that a boat cannot enter it at low water. Its sandy channel is too shallow for a boat at low water below that turn, and at the distance of $1\frac{1}{2}$ miles above it rapids commence. From 7 to 12 feet water may be carried in at high water, between the peninsula and the main land, according as it may be neap or spring tide, and a small vessel may lie safely aground on the sand.

E. by N. from the S.W. end of the sand and clay cliffs, lies a patch of sand, with $3\frac{1}{4}$ fathoms least water, which might be dangerous to a large vessel in a heavy sea. This may be considered as the commencement of the Port Neuf and Mille Vaches Shoals.

THE PORT NEUF SANDS extend three-quarters of a mile out from the sandy peninsula off Port Neuf. They are exceedingly steep on every bearing to the southward of east from Port Neuf, and to the eastward of south from Point Mille Vaches. Half-way before Port Neuf and Point Mille Vaches is the broadest part of these sands, which there extend $1\frac{1}{4}$ miles from the beach. There are from 20 to 30 fathoms close along their edge, and from 40 to 50 fathoms at the distance of 1 mile.

POINT MILLE VACHES is low, sandy, and wooded with spruce trees. From its south extremity, the N.W. reef of Bicquette S.S.E. $\frac{1}{3}$ E. $12\frac{1}{2}$ miles; and the navigable breadth of the channel is diminished by the Mille Vaches Shoals to little more than $11\frac{1}{2}$ miles. As the dangers on either side are so bold, and as the course of a vessel running up the

Estuary must ever be more or less uncertain in consequence of the set of the tides and currents, this pass is justly considered dangerous to a vessel running up in dark nights or foggy weather.

THE BAY OF MILLE VACHES is very large, with several small rivers, which descend by falls or rapids down the granitic shores. All the interior of this Bay is occupied by shoals of sand, mud, and large boulders, which dry at low water. In the western part of it the shoals are extremely steep and dangerous, but from where the Sault de Monton bears north to where Point Mille Vaches comes upon the same bearing, comprising a space of $4\frac{1}{2}$ miles, there is a complete warning by the lead, the depth being 30 fathoms upwards of 2 miles from the 3 fathom edge of the shoals.

There is anchorage in this Bay in 15 fathoms, sand and mud bottom, with the south extremity of Point Mille Vaches on with the inner or north side of the pine trees on the peninsula of Port Neuf, bearing N.E. $\frac{1}{2}$ E. at the distance of 2 or 3 miles from the point, and three-quarters of a mile from the shoals. The shelter is from S.W. by W. round by north to N.E. by E. The ground is good, and there is not much tide.

The course and distance across the Bay of Mille Vaches to two large rocks, which have three small ones nearly a mile to the S.W. of them, and are called the *Esquamine Islets*, is S.W. $\frac{3}{4}$ W. nearly 12 miles. The coast to the south-westward, from the Esquamine Islets to little Bergeron, a distance of 16 miles, consists of granite rock, steep and bold, and free from all danger, excepting a flat which occupies a bay on the west side of Cape Bondesir, but which does not extend above a quarter of a mile outside of a line joining the points of the bay, and is consequently very little in the way of vessels. There are upwards of 50 fathoms water close to the rocks along this part of the coast.

TIDES. The tides are regular, increasing in strength as you approach the comparatively narrow pass on either side of Red Islet. The flood is the stronger tide of the two, the ebb being deflected over towards the southern shore by the stream out of the great river Saguenay. The flood does not extend above 5 or 6 miles off the north shore below Bergeron, and the closer to that shore the stronger is the stream. Its rate at Point Mille Vaches, where it does not extend far off shore, is from $1\frac{1}{2}$ to 2 knots; and off Bergeron from 2 to 3 knots, in spring tides.

GREAT AND LITTLE BERGERON are two coves separated by a point. They are both full of large boulders, which dry at low water, and have small streams at their heads. Little Bergeron is of the two the most to the S.W. From it Green Island Light bears S. by E. $\frac{1}{2}$ E. $11\frac{1}{2}$ miles, and the Saguenay Cliffs, at the east point of entrance of the River, S.W. by W. $5\frac{1}{2}$ miles.

GREEN ISLAND TO QUEBEC.

CACONA is the high bluff land lying S.S.W. from the S.W. end of Green Island; the water between is deep, at a mile and a half south-westward of Cacona, and just to the northward of the stream of it, are the Percé Rocks, two clusters, occupying the extent of a mile and a half. They lie about 1 mile from and parallel with the main, and are nearly

covered at high water. On the south side of them there is no passage, but the depth of 10 fathoms leads clear on the north.

RED ISLAND is a low flat islet, of a reddish colour, and without trees. A smaller one, called White Island, on Hare Island Reef, is covered with trees, and bears from Red Island S.W. $9\frac{1}{2}$ miles, and from the N.E. end of Hare Island N.E. $\frac{1}{2}$ N. A shoal of rocks extends from White Island N.E. $\frac{1}{2}$ E. 3 miles, and dries to the greatest part of that distance.

BARRETT LEDGE is composed principally of two detached rocks, on the south side of which is a black buoy. This buoy lies with the northernmost high land of Cape Orignal bearing N. 64° E.; the summit of the southernmost mountain of the high land of Kamourasca in one with the south point of Great Pilgrim Island, S. 30° W.; the eastern side of the trees on Hare Island in one with the west cape of the Bay of Rocks, (on the north shore) N. 47° W.; and two houses near the River du Loup, S. 29° E.; the latter are the only two houses between the church and River du Loup. The rocks off Barrett Ledge bear from each other N. 63° E. and S. 63° W. one quarter of a mile. The N.E. rock has 10 feet over it; the S.W. has 12. Between them is a depth of 8 fathoms.

At a mile S.W. from the S.W. side of Barrett Ledge lies a small bank of 10 feet, called the Middle Shoal, with the Brandy Pots bearing N.W. $\frac{1}{2}$ W. distant a mile and a half. Near it on the N.E. are from 6 to 8 fathoms of water. This Shoal appears to be the extremity of the remains of a narrow middle Bank, extending thence 2 leagues S.W. by W. and upon which there are still from 4 to $3\frac{1}{2}$ and 3 fathoms, on approaching to the Hare Island Bank. In the channel between the Brandy Pots and Middle Shoal, are from 10 to 17 fathoms of water; but in that to the southward the general depths are 7 and 8 to 5 and 4 fathoms.

HARE ISLAND, &c. The east end of this island lies S.W. $\frac{1}{2}$ S. a mile and a half from White Island; thence it extends $7\frac{1}{4}$ miles to the S.W. and is in no part one mile in breadth: in a great part not half a mile. At S. by W. one mile and a half from the N.E. end of Hare Island, lie the three Islets called the **BRANDY POTS** and **NOGGIN**. The northern Brandy Pot, high and covered with trees, is close to the southern one, and the bottom between is dry at low water. The southern is a whitish rock, almost barren, the wood being nearly burnt off. The Noggin, which lies to the N.E. of the northern Brandy Pot, is likewise covered with trees. At low water, these islets are connected by a chain of rocks, leaving a passage for a boat only. Half-way between the Noggin and the N.E. extremity of Hare Island, at half a mile from shore, there is a reef, dry at low water; but all these are out of the fairway. The depth of 7 fathoms leads clear of them. To the S.W. of the Brandy Pots, the south side of Hare Island has a flat of hard ground extending from it, 3 miles in length, and about one-quarter of a mile in breadth. The whole of this side of the island is bound with rocks.

THE PILGRIMS are five islets, lying at the distance of 14 miles above the peninsula of Cacona, at a mile and a half from the shore. They occupy an extent of $4\frac{1}{2}$ miles N.E. by E. and S.W. by W. and are based upon the Bank du Loup, or Wolf Bank, extending from shore above the river of the same name, and on the exterior part of which the depths are $2\frac{1}{2}$ and 3 fathoms. They are connected by reefs that dry at low water. The easternmost is the highest, and is covered with trees; the others are barren and of a whitish colour. They are bold-to on the

north side, but there is no passage for shipping between them and the shore. From the N.E. or Great Pilgrim, the Brandy Pots bear N.N.E. $7\frac{1}{4}$ miles, and the S.W. end of Hare Island N.W. by W. $4\frac{1}{2}$ miles. Hereabout the ebb runs downward, at about $2\frac{1}{2}$ miles an hour. Without the edge of the Bank du Loup is a sand bank, called the Pilgrim Shoal. It is narrow, but 4 miles in length, and its general depths 13 and 14 feet at low water; a depth of 7 and 8 fathoms clears it on the north side.

HARE ISLAND BANK commences at about a mile S.E. from the S.W. end of the island, and extends thence S.W. by W. and S.W. 9 miles. On its northern side is a reef, the greatest portion of which dries at low water. The western extremity of this reef bears from that of the Pilgrims N.W. by N. $3\frac{1}{2}$ miles; and the eastern end is nearly north $4\frac{1}{2}$ miles from the same. The breadth of the channel between Hare Island Bank and the Pilgrims is only 2 miles, and its greatest depths 7, 8, 10, to 13, 15, and 16 fathoms; mud, sand, and gravel.

KAMOURASCA ISLES is a group of narrow islets, lying at the distance of two leagues above the Pilgrims, on the same side of the river. The N.E. or Grand Isle bears from the Pilgrims S.W. by W. The bank between is steep-to. The island next to the Great Island is Burnt Island, and the third of the larger isles is Crow Island. These isles are about 3 miles in extent, and 1 or 2 from the shore: the bank within is dry at low water. Great Island and Burnt Island are very steep on the north side, but Crow Island is surrounded with shoal water.

The settlement of Kamourasca is within the islands. Its church bears S.E. nearly a mile from Crow Island. From the latter, Cape Diable bears S.W. $\frac{1}{2}$ W. about 3 miles, but a long reef extends from the Cape towards the Island, the easternmost part of which is covered at a quarter flood, and is little more than a mile from Crow Island. Two miles above Cape Diable is Point St. Denis; in a small cove on the south of this point is a small island. From Point St. Denis to Point Onelle, the land trends irregularly 6 miles to the S.W.

On the extremity of a slender bay, at 6 miles westward from St. Anne's, stand the Village and Church of St. Roque. The country between is occupied with settlements, and an extensive mud bank, with large scattered stones, uncovered at low water, extends in front of it. This mud bank is included within the greater bank of sand, called the Shoals of St. Anne and of St. Roque, extending more than a third over the river from the southern shore, and limiting the channel on the south side. Between these banks and the Isle aux Condres, on the north side, other banks form the channels called the Traverses. The South Traverse being the passage usually taken by merchant-vessels bound up and down the river, on its south side; the Middle Traverse that on the north side, above the Isle aux Condres; the North Traverse is up the river next to the Island of Orleans, and below which are numerous islands and shoals.

THE ENTRANCE OF THE SOUTH TRAVERSE lies between a buoy chequered black and white on the edge of St. Anne's Bank, on one side, and the bank called the Middle Ground on the other. The narrowest part of the channel is pointed by a light vessel, stationed nearly 5 miles W.S.W. from the chequered buoy of St. Anne's, and which is to be left, on sailing upward, on the larboard side. At nearly a mile W. by S. above the light vessel, is a white buoy on the Middle Ground, to be

left on the starboard side; and, at the same distance S.W. by S. is a black buoy on the larboard side. The passage between these buoys is only half a mile broad, and this is the most intricate part of the navigation in the river. The courses up from these buoys, to a-breast of a red buoy, on the edge of the southern bank, that of St. Jean, are S.W. $\frac{1}{2}$ S. 4 miles, and S.W. by S. 2 miles, whence you enter the South Traverse, distinguished on the north side by a rocky islet, named the Stone Pillar, which is always above water, a quarter of a mile in length, and $2\frac{1}{4}$ miles from the south shore.

The Avignon, a half-tide rock, round on the top, and dry at three-quarters ebb, lies at the distance of two cables' length, S.E. from the body of the South Pillar, with a depth of 7 fathoms close to it. The Pilier Boisé, or Woody Pillar, a high round rock, with trees on the western part of it, lies at a mile and a quarter to the west of the Stone Pillar. At half a mile to the east of it is a rock, called the Middle Rock, dry at half ebb. To the northward of the Piliers, or Pillars, are the Seal Reefs, having an extent of nearly 4 miles N.E. by E. and S.W. by W. In a considerable extent the rocks which form these reefs are dry at low water. The bank on which they lie is extensive on the N.E. toward Condre Island. At a mile and a quarter S.W. from the Pilier Boisé, lies the extremity of a reef extending thence to Goose Island; and at a mile and a quarter S. W. $\frac{1}{2}$ W. from the Stone Pillar, is the commencement of a ledge of high rocks, called the Goose Island Reef, extending thence $2\frac{1}{2}$ miles S.W. $\frac{1}{2}$ W., the western part of which is composed of rocks, always above water, and steep-to on their south side.

GOOSE ISLAND is connected by low meadow land to *Crane Island*, the whole of which occupies an extent of 10 miles in a direction N.E. $\frac{1}{2}$ E. and S.W. $\frac{1}{2}$ W. The South Traverse continues on the south side of this Island, but is impeded by several shoals of 12 and 15 feet of water, which require great precaution. A farm-house may be seen on Goose Island, to the eastward of which, and close to low water mark, is a large rock called the *Hospital Rock*. Two miles and a half to the westward of this rock is a long reef, dry at low water, but it is out of the fairway, and close along the island. The north side of Crane Island is in a good state of cultivation. On drawing toward it you will see a farm-house (Macpherson's) on the east end. To the S.E. at half a mile from this house, is the edge of the *Beaujeu Bank*, a narrow shoal, which extends 2 miles thence to N.E. $\frac{1}{2}$ E. and having, on its shoalest part, only 12 feet at low water.

On the south shore, opposite to the N.E. end of Goose Island are the settlement and church of *L'Islet*, and at 7 miles higher are the cape and village of *St. Ignace*; between are numerous settlements, and a shoal bank extends along shore, which is a mile and a half in breadth, thus narrowing the channel-way to the breadth of a mile.

BAYFIELD ISLES lie to the west of Crane Island. Exclusive of a number of smaller islets and rocks, the principal isles are, *Canoe Isle* on the north side of Crane Island, *Marguerite* or *Margaret* to the west, *Grosse Isle*, and *Isle aux Reaux*, otherwise Rat Island, and the *Isle Madame*. The whole between Crane Island and the Island of Orleans, occupies an extent of 14 miles. From the west end of Crane Island a reef of rocks extends to the W.S.W. about half a mile, and a spit of sand, of 9 to 12 feet water, a mile and a quarter thence in the same

direction. From the S.W. side of Marguerite, there is likewise a bank extending in a S.W. direction, the extremity of which is marked by a red buoy. On the north side of this island is a good roadstead, with 8 fathoms of water, lying about a mile to the east of Grosse Isle. You enter from the southward with the red buoy above-mentioned on the starboard, and a white buoy, three-quarters of a mile farther north, on the larboard side; the course in being N. by E.

Grosse Isle, which has a farm near its N.E. end, is about 150 feet in height; and the next isle, *Reaux*, which is long, narrow, low, and covered with trees, has one near its west end. The Isle Madame is also low, covered with trees, and has only one habitation. The last two isles are wholly on a base of rock, and from the S.W. end of Madame, the bank extends $2\frac{1}{2}$ miles to the S.W. and thus forms the entrance of the Northern Traverse, on the eastern side of the island of Orleans. A ship should not approach it nearer than in 7 or 8 fathoms.

On the SOUTHERN LAND, above the Beaujeu Bank, will be seen, in succession, the Churches of St. Ignace, St. Thomas, Berthier, St. Vallier, St. Michael, and Beaumont. Within this extent are 4 telegraphs, a part of the chain connected with Quebec. A large tract in the vicinity of the River du Sud is in so high a state of improvement as to be considered as the granary of the province. The western side of this river is distinguished by the respectable village of St. Thomas, and the country about it is very fine, exhibiting churches, telegraph stations, and villages. From the land of St. Thomas, a bank extends more than half-way over toward Crane Island. Its northern extremity is a mile and a half S.W. by W. from the south point of the Island; the bank is partly dry at low water.

The Wye Rock lies immediately above the Bank of St. Thomas. This reef is about one-quarter of a mile in length, in the direction of S.W. by W. It has only 3 feet over its west end, and 6 feet over the east end. The west end lies with the Seminary of St. Joachim, on the north side of the river, just shut in with the east end of Reaux Island, and bearing N. 50° W. Its distance from the nearest shore is rather more than half a mile. On the south shore, at $6\frac{1}{2}$ miles above the Wye Rock, and W.N.W. from Berthier Church, lie the Bella Chasse Islets, two remarkable rocks. They are situate three-quarters of a mile from the shore; above these will be seen the telegraph, No. 4, standing on the highest part of the point of St. Vallier, and at about 2 miles to the eastward of the church. The ground, all the way up from St. Vallier Point to Quebec, is foul and unfit for anchoring.

St. Vallier Church bears from that of St. Jean, or St. John, on the Island of Orleans, S.E. distant about 3 miles. The Shoal of Beaumont, opposite to the point of St. Lawrent, or St. Lawrence, on the Island of Orleans, is a large rocky bank, extending more than half-way over from the south shore. It is dry at low water, uneven, and steep-to on the north side, having 14 fathoms close to it.

THE ISLAND OF ORLEANS is distinguished for its fertility. The shores in general slant gradually to the beach; from the foot of the slopes are large spaces of low meadow-land, sometimes intersected by patches of excellent arable. Bordering the north channel the beach is flat and muddy, with reefs of rocks running along it; but, on the southern side, it is a fine sand, with only a few pointed rocks sticking up here and there. The highest part of the island is by the church of St. Pierre,

(St. Peter,) about $3\frac{1}{2}$ miles from the western extremity, and almost fronting the Falls of Montmorency; and also just above Patrick's Hole, on the south side, nearly abreast of St. Pierre, on which is placed the second telegraph of a chain between Quebec and Green Island. The central part is thickly wooded. The churches of St. Lawrence and St. John are situated close down on the southern shore; the distance between them is nearly 6 miles, and this extent presents excellent cultivated lands, richly diversified with orchards and gardens, and houses at short intervals from each other. *St. Patrick's Hole*, a little to the westward of St. Lawrence, is a safe and well-sheltered cove, where vessels outward bound usually come to an anchor, to await their final instructions for sailing. Off St. Patrick's Hole, ships ride in 10, 12, or 14 fathoms, abreast of the inlet. The telegraph, No. 2, is just to the eastward of this cove, on the high part of the island. The ground is not good, but it is well sheltered from easterly winds. Here the river is about 1 mile and a quarter wide, and bold on both sides.

At about half-way between St. Patrick's Hole and the west end of Orleans, is a shelf called MORANDAN'S ROCKS. They extend a cable's length from the island, and have only 10 feet over them. On the S.W. part of the west end of Orleans is another reef; this is dry at low water, lies close in, and should not be approached nearer than in 10 fathoms. On the opposite shore, a little to the eastward of Point Levy, is another reef which should be passed at the same depth. Northward of Point Levy is a small reef, but close in, and out of the fair-way.

BASIN OF QUEBEC. This is 1 mile across between the high-water mark, with a great depth of water. The **HARBOUR OF QUEBEC**, properly so called, commences at St. Patrick's Hole, and extends thence to Cape Rouge River, which is nearly 3 leagues above Quebec. The Port of Quebec comprehends all the space between Barnaby Island and the first rapid above Montreal.

The situation of Quebec, the capital of Lower Canada, and the residence of the Governor General of British North America is unusually grand and majestic, in form of an amphitheatre. The city is seated on the N.W. side of the St. Lawrence, upon a promontory, formed by that river and the St. Charles. The extremity of this headland is called *Cape Diamond*, of which the highest point rises 345 feet above the level of the water.

MONTREAL. The communication between Quebec and Montreal is chiefly by means of steam vessels, which start almost every day from both cities.

TIDES IN THE RIVER OF ST. LAWRENCE.

On the days of full and change, the tide flows in the river as follows: At Point Deamon, or the extremity of the Monts Pelés, on the north side, at 12h. In Manicouagan Bay, at 1; here spring-tides rise 12, and neaps 8 feet. At Bersimis Point $1\frac{1}{2}$. Mille Vaches Point, 2h. On the south coast, near Cape Chatte, the time is 12h. Here spring-tides rise from 12 to 14, and neaps 8 feet. Off the river Matane, the time is 2h.; springs rise 12, and neaps 6 feet. At Grand Metis Bay, the time is 2h. 10m.; springs rise 13, and neaps 8 feet. Off shore hereabout, the current on the surface always runs downward, from $1\frac{1}{2}$ to $2\frac{1}{2}$ knots.

The time of high water at Green Island, is 3h.; spring-tides rise 16, and neaps 10 feet. In the middle of the river, off the eastern part of this

island, the flood from the north shore turns to the southward, and sets thence eastward off the south shore; and thus below the Isle Bic, the stream sets constantly downward, at the rate of $1\frac{1}{2}$ to $2\frac{1}{2}$ knots, as before-mentioned.

At Green Island, the time is 3h.; at Kamourasca, 4h.; at the Brandy Pots, 3h. 30m.; in the Traverse, 4h. 30m. Off Point St. Roch, or Roque, 4h. 50m. Here it ebbs $6\frac{3}{4}$ hours, and flows $5\frac{1}{2}$. At the ISLE BIC the stream never bends to the westward until an hour's flood by the shore. The neap-floods are here very weak; and, with westerly winds, none are perceptible. A spring flood is, however, always found, within 4 miles of the shore, between Father Point and Bic. The ebb-stream from the river Saguenay sets with great force south-eastward toward Red Island Bank. Off Green Island, on the opposite side, there is little or no flood, but a great ripple. All the way hence to Quebec, the tide, when regular, flows tide and quarter-tide; but it is influenced greatly by the wind, and by no means to be depended on, as to its running any where below Hare Island, where there is a regular stream of ebb and flood.

BETWEEN BARNABY and BIC, the stream of flood sets in from the N.E. at the rate of about 2 knots; then fair through the channel until last quarter flood, when it sets to the N.W. by the west end of Bic, and then gradually to the N.E. as the flood slacks. The whole of the ebb, both to the eastward and westward of the island, sets strongly to the N.E. The current between Bicquet and the north coast is generally very strong to the N.E. without any regular change. In the summer and autumn, as well as in spring-tides, this current slacks, and, near Bicquet, runs to the westward, during flood; but until the upland waters have all run down, and the great rivers have discharged the freshes, caused by the thawing of the snows in the spring of the year, this current always runs downward.

From BIC to GREEN ISLAND, on the southern side, the stream of flood is no where perceptible at a mile and a half from the islands. The ebb or rather current, comes strongly from the N.W. out of the River Saguenay, and through the channel to the northward of Red Island. Here it always runs in a S.E. direction, 2 miles an hour, with a westerly wind; but only so to the southward and eastward of Red Island. Between Red Island and Green Island, the ebb runs from 4 to $6\frac{1}{2}$ knots. In crossing over to the north shore, this easterly current will be found to diminish; for, on the north side the flood is pretty regular, and the ebb much weaker. Eastward of the Razade Rocks, and near Bic, the current assumes a N.E. direction, and sets strongly between Bic and Bicquet. To the southward of Bic, spring-floods run at the rate of a knot and a half; neaps are not perceptible. Ships that come to the southward of Bic, with a scant wind from the northward, must steer W. by N. to check the S.E. current, until they come into 18 fathoms of water, or up to Basque, whence they proceed for Green Island.

The first of the flood, spring-tides, sets from the N.E. along the north side of GREEN ISLAND, and strongly toward the west end of it; then S.S.W. over the reef toward Cacona. In the middle of the channel no flood is perceptible. At 2 miles to the southward of Red Island it sets strongly to the N.W. and the ebb contrary. During spring ebbs, the meeting of the N.E. and S.E. tides, near the middle of Green Island, causes very strong rippings: and, to the eastward of Green Island, the

S.E. ebb comes strongly about the east end of Red Island ; here meeting the N.E. tide causes a high rippling, much like broken water in strong easterly winds : but, in neap tides, the floods are very weak, and in the spring of the year there are none. This renders the part of the river now under notice more tedious in its navigation than any other, unless with a free wind.

From the west end of Green Island a regular stream of flood and ebb commences, which runs 5 hours upward and 7 downward. At the Brandy Pots it flows tide and quarter-tide : and, above the Percé Rocks, on the south shore, it sets regularly up and down, N.E. by E. and S.W. by W.

From the Brandy Pots, the stream of flood sets toward Hare Island and near the west end N.W. with great strength, through the passage between the Island and shoal. Above Hare Island, the flood sets regularly up the river ; the ebbs contrarywise. From the Pilgrims up to Cape Diable, the flood is very weak, but it thence increases up to the buoys of the Traverse, where it runs at the rate of 6 knots. The first of the ebb sets towards the English Bank and Hare Island Shoal, when abreast of the greater island of Kamourasca, and the ebb contrary. In La Prairie Bay, on the north side of the Isle aux Coudres, the time of high water is 4h. 25m. and here it flows 6 hours ; the ebb stream continues an hour and a quarter after low water, and the flood three-quarters of an hour after high water.

The tides in the North Channel being half an hour earlier than in the southern channel, the first of the flood sets strongly on the St. Roque and St. Anne's Banks ; and the first of the ebb sets strongly across the shoals in the middle of the river. In the Traverse, spring tides arise 18, and neaps 11 feet.

At the TRAVERSE, on the full and change, the tide on shore flows at half-past four, but it continues to run to the westward until six o'clock, when regular in the channel. With westerly winds there is a deviation, but it is certain that the tide on shore rises 3 feet before the stream bends to the westward ; and this allowance must always be made in every part of the river. In the Traverse, the first of the flood sets from the N.N.E. ; at the buoys, at a quarter flood, it takes a S.W. direction, and when the shoals are covered at half-flood, at the Seal Reefs, it sets until high water S.W. by W. The ebbs in a contrary direction, run with great strength ; frequently in the spring of the year at the rate of 6 or 7 knots.

Between the Piliers, or Pillars, it is high water at 5h. The ebb here runs 6 hours and 50 minutes ; the flood 5 hours and 25 minutes. Both streams continue to run an hour after high and low water by the shore. From Crane Island the flood sets fair up the river, but the first of the ebb off L'Islet sets to the northward for half an hour, then fair down the river, and at the rate of not more than $3\frac{1}{2}$ knots in spring tide.

At the Isle aux Reaux, or Rat Isle, below Orleans Island, it is high water at 5h. 32m. It ebbs by the shore 7 hours, and flows 5 and a half ; the streams run an hour later. Off the S.W. end of Madame Island, it is high water at 5h. 40m. ; springs rise 17. and neaps 13 feet. At Quebec, the time of high water is 6h. 37m. Here it ebbs by the shore seven hours and forty minutes, and flows four hours and forty-five minutes. Both streams run an hour after high and low water by the shore. Springs rise 18, and neaps 13 feet.

DIRECTIONS

FOR SAILING FROM ANTICOSTI TO QUEBEC.

From CAPE CHATTE to Matane, the course and distance are W. $\frac{1}{2}$ S. $10\frac{1}{2}$ leagues. When at 4 miles to the north-eastward of Matane, you will see the Paps bearing S.W. $\frac{1}{2}$ W. : they stand inland to the westward of the river, as already noticed, and this is the best bearing on which they can be seen. Mount Camille will now come in sight to the W.S.W. and may be seen in this direction 13 leagues off. It hence appears to the northward of all the land on the south side, and in the form of a circular island.

Twenty-three miles W. $\frac{1}{2}$ S. of Matane River is LITTLE METIS COVE. If requisite to anchor here, give the east end of the reef a berth of 100 yards, or cross it in three fathoms : then haul up into the middle of the cove, and let go.

GRAND METIS is $5\frac{1}{4}$ miles W. $\frac{1}{2}$ S. from Little Metis. The bank of soundings extends farther to the northward of these coves than off Matane, and 35 fathoms, with sand, may be found at 4 miles from shore ; but, beyond this, the depths speedily increase to 60 and 70 fathoms. The edge of the bank continues steep as high up as Green Island. Along shore, within 10 fathoms, the ground is hard, and it is difficult for a boat to land, unless in fine weather. From Grand Metis to Cock Cove, the land trends W. by S. 10 miles. In fine weather, ships may stop tide between, in 15 fathoms.

POINT AUX PERES, or FATHER POINT, has been already described, as well as Barnaby Island, which lies to the westward of it. Small vessels, seeking shelter from westerly winds, may find a depth of 3 fathoms, under the reef extending from the east end of this island. Upon this reef is a large round stone, which serves as a mark. To enter, cross the tail of the reef in 4 fathoms, and then haul to the southward ; and, when the island bears W. by N. with the large stone N.W. by W. anchor at a quarter of a mile from the island.

From *Barnaby Island*, the *Isle Bic* bears West, 10 miles ; *Bicquet* W. by N. $11\frac{1}{2}$ miles ; and *Cape Orignal* W.S.W. $\frac{3}{4}$ W. $3\frac{1}{2}$ leagues. *Cape Orignal* and the east end of *Bic* lie North and South from each other, distant $2\frac{3}{4}$ miles. The *Cape* bears from *Bic Old Harbour* nearly West, about $2\frac{1}{2}$ miles. From the *cape* a reef extends east 1 mile. The eastern part of this reef and the western point of the harbour, in a line, bear E.S.E. 1 mile.

SOUNDINGS, &c., between COCK COVE and BIC ISLAND.—From *Father Point*, the bank extends northward 5 miles. At that distance from land are 35 fathoms of water, with sand and mud. Hence, westward, all the way to within 1 mile of *Bicquet*, the soundings are very regular. Ships may therefore stand to the southward by the lead, and

tack at pleasure. They may, also, stop tide any where in this extent, in 9 or 10 fathoms, good ground.

If a ship arrives off Father Point, during an easterly wind and clear weather, when no pilots are to be obtained, she may safely proceed along the land in 10 fathoms of water. On approaching the Isle Bic, the reef extending from the S.E. of that island will be seen: give this a berth, and continue onward through the middle of the channel between the island and Cape Orignal. With the body of the island N.E. you may come to an anchor, in 8 or 9 fathoms, clean ground, and wait for a pilot. There is a spot on the island cleared from trees; when this spot bears N.E. from a depth of 11 or 12 fathoms, you will be in a good berth. The ground is hard toward the island.

A ship off Father Point, during THICK WEATHER and an easterly wind, without a pilot, may stand to the southward by the lead, and tack by sounding. In this case observe that, when in 12 fathoms, Bic will bear due West.

To BEAT up from Father Point to Bic Island, you may make free with the south shore; as, by nearing it, the flood tide will be most in your favour. The depth of 7 fathoms is a good fair-way, and you may anchor in that depth all the way up to the island. When beating in, to the southward of Bic, from the eastward, stand to the southward into 7 fathoms while to the eastward of the island, but approach no nearer to the S.E. reef than 9 fathoms. In the middle are 12 fathoms. In standing to the northward, toward Bic, tack in 10 fathoms all along the island, and when it bears N.E. anchor as above.

THE GENERAL COURSES, &c.

Between Cape Chatte and Isle Bic.

A ship bound upward, and having arrived within 3 leagues to the N.E. of Cape Chatte, should steer W. by S. or according to the wind, allowing for current to S.E. as already shown. Running thus, for 24 leagues, will bring you to Father Point. Should the weather be thick, you may haul to the southward; and if, after gaining soundings in from 30 to 25 fathoms, the water should suddenly shoalen to 20 and 15, you will not be up to the point, but may safely run 4 or 5 miles higher: with soundings, and the water gradually shoaling from 30 to 25, 18, &c. in 3 or 4 miles you will be up with the point, and may make signal for a pilot, approaching no nearer than in 12 fathoms. Here you will be about 1 mile and a half from shore; and will, if the weather be clear, see the houses. The shore is bold-to, and may be approached with safety. From Father Point to the Isle Bic, the bearing and distance are W. $\frac{1}{4}$ S. 16 miles.

While advancing from the eastward toward Father Point, and being off Little Metis, the high land to the southward of Cape Orignal may be seen before the cape itself or Isle Bic come in sight. From off Mount Camille, in clear weather, Bic may be clearly seen. To avoid mistaking Barnaby Isle for that of Bic, observe that, in thick weather, a ship

cannot approach the land, near Father Point, without gradually shoaling the water; consequently if, while keeping the lead going, you come into 9 fathoms, and make an island suddenly it must be Barnaby; or if falling in with an island on any bearing to the westward of W.S.W. one east of the lead will be sufficient to ascertain which it is: for, with Barnaby from W.S.W. to W. you will have from 7 to 5 fathoms only; but with Bic on the same bearings are from 15 to 12 fathoms.

If, with the lead kept going, and no soundings be found, you suddenly fall in with an island to the southward, it must be Bicquet. With this island S.W. half a mile there are 16 fathoms of water. At 2 miles east from it are 10 fathoms, and a ship advancing into this depth, from the deeper water, may either haul off to the northward, and wait for clear weather, or proceed by sounding around the reef from the east end of Bic; steer thence west 2 miles, and come to an anchor, within the island, in 12 or 11 fathoms. At 4 miles north of Bicquet, are 50 fathoms of water.

With an *EASTERLY* wind, if requisite to anchor on the south side of Bic, to proceed from windward, run boldly to the southward, and look out for the reef extending from the east end of the island; the latter may be seen, being always above water. Give the reef a berth of a quarter of a mile, and run along, in mid-channel, until Cape Orignal bears S.S.E. the body of the island then bearing N.N.W. In 10 or 11 fathoms is a large ship's berth, the ground clear and good. Small vessels may run up, until the island bears N.E. in 9 fathoms, at about a quarter of a mile from the island, but here the ground is not so clear as in the deeper water. Fresh water is obtainable in the cove just to the westward of the east end of the island.

If, during a *WESTERLY* wind, a ship should be to the windward of the island, and it be required to bear up, in order to anchor, stand to the southward into 11 fathoms; then run down and anchor, as above directed; but particularly noticing that, with little wind, 10 fathoms is the proper depth of the fair-way, and that the last quarter-flood, and all the ebb, sets strongly between Bicquet and Bic.

Should you, with the wind *easterly*, be too far to the westward to fetch round the east end of Bic, in order to gain the anchorage, give Bicquet a berth of half a mile, then run up until the west end of Bic bears S.E. when Cape Orignal will be open of it. The latter mark leads to the westward of a reef that covers at a quarter tide, and extends W.S.W. 1 mile from Bicquet. Another reef, always in sight, lies between the former and Bicquet. By hauling round to the southward, with Cape Orignal open, you will pass athwart the opening between Bic and Bicquet, in from 16 to 12, 10, and 9 fathoms; the water thence shoalens into 6 fathoms, on the spit of mud and sand lying S.W. by W. from Bic 1 mile. After crossing this spit, you will deepen into 9 and 10 fathoms, when the passage will be open, and you may come to an anchor.

The N.W. ledge of Bic, the west end of that isle, and Cape Orignal, are nearly in a line when bearing S.E. When beating into Bic from the westward, while standing to the southward, do not shut Mount Camille with Cape Orignal; in standing to the northward, do not shut Mount Camille with the Isle Bic.

BANK OF SOUNDINGS. In the offing, between Barnaby and Bic, are regular soundings, decreasing from 35 to 30 fathoms, generally of clean ground. Ships may, therefore, anchor in any depth but no nearer than

a mile and a half, with Bic bearing from W.S.W. to S.W. as otherwise, the channel on the south of that island will not be open; and, with a sudden shift of wind, you may not be able to clear the island.

At N.W. from the eastern extremity of the S.E. reef of Bic, and just to the southward of the stream of Bicquet, is the *N.E. reef*, a dangerous ledge, seen at low water, spring-tides only. To avoid it, give Bic the berth of a mile. Westward of Bic the edge of the Bank of Soundings trends to the south-westward up to Basque Isle, and ships may therefore stand safely to the southward by the lead, 12 fathoms being the fair-way.

ISLE BIC TO GREEN ISLAND. From the Isle Bic, Green Island bears S.W. by W. $\frac{3}{4}$ W. $9\frac{1}{2}$ leagues: and the course will therefore be from W.S.W. to S.W. according to the distance northward from Bic, &c. In this course and distance, you pass the Alcides Rock, Razades, Basque, and Apple Island. From the rocks of Apple Island to the eastern reef of Green Island, the bearing and distance are W. by S. 2 miles. This reef extends nearly a mile from the trees on the east end of Green Island, and is always uncovered. The small channel on the south side of Green Island is nearly dry at low water.

The edge of the bank is steep to the northward of the Razades, &c.; but from 35 fathoms, inward, there are gradual soundings. Between Bic and Green Island there is anchorage all the way in 14 fathoms; and for small vessels, in fine weather, in 9 fathoms. If up to the east end of Green Island, and the tide be done, you may anchor in 10 fathoms, off the reef, and in the stream of the ledge extending N.E. by N. from the lighthouse point, at the distance of a mile from the extremity of that shoal.

Between Bic and Basque the ground is all clean; but thence to Green Island it is foul. A small vessel may find shelter under the east end of Basque, in $2\frac{1}{2}$ fathoms at low water, giving the east end of the reef extending from that island the berth of a quarter of a mile. The anchorage is with the island bearing W. by S.

The **LIGHTHOUSE** and reefs about Green Island have been already described. The lighthouse bearing S.W. by W. leads safely up to Green Island. The high land to the southward of Cape Orignal kept open to the northward of Basque Island, leads clear of the lighthouse ledge. With the lighthouse bearing S.W. by S. this ledge will be exactly between the ship and lighthouse.

Between the lighthouse and the west end of Green Island, in fine weather, you may stop tide in 20 or 25 fathoms, close to the north side of the island: but, if the wind be fresh, the ground will be found to be bad for holding, and too near the shore. During N.E. winds, small vessels may anchor between the S.W. reef and Cacona, in 4 fathoms; but it will be better to bear up for the Brandy Pots, lest they be caught by adverse weather, &c.

RED ISLAND bears from the lighthouse of Green Island N.W. by W. $\frac{1}{2}$ W. nearly $5\frac{1}{2}$ miles. The eastern extremity of its extensive reef bears from the lighthouse nearly N.W. by N. When coming up in the night, the light should not, therefore, be brought to the eastward of S. by E. until you are certainly within 5 miles of it. If, with the light bearing S. by E. you cannot make free to enter the Narrows, wait for day-light; and, should the wind be scant from N.W. you may then borrow on the south side of Red Island, but so as to have White Island open from the north

side of Hare Island. On drawing to the westward, you may approach the shoal of White Island by the lead, remembering that the ebb-tide sets strongly down between White Island Shoal and Red Island, and the flood in the contrary direction. A vessel may anchor, in fine weather, on the south side of Red Island Reef, in 12 fathoms, at the distance of about three-quarters of a mile. The tide hereabout, as already shown, sets in all directions.

The SOUNDINGS between Green Island and Red Island are very irregular. At a mile from each are nearly 30 fathoms of water. The water of this channel, during ebb-tide, with an easterly wind, appears broken, but there is no danger.

THE NORTH COAST. The *Point de Mille Vaches* bears from Bicquet N. by W. $4\frac{1}{2}$ leagues. The extensive shoal which surrounds this point commences off the river of *Port-neuf*, on the east. The southern extremity of the shoal is a mile from shore, and is very steep-to. The greater part of the shoal is dry at low water. Above the point the land forms the *Bay of Mille Vaches*, which is shoal, and full of rocks. At 11 miles S.W. by W. from Point Mille Vaches, are two islets, called the *Esquemine Isles*. In the Bay, at 4 miles west from the point, is a small river, called *Sault au Mouton*, having a handsome fall of 80 feet, near the mouth of it, which may be always seen when passing. Between the Esquemine Isles and Saguenay River, a distance of $7\frac{1}{2}$ leagues, S.W. by W. are 3 small rocky inlets, named *Bondesir* and *Les Bergeronnes*, which afford shelter to fishing-boats.

Ships working up on the north side, between the Esquemine Isles and Red Island, should keep within 2 leagues of the north land: the shore is clear and bold, and the flood pretty regular.

Should a ship, to the northward of Red Island, be caught by a sudden shift of easterly wind, so that she cannot fetch round the east end of Red Island Reef, she may safely bear up and run to the westward, giving Red Island, White Island, and Hare Island, on the larboard side, a berth of 2 miles in passing. At 3 leagues above Hare Island, haul to the southward, and enter the South Channel toward Kamourasca: whence proceed as hereafter directed.

GREEN ISLAND TO THE BRANDY POTS. The Percé Rocks, Barrett Ledge, White Island, and the Brandy Pots, have already been described. From Green Island to the Brandy Pots, the course and distance are from S.W. $\frac{1}{2}$ W. to S.W. by W. 4 leagues. To sail to the northward of Barrett Ledge, bring the southernmost mountain of Kamourasca in a line with the saddle of the Great Pilgrim, or an islet lying off the N.E. side of Green Island, touching the high land of Cape Orignal. Either of these marks will clear the Ledge.

In advancing toward the White Island Reef, you may trust to the lead: 7 fathoms is near enough to tack or anchor in, and this depth is in the fair-way to the Brandy Pots. The Brandy Pots are steep on the south side, 10 fathoms being near to them.

There is good anchorage to the eastward of the Brandy Pots, in from 9 to 7 fathoms, and good anchorage above them, in from 9 to 14 fathoms. This is the best roadstead of any part of the river, during easterly winds, excepting that of Crane Island.

There is a good passage to the southward of Barrett Ledge up to the Pilgrims, leaving the Middle Ground, which is above Barrett Ledge, on the starboard hand. The N. passage is, however, the best, and most used.

BRANDY POTS TO THE SOUTH TRAVERSE AND GOOSE ISLAND. The flat on the south side of Hare Island, above the Brandy Pots, is bold-to, there being 7 fathoms close to it, nearly up to the west end; and the whole of this side of the island is bound by rocks.

The lower end of the Middle Bank, as already noticed, bears S.E. $\frac{1}{2}$ E. about a mile and a half from the Brandy Pots. Between the Middle Ground and Hare Island are 15 and 16 to 20 fathoms of water; on the south side of the Middle Ground, 8 and 9 fathoms. At half tide, in this part of the river, a large ship may safely beat up or down.

In order to pass through the best water, between the Middle Ground and Hare Island Spit, after running about half a mile above the Brandy Pots, on a S.W. course, bring the southernmost mountain of Kamourasca over the middle of the second Pilgrim; and, with this mark kept on, when White Island comes open between Hare Island and the Brandy Pots, keep it midway between them, and it will lead between the knoll and west end of the Middle, in 4 and $3\frac{1}{2}$ fathoms at low water. You will be up to the knoll when the west end of Hare Island bears N.W.

In standing to the southward from Hare Island, above the Brandy Pots, you will find 18 and 20 fathoms of water. On the north side of the Middle Bank, 4 fathoms; but there are 8 and 9 fathoms on the south side of this bank, with gradual soundings to the south shore. Five fathoms is a good depth to tack in. Abreast of the middle of Hare Island the depths are nearly the same. On the S.W. spit of Hare Island Shoal are but 2 and $2\frac{1}{2}$ fathoms.

The direct course from the Pilgrims to the Chequered Buoy on the south side of the Traverse is S.W. by W. the distance about $7\frac{1}{2}$ leagues. The South Traverse and coast between have been fully described. The bank between the Pilgrims and Kamourasca Isles is steep-to. The mark for tacking here is not to shut the S.W. land with the great Island of Kamourasca: in standing to the northward, you will gain the depth of 20 fathoms.

KAMOURASCA. From the west end of Crow Island, the third of the Kamourasca Isles, the church bears S.E. nearly a mile. Between is a place on which ships may safely be run on shore. To get in, open the church three sails' breadth to the westward of Crow Island, and run for it. In passing in, you will carry 14 feet in common spring-tides, and 10 feet with neaps. The bottom is of soft mud.

CAPE DIABLE bears from Crow Island S.W. $\frac{1}{2}$ W. about 3 miles, and a reef extends from the cape as already explained, the easternmost part of which is not more than a mile and a half from Crow Island. Ships from the westward, therefore, in order to get in, should run down along the reef in 6 fathoms, and haul in for the church, as above.

With easterly winds, the large cove on the S.E. of Cape Diable is a fine place for a vessel to run into, should she have lost her anchors. To enter, bring the church and Crow Island in the line of direction given above. Having arrived within the reefs, run up to the westward, leaving an islet that lies above the church on the left side; then put the ship on shore in the S.W. part of the cove, and she will be safe. Should the wind be westerly, put her on shore a little to the eastward of the church.

TRAVERSE. From Cape Diable to the narrow channel called the TRAVERSE, the course, if at 3 miles from the cape, will be S.W. by W.

In proceeding, keep the northernmost part of the high land of Kamourasca in a line with the low point of St. Denis: this mark will lead to the Light-vessel and the black buoy off the point of St. Roque, and the white buoy upon the Middle Ground on the opposite side. When St. Roque church bears S.E. by S. the roadway beyond the church will be in a line with it, and you will be up to the buoys. From this spot, observing to keep the Pilier Boisé just touching the south point of Goose Island, run one-half or quarter of a mile above the buoys on a S.W. course.

From the spot last mentioned, the direct courses upward along the edge of St. Roque's Bank will be S.W. $\frac{1}{2}$ S. 4 miles, and S.W. by S. 2 miles; but considerable allowance must be made for tide, whether ebb or flood. These courses lead up to abreast of the red buoy, lying on the bank at $4\frac{1}{2}$ miles W.S.W. $\frac{1}{4}$ W. from the Point of St. Roque. The depths on the courses prescribed are 8, 7, and 6 fathoms, varying to 11 and again to $5\frac{1}{2}$ and 6 fathoms.

On proceeding hence upward, with the Stone Pillar in sight, bearing S.W. you will keep in the best water, until you have that islet at the distance of 2 miles, where the depths at low water are 5 and 6 fathoms: from this place you bear up, on a south course, into the southern part of the Traverse: and thence, not forgetting the *Avignon* or *South Rock*, the course will be S.W. $\frac{1}{2}$ W. until past the Stone Pillar and Goose Island Reef, which you keep on board upon the starboard side.

If running from off Cape Diable for the Traverse, during the night or in a fog, strike the bank off that cape in 7 or 8 fathoms, and steer about W.S.W. By keeping that water, it will lead to the light-vessel, On passing the point of St. Roque Sand, the water will suddenly be found to deepen, whence you must haul to the southward, keeping the south side on board, and proceeding as above.

If entering the Traverse with *little wind*, be careful to allow for the first of the flood, as it sets strongly toward the point of St. Roque Bank. On going through, if more than half-flood allow for a set to S.W. by W. and be sure always to keep the south bank on board. Above the Piliars, the tide sets fair up the river.

In beating into and through this passage, be careful and tack from each side on the first shoal-cast of the lead; but most so to the northward, on the edge of the Middle Ground. Ten fathoms is near enough to the bank; and it is to be remembered, that the ship will always go farther over toward the Middle Bank than to the point of St. Roque Shoal.

ANCHORAGE. Between the Brandy Pots and Traverse, there is anchorage all along the English Bank, and upon the edge of the flat on the south side, between the Pilgrims and the greater Kamourasca Isle, in 9 fathoms: under the Pilgrims, in 3 fathoms; off Cape Diable, in 10 fathoms; and thence, along the flat, up to the buoys.

Should the flood be done, when a ship is in the Narrows, or between the buoys, or if any occurrence render it necessary to anchor thereabout, instead of coming-to in the channel, run below either buoy, and come-to there, in 7 fathoms, on either side. The tides will be found much easier after half-ebb below the buoys than between them. In the deep water the tides here run very strong. Should the wind be inclinable to the southward, anchor to the southward of the stream of the black buoy, in 7 fathoms. Should a ship be a mile above the buoys, under

similar circumstances, she should anchor on the edge of the South Bank, in 7 fathoms, with a good scope of cable before the tide comes strong; for, if the anchor once starts, you may have to cut from it, as it seldom takes hold again, the ground hereabout being foul and unfit for holding.

Near the Pillars the tides are much easier than below; at and above them, setting at the rate of not more than $3\frac{1}{2}$ miles an hour.

Ships bound down, with easterly winds, may anchor at two miles to the north-eastward of the South Pillar, in 7 fathoms; or, to the southward of it, in the same depth, with good ground.

STONE PILLAR, or PILLAR, to CRANE ISLAND. From abreast of the Stone Pillar, or of the Avignon Rock, the direct course and distance to Crane Island, are S.W. $\frac{1}{2}$ W. 4 leagues. On this course you pass Goose Island, and arrive at the Beaujeu Bank, before-mentioned, but must hence take a circuitous route, in order to avoid this and other shoals. The south side of the channel is a muddy flat, of 3 and 2 fathoms, with regular soundings toward it. There is hence good anchorage all the way up to Crane Island. Stand no nearer toward Goose Island Reef than 10 fathoms; but above it you may stand toward the island to 7 fathoms.

When up to the body of Crane Island, you may approach safely, as it is bold and clear, with 7 fathoms close to the rocks.

ANCHORAGE. From off the Pillars to Crane Island, there is all the way, good and clean ground. There is, also, a good road off the body of Crane Island, in 8 fathoms. The best road in the river, during easterly winds, is at a mile to the westward of Crane Island: and ships bound downward, if at the Pillars, and caught by strong easterly winds, had better run back to this place, than ride below, and risk the loss of anchors.

CRANE ISLAND TO POINT ST. VALLIER. The direct course and distance from Crane Island to Point St. Vallier, is from W. by S. to W.S.W. 4 leagues. Between are the mud bank of St. Thomas, the Wye Rocks, the Belle-Chasse Islets, and the bank off Grosse Island. When St. Thomas's church bears S.E. $\frac{1}{2}$ E. you will be abreast the point of the bank, having a red buoy, and may thence steer directly up, W.S.W.

To avoid the Wye Rock, never stand to the southward of 6 fathoms in the night: and, by day, observe that the long mark is to keep Belle-Chasse Islets always open to the southward of Point St. Vallier. The Rocks lie with Belle-Chasse Islets and the telegraph of St. Michael in one; and the islets thence appear twice their breadth open to the northward of Point St. Vallier.

When above Marguerite Island, stand no farther to the northward than into 6 fathoms. Reaux or Rat Island and Madame are flat to the southward; 7 fathoms will be near enough to both. The south side of the channel, up to Belle-Chasse, is all bold, 8 fathoms are close to it, with 7, 8, 9, and 5 fathoms, quite across. There is good clean anchoring-ground, and easy tides, all the way.

When up to Belle-Chasse, stand no nearer to these islets than 8 fathoms, and to Madame than 6 fathoms. The shoal extending from Madame has already been noticed.

ST. VALLIER TO QUEBEC. From the Point of St. Vallier to that of St. Laurent, or St. Lawrence, in Orleans, the course and distance are from W.S.W. to S.W. by W. $9\frac{1}{2}$ miles. Both sides are bold; 10

fathoms in the fair-way from Orleans, and 8 fathoms from the south shore. Ships may anchor toward the island, in from 16 to 10 fathoms.

THE SHOAL OF BEAUMONT is steep-to. Make short boards until you are above Point St. Lawrence, when you will be above it, and may safely stand to the southward into 10 fathoms.

From POINT ST. LAWRENCE to POINT LEVY, the course and distance are W. by N. 2 leagues. At a mile and a half westward from St. Lawrence's church is St. Patrick's Hole. Here in about 10 fathoms, is the fair-way to tack from. The depth in the middle is 10 fathoms.

From off POINT LEVY to QUÉBEC, the course is W.S.W. and the distance about 2 miles. The shoals of Beauport, on the north side, may be easily avoided: in standing toward them advance no nearer than in 10 fathoms, as they are steep-to, and are, in some parts, studded with rocks.

Ships arriving at Quebec, with flood tide and an easterly wind, should take in their canvas in time and have cable ready, as the ground in the basin is not very good for holding. The water is deep, and the tides strong, particularly spring-tides. If obliged to come-to in the middle, there will be found from 16 to 20 fathoms abreast of the town; but near the wharfs, or at two cables' length from them, is a depth of 11 fathoms: and here vessels are easily brought up: but, in the offing, 16 fathoms of cable will be required. On the Point Levy side is a depth of nearly 30 fathoms, and the tides are stronger here than near the wharfs. With the wind heavy from the eastward, the best riding will be above the wharfs, off the cove called Diamond Harbour, in the depth of 10 fathoms.

The BALLAST GROUND, or place appointed by law for heaving out the ballast in, is to the westward of two beacons fixed on the south shore, above Quebec. These beacons stand on the brow of a hill, above a cove called Charles Cove, and when in a line bear S.E.

GENERAL DESCRIPTION OF THE RIVER OF ST. LAWRENCE, FROM MONTREAL TO QUÉBEC, &c. &c.

THE ISLAND of MONTREAL is considered as the most beautiful part of Lower Canada. On the S.E. side of it is the City with its convenient port, at 90 sea-leagues from the Isle of Bic, and to this place ships of 600 tons may ascend, with very little difficulty. From Montreal, downward, the navigation assumes a character of more consequence than what it does above, being carried on in ships and decked vessels of all classes. In the distance hence to Quebec, 45 leagues or 135 miles, the impediments to the navigation of large vessels, up or down, are not many, and they may be readily overcome, if expedient for cargoes to be so conveyed, in preference to small craft. At about 39 miles below Montreal, on the south bank of the river, is the town of WILLIAM HENRY, formerly

SOREL, which stands at the entrance of the River Richelieu, and above the lake of St. Pierre, or St. Peter. The latter is 22 miles long and 8 broad ; but a portion of about 8 miles of the western part is filled with a group of islands, which, however, form two distinct channels ; and of these, the one on the south being the deepest and cleanest, is the best for ships. Here the banks on each side are very low, with shoals stretching from them to a considerable distance, so that a narrow passage only, with 18, to 12 feet of water, is left clear.

On the north side of the river, at about 33 miles below William Henry, is the town of **TROIS RIVIERES**, or **THREE RIVERS**. It stands at the mouth of the River St. Maurice, and here the tide entirely ceases. Between Trois Rivieres and Richelieu Rapid, about 33 miles, there is little variation in the general aspect of the country. At the Richelieu Rapid the bed of the river is so much contracted and obstructed, by huge masses of rock, as to leave but a very narrow channel ; and in this, at ebb-tide, is so great a descent, that much caution and a proper time of tide are necessary for passing through : at the end of the Rapid is good anchorage, where vessels can wait for a convenient opportunity.

From Montreal, thus far, the banks are of a very moderate elevation and uniformly level ; but hereabout they are much higher and gradually increase in their approach to **QUEBEC**, until they attain the height of Cape Diamond, upon which the city is built. This spot, and Point Levy, on the south shore, command the finest views that can be imagined ; the assemblage of objects is so grand, and they are so beautifully contrasted, that the mind of the spectator is overcome with a sensation which cannot be expressed. The capital, upon the summit of the cape ; the river of St. Charles, which flows to the northward of it, through a fine valley, abounding with natural beauties ; the Falls of Montmorency, at two leagues to the eastward ; the Island of Orleans, and the well-cultivated settlements on all sides, form altogether a most beautiful picture. The Basin of Quebec is 2 miles in breadth.

The **ISLAND OF ORLEANS**, which has been already described, divides the river into two parts, or channels ; and, of these, the one to the south is always used by ships. The shore on this side is high, and on the opposite, in some parts, it is even mountainous ; but both are well settled.

The North Channel or Traverse, which is now entirely disused by the pilots, lies along the S.E. Coast of the Isle of Orleans, thence to Burnt Cape, Cape Millard, Coudre Island, and Cape Goose, whence ships crossed over to the Kamourasca Isles, &c. In this channel the water is, in general, deep ; the passage, near Orleans, narrow and intricate ; the tides very strong ; the lands high, and heavy squalls therefore frequent ; and, lastly, few places for anchorage.

ST. PAUL'S BAY, to the N.W. of Coudre Island, is shoal and rocky, with a great ripple, to some distance off, whence the French have given to this part the name of the whirlpool. In passing here, whether up or down, it is necessary for a vessel to go as near the reef as she safely can, to keep out of a contrary current. The north cape of the Isle of Coudre kept about a cable's length open of Cape Goose, leads clear of the reef.

In the channel between the **ISLE AUX COUDRES**, or Coudre Island, and the north shore, the current is rapid, the depth of water great, and the ground, in general, bad for anchorage. The island being cultivated, presents a pleasing aspect, and here are seen the settlements of the bay of St. Paul, inclosed within an amphitheatre of very high hills. In case of

necessity you may however, moor off Coudre, in 17 fathoms, coarse sand, with Cape Goose just open of the land to the westward of it bearing E.N.E. $\frac{1}{2}$ E. and the east end of Coudre Island E.S.E. $\frac{1}{2}$ E. In this place the tide runs very strongly, and causes a ship to swing round with the sun. You may also moor in the channel of Coudre, in 17 fathoms at low water, sand and mud, with Cape Goose E. by N. $\frac{1}{2}$ N. ; Cape Torment S.W. $\frac{1}{4}$ W. ; the east point of St. Paul's Bay W. by N. $\frac{3}{4}$ N. ; and the water-stream on the north shore, North. The tides at Coudre, both at ebb and flood, are very strong ; yet at the meadows there is good anchorage, but not near the north shore.

There is a very long reef of rocks running off the N.W. of the island, which are all covered at high water. The bearing from the end of the ledge are, St. Paul's-church (just open) bearing N. 41° W. the east bluff point of St. Paul's Bay (called Cape Diable) N. 27° W. the water-fall on the north shore N. 27° E. the N.W. bluff point of the island S. 22° W. and the N.E. bluff point of ditto, off which is a reef of rocks, E. 9° N.

N.B. The part of this reef which is dry at low water lies to the westward, about S.W. and N.E. and to the eastward about East and West. Near the length of a cable farther out, are 5 fathoms at low water.

RATES OF PILOTAGE

FOR

THE RIVER OF ST. LAWRENCE,

1827.

From Bic to QUEBEC.	<i>Per Foot.</i>	£.	s.	d.
From the 2nd to the 30th of April, inclusive		1	0	6
1st of May to the 10th November, inclusive.		0	18	0
11th to the 19th November, inclusive		1	3	0
20th of November to the 1st March, inclusive		1	8	0
From QUEBEC to Bic.				
From the 2nd to the 30th of April, inclusive		0	18	3
1st of May to the 10th November, inclusive.		0	15	9
11th to the 19th November, inclusive		1	0	9
20th of November to the 1st March, inclusive		1	5	9

Rates of pilot-water and poundage on pilot-money are payable at the Naval Office, by masters and commanders of vessels.

For every foot of water for which masters and commanders of vessels are bound to pay their pilots from Bic to Quebec, and from Quebec to Bic, 2s. 6d. currency, per foot.

For vessels going to **THREE RIVERS** or **MONTREAL**,

Of 100 to 150 tons, inclusive	£2	0	0	currency.
Of 151 to 200 tons, inclusive	3	0	0	
Of 201 to 250 tons, inclusive	4	0	0	
Of 251 tons, and upwards	5	0	0	

On settling with pilots, masters or commanders of vessels, or the consignees of such vessels, are to deduct 1s. in the pound for the amount of the sums to be paid for pilotage, which will be exacted by the Naval Officer at clearing out, the same being funded by law, under the direction of the Trinity House, for the relief of decayed pilots, heir widows, and children.

Regulations for the Pilotage above Bic to Quebec.

At or above the anchorage of the Brandy Pots :

Two-thirds of the present rate for a full pilotage.

At or above the Point of St. Roque :

One-third of ditto.

For above the Point au Pins, on the Isle aux Grues, and below Patrick's Hole : One-fourth of ditto.

And at and above Patrick's Hole : £1 3s. 4d.

For shifting a vessel from one wharf to another, between Bréhant's Wharf and Point à Carcis, or to the stream from or to any of the above wharfs : 11s. 8d.

For shifting a vessel from the stream or from either of the above wharfs to St. Patrick's Hole or to the Basin of Montmorency, or to the Ballast Ground, the Basin of the Chaudière, Wolf's Cove, and as far as the River Cap Rouge : £1 3s. 4d.

Rates above the Harbour of Quebec.

From Quebec to Port Neuf.

To Quebec from Port Neuf.

For vessels of registered measurement,

4l. currency.	not exceeding 200 tons	2l. 10s. currency.
5l.	If above 200 & not exceeding 250 tons	3l. 10s.
6l.	If above 250 tons	4l.

To Three Rivers, or above Port Neuf.

From Three Rivers, and above Port Neuf.

6l. currency.	For vessels not exceeding 200 tons . .	4l. currency.
7l.	If above 200 & not exceeding 250 tons	4l. 10s.
8l.	If above 250 tons	5l. 10s.

To Montreal, and above Three Rivers.

From Montreal, and above Three Rivers.

11l. currency.	For vessels not exceeding 200 tons . .	7l. 10s. currency.
13l.	If above 200 & not exceeding 250 tons	8l. 15s.
16l.	If above 250 tons	10l. 15s.

Pilots are at liberty to leave vessels forty-eight hours after they arrive at the place of their destination.

RATES CHARGED FOR TOWING VESSELS,

By the Steamers from Quebec to Montreal,

1830.

Breadth of Beam.	9 ft. draft pay each upwards.	For each additional foot over 9.	DRAFT OF WATER ON EACH VESSEL.																	
			10 feet.			11 feet.			12 feet.			13 feet.			14 feet.			15 feet.		
<i>Feet.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>	<i>£. s. d.</i>		
20	26 13 4	2 13 4	29 6 8	32 0 0	34 13 4	37 6 8	40 0 0	42 13 4	44 6 8	47 0 0	49 13 4	52 6 8	54 0 0	56 13 4	59 6 8	62 0 0	64 13 4	67 6 8	70 0 0	
21	28 0 0	3 0 0	31 0 0	34 0 0	37 0 0	40 0 0	43 0 0	46 0 0	49 0 0	52 0 0	55 0 0	58 0 0	61 0 0	64 0 0	67 0 0	70 0 0	73 0 0	76 0 0	79 0 0	
22	29 6 8	3 6 8	32 13 4	36 0 0	39 6 8	42 13 4	46 0 0	49 6 8	52 13 4	56 0 0	59 6 8	62 13 4	66 0 0	69 6 8	72 13 4	76 0 0	79 6 8	82 13 4	86 0 0	
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24	32 0 0	4 0 0	36 0 0	40 0 0	44 0 0	48 0 0	52 0 0	56 0 0	60 0 0	64 0 0	68 0 0	72 0 0	76 0 0	80 0 0	84 0 0	88 0 0	92 0 0	96 0 0	100 0 0	
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27	36 0 0	5 0 0	41 0 0	46 0 0	51 0 0	56 0 0	61 0 0	66 0 0	71 0 0	76 0 0	81 0 0	86 0 0	91 0 0	96 0 0	101 0 0	106 0 0	111 0 0	116 0 0	121 0 0	
28	37 6 8	5 6 8	42 13 4	48 0 0	53 6 8	58 13 4	64 0 0	69 6 8	74 13 4	80 0 0	85 6 8	91 13 4	96 0 0	101 6 8	107 13 4	112 0 0	118 6 8	123 13 4	129 0 0	

The downward towing is one-half of the upward rate.

Any vessel taking the boat at any intermediate distance between Quebec and the church at *Batiscan* pays the full towage, as if towed from Quebec. If taken in tow between *Batiscan* church and the wharf at *Three Rivers*, pays three-fourths of the full towage. If taken in tow between the wharf at *Three Rivers* and *Sorel*, pays two-thirds of the full towage. If taken in tow between *Sorel* and the church of *Point aux Trembles*, pays one-half the full towage; and from the church at *Point aux Trembles*, or any intermediate place above the said point, to *Montreal*, pays one-third of the full towage.

All vessels under nine feet draft pay at the rate of 80s. per foot. *Schooners* are taken in tow on reasonable terms, according to their tonnage and the cargo they have on board, by applying to the masters.

The Proprietors do not hold themselves liable for any damage that may be done to vessels while in tow of either of the boats.



ISLANDS

IN THE

Gulf of St. Lawrence.

ISLAND OF ST. PAUL.

THIS island is nearly 3 miles long, by 1 mile broad. Its N.E. point is a small detached islet, although it does not appear as such from the sea. This islet is separated, by a narrow channel, from a peninsula between 3 and 400 feet high, which together with the isthmus, is so precipitous as to be nearly inaccessible. The remaining part of the island has two ranges of hills, that on the Atlantic coast being the highest, and attaining an elevation of about 450 feet. A valley runs through between these hills, having two small lakes or ponds, 2 or 300 feet above the sea. These supply the principal stream on the island, which is about a fathom wide, of a yellowish-brown water, well tasted and wholesome, and descending into the sea in the southern part of Trinity Cove. There are several other but much smaller runs of water, one of which is into Atlantic Cove. These two coves are nearly a mile from the S.W. extremity of the island; the first being on the Gulf side, and the other on that which is toward the Atlantic, as its name implies. They afford the only shelter for boats, and the only good landing on the island, which is easier of ascent from them than any other part. Off the coves just mentioned, small fishing schooners anchor, with the wind off shore, in 10 or 12 fathoms, sand and gravel bottom, and at the distance of 2 cables' length from the rocks. In fine weather, large vessels might venture to ride with a stream in from 25 to 30 fathoms, about half a mile off shore, but should be in constant readiness to weigh at the first sign of a change in the wind or weather. Further off shore the water becomes extremely deep, so that there is little or no warning by the lead in approaching this island in foggy weather. On this account it is extremely dangerous, and many shipwrecks have taken place upon its shores, attended with a most melancholy loss of life.*

THE BIRD ROCKS are of coarse red sandstone, and are constantly diminishing in size from the action of the sea. The two Rocks bear from each other N.N.W. $\frac{1}{2}$ W. and S.S.E. $\frac{1}{2}$ E. and are 700 fathoms apart. Sunken rocks leave only a boat passage between them. The

* In few parts of the world would a lighthouse have prevented a greater loss of property, or a greater amount of misery; and it gives us, therefore, infinite satisfaction to announce, that the commission recently appointed to determine on the most generally useful position for it, has already made their report to Her Majesty's Government.

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 south-easternmost is the largest, though scarcely 200 fathoms long and not more than 140 feet high above the sea. The other is divided into two precipitous mounds, joined together by a low ledge. The lesser of these mounds resembles a tower. Every ledge and fissure of the cliffs are occupied by gannets, and the white plumage of these birds gives these rocks the appearance of being capped with snow, and renders them visible through a night-glass, in a clear night, from the distance of 7 miles. A reef extends 700 fathoms to the eastward, from the Little, or N.W. Bird Rock; and there is a patch of breakers nearly midway between the two, and rather to the S.W. of a line drawn from one to the other. The Great or S.E. Bird Rock, is quite bold, excepting in the direction of the other Rock. The Little, or N.W. Bird Rock, bears N.E. by E. $\frac{1}{4}$ E. distant $16\frac{1}{4}$ miles from the east point of the Magdalens, and E. $\frac{1}{2}$ S. $10\frac{3}{4}$ miles from the east end of Bryon Island.

Bank of Soundings. The soundings off the Bird Rocks to the eastward have been already mentioned. They extend still further off to the northward, so as to afford the most ample warning and assistance to vessels at night, or in foggy weather. Between them and the east point of the Magdalens, the depth is 16 or 17 fathoms, over a bottom of reddish sand, and sea-eggs are frequently brought up by the lead.

There is a ridge of rocky and foul ground, between the Birds and Bryon Island, on some parts of which it has been said there is as little as 4 fathoms of water, because bottom has been seen in calm weather, but although Captain Bayfield could not find less than 7 fathoms, it may nevertheless exist, so that a large ship had better not cross this ridge when there is much sea running. The two cliffy points, on the north side of Bryon Island, in one, mark the northern limits of this rocky ground.

BRYON ISLAND is about 4 miles long, in a W. by N. and E. by S. direction, with the extreme breadth of rather more than a mile. Its eastern end bears from the east point of the Magdalens N. by E. $\frac{1}{2}$ E. $10\frac{1}{2}$ miles, but its S.W. point approaches to within nearly 9 miles of the North Cape of these islands. A great part of the island is wooded with dwarf spruce trees, and there is a large upland tract covered with good grass. Water is not easily obtained, but it may be had in small quantities by digging; and there is a spring on the north side of the narrow isthmus, which gives the eastern peninsula to the remainder of the island. The Cliffs on the north side of Bryon Island are much higher than those on the south, where there are several small coves, in which boats may land easily with the wind off shore.

There are three reefs off Bryon Island, one off its east end extends near three-quarters of a mile to the north-eastward; another off the west end extends $1\frac{1}{2}$ mile to the westward; and the third, off the sandy S.W. point $1\frac{1}{3}$ mile to the southward. No marks can be given for clearing these reefs, but the bearings of the land will afford sufficient guidance to the seaman. The reef off the S.W. point is so much in the way of vessels passing between it and the Magdalens, that it may be useful to add, that from the southern ridge of this reef, Bryon Island subtends an angle of 97° , so that with the island subtending any less angle the reef may be passed. The south reef assists greatly in turning off the sea from the roadstead to the eastward of it, where vessels may safely anchor in 6 fathoms water and sandy bottom, at the distance of a mile or more from the shore, and with all winds from N.E. round

by north to W.N.W. Small vessels in heavy N.W. gales lie at anchor close under the reef.

Between Bryon Island and the Magdalens, there are regular soundings from 9 to 11 fathoms, sandy bottom, with the exception of an extensive patch of foul and rocky ground, lying between S.W. $\frac{1}{2}$ W. and W.S.W. from the west end of Bryon Island, and having a clear channel on either side of it. These rocky places are called fishing-grounds, because cod-fish abound upon them. There is one with 11 fathoms of water, $2\frac{1}{2}$ miles north of Bryon Island, and which extends a considerable distance parallel to the island. There is sandy bottom, and a greater depth of water within this ridge; and vessels may anchor, in fine weather and southerly winds, off the bay on the north side of the island. The soundings extend so far off Bryon Island to seaward, in every direction, that there is no possibility of a vessel on a voyage being endangered by it, if the lead be used; but great caution is requisite in approaching the reefs, for they are very steep, especially that which extends to the southward.

THE DEADMAN ISLET bears N. 52° W. nearly $7\frac{3}{4}$ miles from the west Cape of the Magdalens; being not more than 300 fathoms long in an E.S.E. direction, and less than half that breadth. When seen from a distance, its outline resembles that of a body laid out for burial, from which circumstance its name is derived. It is so bold on the west side, that a vessel may pass within a couple of cables' length with perfect safety; but a reef extends towards Amherst Island one-third of a mile.

About a mile to the northward of it, there is a rocky fishing-ground, with 8 fathoms least water: and 6 miles S.S.W. $\frac{1}{4}$ W. of it, there is another, with 11 fathoms. There is no danger nearer than the WHITE HORSES hereafter-mentioned, and vessels may safely pass between it and Amherst Island. It is, however, much in the way of vessels passing round the west end of the Magdalens, and they should beware of it at night, or in foggy weather, for the lead will give little warning, since there is nearly as much water within half-a-mile of it as at the distance of several miles.

MAGDALEN ISLANDS.

THE MAGDALENS assume an irregular curved direction, the greatest length of which, from the S.W. Cape of Amherst Island to the east point, is 35 miles; but if the smaller islands be included, the whole length of the range, from the Deadman to the Great Bird Rock, will be 56 miles in an E.N.E. direction.

When first made from sea, the Magdalens appear like several hilly islands, with channels between, but, on a nearer approach, they are seen to be all connected together, with the exception of Entry Island, by a double line of sand-bars and beaches, inclosing extensive lagoons, having very narrow entrances, by which the tide finds access and egress. These sand-bars are in some parts only a few feet above the sea, whilst in others they rise into hills of blown sand of considerable elevation. They appear to be increasing, since there are generally ridges of sand with from 9 to 12 feet water parallel to, and from 50 to 100 fathoms outside the beach. There are 3 and 4 fathoms of water between these

ridges and the shore, a circumstance which has often proved fatal to the crews of vessels wrecked upon these shores.

The East Point of the Magdalens is of low sand, inclosing several shallow ponds, and having several sand-hills, some of which are near its extremity, while others, of greater elevation and further to the westward, extend in a chain nearly to the N.E. Cape. The N.E. Cape is a hill on East Island, which stands at the head of Grand Entry Harbour. It is a very remarkable Cape, and its isolated Cliffs, being 230 feet high, can be seen over all the sand-hills and sand-bars, so that when these last are below the horizon, the N.E. Cape appears to be the eastern extremity of the chain.

LONG-SPIT is a ridge of sand, with from 2 to 3 fathoms water, which extends off the East Point S.E. $\frac{1}{2}$ S. rather more than $1\frac{1}{2}$ mile, and for $1\frac{1}{4}$ mile further, in the same direction, the depth is from 4 to 6 fathoms. To clear this spit, observe the following remarks and directions. The southern part of Coffin Island is a peninsula, forming the southern shore of the Oyster Pond, and connected to the remainder of the island by a low neck or isthmus, at the west end of the pond. Now, the mark for the 3 fathoms' extremity of the spit, is the north side of this peninsula on with the Old Harry Head, and the south side of the northern part of Coffin Island, (where the narrow neck joins it, as above-mentioned,) on with the Old Harry Head. will lead over the spit in 4 fathoms. To know when a vessel from the eastward has passed it, observe, that the line of the summit of the North Cape on with the east side of the N.E. Cape, clears it nearly half-a-mile to the S.W. which mark will also be useful to a vessel approaching it from the westward. The tides set rapidly over this spit, and together with the shoal water, cause a heavy breaking sea. It is extremely dangerous, and vessels should take care not to get becalmed near it without an anchor clear.

DOYLE REEF lies S.E. $\frac{1}{2}$ E. distant $6\frac{3}{4}$ miles from the East Point, and consists of pointed rocks. It is very small, being only 300 fathoms long and 50 fathoms wide. The least water is 3 fathoms on one spot, nearly in the centre, and there are 12 and 13 fathoms all round it. The only mark for this reef is the North Cape of the Magdalens, open two-thirds of its breadth to the N.E. of the North East Cape. On the reef, the angle between these marks and the western point of Coffin Island is $24^{\circ} 27'$ lying in the way of vessels, and very seldom showing the sea breaking upon it, only in heavy gales. This reef may justly be considered as one of the worst dangers off the Magdalens.

OLD HARRY HEAD is the S.E. point of Coffin Island, and bears from the east point W.S.W. by compass $4\frac{1}{2}$ miles. Between is a sandy bay, in which vessels may anchor with good shelter, in all winds from west round by north to N.E.; but it is not a place to be recommended, because a vessel would be there very much embayed by the shoals on either side, and might find it difficult to get out on the occurrence of a sudden shift of wind, either at night or attended with fog. The Old Harry Head has red sand stone cliffs, of a moderate height, with a reef off it to the south-eastward one third of a mile.

COLUMBINE SHOALS. From the Old Harry $2\frac{1}{2}$ miles S.S.W. $\frac{1}{2}$ W. and S.E. by S. 2 miles from the east end of the cliffs westward of the entrance of the Oyster Pond, lies the outermost of the Columbine Shoals, a patch of rocks, with 3 fathoms at low water. Within this, and towards

Coffin Island, are numerous small shoal patches and pointed rocks, on some of which there are not more than 3 feet at low water. These shoals are extremely dangerous, and much in the way of vessels hauling round the east point of the Magdalens with northerly winds. To clear the east side of them, the whole of the high N.E. Cape must be kept well open to the eastward of the Old Harry. There are no good marks for clearing the west side, or for leading clear outside of them, so that the only guide for the latter purpose is not to bring the East Point to bear to the eastward of N.E. and, for the former, is not to bring the west end of Coffin Island to bear to the westward of N.W. $\frac{1}{2}$ N. Coffin Island extends 4 miles to the westward of the Old Harry, having on its south side a lagoon, with a very narrow outlet, called the Oyster Pond, and which boats can only enter in fine weather. Off the coast of Coffin Island there are several rocks, besides the Columbine Shoals; but as these are in-shore, and out of the way of vessels, it is sufficient to refer to them, and to remark, that this is a very dangerous part of the islands, which should never be approached at night or in foggy weather.

GRAND ENTRY HARBOUR. At the N.W. end of Coffin Island, and between it and the sand-bars to the westward, is the entrance of Grand Entry Harbour, which is extremely narrow, not exceeding 50 fathoms in breadth, the narrow channel leading to it, between sandy shoals which are said to shift, extends $1\frac{1}{3}$ mile to the westward. The depth that can be carried in, at low water, is 10 feet; at high water, neap tides, 12 feet; and in spring tides, 13 feet. There are 28 feet water at, and immediately within, the entrance. The ebb-tide runs out with great rapidity, and the flood in is also strong.

SHAG ISLAND is small and low, lying about half-a-mile from the sand-bars, nearly midway between Coffin and Alright Islands, and out of the way of vessels.

CAPE ALRIGHT bears from the Old Harry Head S. 72° W. $16\frac{1}{2}$ miles. It is the southern point of Alright Island, and a very remarkable headland. Nearly a mile inland is the summit of Alright Island, 420 feet above the sea. Between this summit and the Cape there is a very remarkable hill, named *Bute-Ronde*. The south extremity of the Cape is low, with a small rock close off it.

ALRIGHT REEF lies S. 80° E. $3\frac{1}{4}$ miles from Cape Alright, to the outer edge of the reef, which is 400 fathoms long by 300 fathoms wide. It is of white and pointed rocks, having over them 6 feet. On this reef, the *Bute-Ronde* is on with the summit of Grindstone Island; the west side of Cape Alright is on with the west side of Cape Meules; and the whole of the woody Wolf Island is just open to the westward of Shag Island. Therefore, to clear the S.W. side, keep the well-marked summit of Grindstone Island open to the south-westward of Cape Alright; and to clear the south-eastern side of this reef, keep the east side of the woods of Wolf Island (seen over the sand bars) open to the eastward of Shag Island.

The N.E. point of Entry Island bears S. $\frac{1}{2}$ E. 7 miles, from Cape Alright; and the channel between them leads into Pleasant Bay, passing previously between Alright Reef and the Pearl Reef.

THE PEARL REEF is small and dangerous, and of white pointed rocks, like most of the reefs round these islands. It is round, and about 200 fathoms in diameter, with 9 feet least water. It bears

S. 41° E. $8\frac{1}{2}$ miles from Cape Alright, and N. $80'$ E. $4\frac{1}{2}$ miles, from the N.E. point of Entry Island. Even with a moderate swell the sea breaks heavily upon it. The marks on this reef are the Demoiselle Hills, open one-quarter of a point to the northward of the cliffs of Entry Island, and exactly on with the extremity of the N.W. spit, above water, of the same island. This spit, however, can be seldom seen from the reef. The cross mark is the three high cliffs on the S.W. side of Alright Island, nearly in one, bearing N. 44° W. when the north-westward of those cliffs will be seen over the middle one, and between it and the south-easternmost. Hence, keeping all those cliffs open, will clear the reef to the westward; and the north-westernmost cliff completely shut in behind the other two, will clear it to the eastward. The Demoiselle Hill shut in behind the north side of Entry Island, will clear it to the southward; and, lastly, the Demoiselle kept more than half a point open to the northward of Entry Island, will clear it to the northward.

To the N.W. of Cape Alright, and distant $2\frac{3}{4}$ miles, is the entrance of House Harbour, a narrow and crooked channel, with only 6 feet at low water.

GRINDSTONE ISLAND lies between Amherst and Alright Islands. Its summit is elevated 550 feet above the sea, at high water. From Cape Alright, S. 80° W. 5 miles, across the bay in which is the entrance of House Harbour, brings you to Red Cape, the southern point of Grindstone Island, and the north point of Pleasant Bay. The opposite point of the bay, Sandy-Hook, is the east point of Amherst Island, and bears from the Red Cape S. by E. $\frac{1}{2}$ E. 6 miles. Between Red Cape and House Harbour is Cape Moule, of grey sandstone, off which there is a rock, with 5 feet of water; and there is another rock with 3 feet, off the west side of Alright Island.

AMHERST ISLAND, the largest and south-westernmost of the Magdalens, is connected with Grindstone Island by a double line of sand-bars, inclosing an extensive lagoon 5 or 6 miles long, and from 1 to 3 miles wide, the southern part of which is called Basque Harbour. This lagoon is full of sands, which dry at low water, and has three outlets into Pleasant Bay, the southernmost being the deepest, but having only 3 feet water over its bar at low water. The others, including three through the sand-bars of the N.W. course, will only admit boats at high water, and when the surf is not too high. The hills in the interior of Amherst Island rise to the height of 550 feet above the sea. Towards the south-east part of the island, and about a mile to the N.W. of Amherst Harbour, is the very remarkable conical hill, named the Demoiselle, of trap rock, and 280 feet high.

AMHERST HARBOUR is formed by a peninsula in the S.W. course of Pleasant Bay. Its entrance, between this peninsula and the sands to the southward, is $2\frac{1}{2}$ miles within, or to the westward of the extremity of Sandy-Hook, which is a long and narrow sandy point, with sand hills. This harbour is the easiest of access and egress of any in the Magdalens, and has, moreover, the advantage of an excellent roadstead outside, where vessels may wait their opportunity of running in. Nevertheless, its entrance is extremely narrow and rather crooked, so that, without a pilot, it would be necessary to buoy or stake the channel. The depth over the bar, which is rocky, is 7 feet at low water, and from 9 to 10 feet at high water, according as it may be neap or spring tides.

Within the harbour there are from 12 to 17 feet, over a bottom of soft, black, and fetid mud, well sheltered from every wind.

PLEASANT BAY is the only roadstead in the Magdalens, where vessels can venture to lie with all winds, during the months of June, July, and August. In those months, a gale of wind from the eastward, so heavy as to endanger a vessel with good anchors and cables, does not occur above once in 3 or 4 years. The riding, however, is often heavy and rough enough in north-east gales, and a vessel should be well moored with a whole cable on each anchor, an open hawse to seaward and all snug aloft.

The best and most sheltered anchorage is in 4 fathoms, with the rocky point of entrance of Amherst Harbour bearing S.W. $\frac{1}{2}$ W. two-thirds of a mile, and a little more than half-a-mile from high-water mark on the sandy beach to the southward, when a remarkable and high sand-hill will bear S. $\frac{1}{2}$ E. A large ship should anchor further off, and should take notice, that there is only from 3 to $3\frac{1}{2}$ fathoms in one part of the bay. The bottom is everywhere excellent for holding, and of red sandy clay. In the northern and western parts of the bay, sandy flats extend more than a mile from the beach.

SANDY-HOOK CHANNEL. From the Sandy-Hook to the N.W. point of Entry Island, the bearing is east, by compass $2\frac{1}{2}$ miles. An extensive flat sandy shoal runs out 2 miles from Sandy-Hook towards Entry Island, which last has also rocky shoals off its west side. Sandy-Hook Channel, between them, is two-thirds of a mile wide, and 4 fathoms can be carried through it by a good pilot; but $3\frac{1}{2}$ fathoms is the utmost that can be safely reckoned on by a stranger. There are several rocky patches of $2\frac{1}{2}$ fathoms off the S.W. point of Entry Island, reaching to fully three-quarters of a mile from the shore. The ebb tide sets strongly through this channel and over Sandy-Hook Flat, so that large vessels should go round to the eastward of Entry Island rather than encounter so many difficulties. To run through Sandy-Hook Channel from the sea, keep the east side of Alright Island just open to the westward of the shingle and sandy spit forming the N.W. point of Entry Island, until abreast of the S.W. point of the last named island, then haul up for the summit of Grindstone Island, looking out for the edge of the sand shoal to the westward, which can generally be seen.

ENTRY ISLAND is the highest of the Magdalens, its summit being 580 feet above the sea at high water. Off the N.E. point there is a high rock about half a cable's length from the cliffs, and on its north side the remarkable Tower Rock, of red sandstone, joined to the island, and which can be seen from the S.W. over the low N.W. point, as well as from the N.E. Vessels occasionally anchor under Entry Island in northerly and easterly winds, but it is rough riding by reason of the sea which rolls round the island.

From Sandy-Hook, the south coast of Amherst Island curves round to the westward for 6 or 7 miles, to the entrance of a basin, which extends nearly across the island, to within less than half a mile of Pleasant Bay. There is good anchorage off the entrance of the Basin, in from 6 to 9 fathoms, sandy bottom, and with winds from N.W. round by north to east. A mile and a half to the westward of the entrance of the basin, cliffs commence and continue, except in Cabane Bay, to the West Cape, which is the highest cliff of Amherst Island, its summit being 300 feet above the sea. There is a remarkable rock above water,

close to the shore, and about a quarter of a mile to the southward of it.

CABANE BAY is a small bight, between the south and S.W. Capes of Amherst Island, where vessels may safely anchor with northerly and easterly winds, and where good water may easily be obtained. The best berth is in 8 or 9 fathoms, sandy bottom, off the centre of the bay, with the South Cape and Cape Percé in one, three-quarters of a mile off shore.

From the West Cape, the remainder of the sea-coast of Amherst Island consists of red cliffs, without beach, but having shoal water one-third of a mile off shore, all the way to West Lake, a small pond at the S.W. end of the sand-bars, which join Amherst and Grindstone Islands. At the N.E. extremity of these sand-bars is **GULL ISLET**, which is small, rocky, and close to the western point of Grindstone Island, and has shoal water off its west point to the distance of one-third of a mile. About $1\frac{1}{2}$ mile south-westward of it, nearly $1\frac{1}{2}$ mile off the N.W. outlet of Basque Harbour, and with the west side of Gull Islet and Gros Cap in one, lies a rocky shoal with 3 fathoms at low water, and leaving no good passage between it and the shore. Close to the N.E. of Gull Island is the Etang du Nord, a small inlet affording good shelter to boats.

The northern shore of Grindstone Island is of red sandstone cliffs. Near the N.E. extreme lies the **HOSPITAL ROCK**, close to the shore, and also some rocky 3 fathom patches, more than half a mile from the shore.

THE WHITE HORSE is a dangerous reef, lying N. 60° E. 7 miles, from Deadman Islet: and due W.N.W. 5 miles from Gull Islet. It is extremely small, being scarcely more than a cable's length in diameter; and having 10 feet water over pointed rocks, on which the sea often breaks. On this reef, the summit of Entry Island is seen over a low part of the sand-bars at the N.E. outlet of Havre Basque, but this mark cannot be easily discerned by a stranger, nor is there any other. There are irregular soundings and foul ground between this reef and the shore, but nothing less than 5 fathoms, excepting what has been already mentioned.

THE PIERRE DE GROS CAP is another dangerous reef of rocks, and having 18 feet water. This reef is seldom seen, as the sea breaks upon it only in heavy weather. It lies N. 62° E. 6 miles from the White Horse; due north from the west point of Etang du Nord; N. 56° W. from Hospital Cape; and $3\frac{1}{2}$ miles off Cape le Trou, the nearest point of Grindstone Island. The marks on this reef are, the summit of Al-right Island, seen over the N.E. point of Grindstone Island, which is in the lagoon, and very nearly on with Hospital Cape; the Bute de Portage, a hill of Amherst Island, situated about $1\frac{1}{2}$ mile N.W. of the Demoiselle, midway or in the centre of the narrow passage between Gull Island and the west point of Etang du Nord. These marks kept open will clear the reef to the N.E. and S.W. and a vessel will pass well clear outside of it, and also of the White Horse, if Deadman Islet be not brought to the westward of S.W. $\frac{1}{2}$ W.

From Hospital Cape to Wolf Island, off which there is a rocky 3 fathom shoal, nearly half a mile from the shore, the northern coast of the Magdalens consist merely of sand beaches and sand hills, for a distance of 9 or 10 miles. The low sandstone cliffs of Wolf Island, which is about three-quarters of a mile long, interrupt the continuance of the sandy shore for only half a mile; the sand beaches then recommence, and continue, with high sand hills occasionally, 9 or 10 miles further,

to the North Cape. In all this part the sand-bars may be safely approached by the lead as near as 9 or 10 fathoms of depth of water.

THE NORTH CAPE of the Magdalens, is the northern point of Grosse Isle, and a precipice of considerable height, but not so high as the west point of the same island, which is in the great lagoon, and 300 feet above the sea. **THE NORTH CAPE ROCKS**, some of which always show, lie to the westward of the Cape, the outermost being 600 fathoms off shore. The west end of these rocks bears S.S.E. from the high S.W. side of Grosse Isle, and their extent to the eastward is marked by the N.E. sides of the North and N.E. Capes in one. Therefore, in running down from the westward to anchor under the North Cape, do not come nearer to the shore than 1 mile, until the above-named marks open. In this anchorage, namely to the eastward of the North Cape, vessels may ride in 8 or 9 fathoms, over sandy bottom, with all southerly winds, and will find good holding ground, and plenty of room to get under weigh. Water may be had in small quantities near the houses on the east side of the North Cape, but there are no good watering-places excepting those already mentioned. The coast continues from the North Cape, in a curved line of sand-beaches and sand-hills, for about 6 miles, which distance again brings you to the east point, and completes the description of the Magdalens.

MAKING THE MAGDALENS FROM THE SOUTHWARD.

Although a general description of the Magdalens has been given, yet as vessels passing to the southward of them have been directed to endeavour to make Entry Island, it may be useful to add, that that Island, when first made from the eastward, will appear like a double-peaked hill, sloping somewhat abruptly down to perpendicular and high cliffs on either side. The S.W. point of Amherst Island is also a steep cliff, but of less height, and as there is no land to the southward and westward of it, it cannot be mistaken. The land rises from it in undulations to the highest parts of the island; should the weather be foggy, the soundings will safely guide vessels passing to the south-eastward of the islands.

TIDES AND CURRENTS. A few miles outside of Bryon Island and the Bird Rocks, there appears to be usually a current setting to the south-eastward, out of the Gulf; but the stream of flood tide flows between them and the Magdalens. The stream of flood comes from the S.E. and is divided by the east point of the Magdalens; the branch of the stream sets strongly over the Long Spit, which, with the Old Harry Head, and the shoals off it, turn it off to the south-westward towards Entry Island, leaving nearly slack water in the bay between Coffin Island and Cape Alright, and also in Pleasant Bay. The other branch, to the northward of the islands, follows the shore, from East Point round to the south-west Cape of Amherst Island, whence the greater part of the stream continues its course to the S.W. whilst the remainder, following the shore, runs round, and along the southern coast of Amherst Island, until it meets the before-mentioned other branch of the stream from the east point, setting off the east side of Entry Island; it is overcome by this other branch and turned gradually round, to join the general weak stream of flood to the westward in the offing.

On the S.E. side of the islands, the stream of the ebb tide sets strongly out of the lagoon, and out of Pleasant Bay, between the Sandy-Hook and Entry Island. It is also often found running to the westward along the southern shores of Amherst Island, and right round it in like manner, but contrary in direction to the course of the flood already described, in the offing at the same time; the stream of ebb is from the S.W. and sets over the Long Spit off the Sandy-Hook Point, where it meets the stream from the N.W. which has followed the north shore of the island, round from Amherst Island to the east point. The meeting of these two streams of the ebb tide, together with the shoalness of the water, causes so heavy a breaking sea in strong easterly winds, that the fishing shallows dare not venture at times to pass the point.

The rate of either stream seldom amounts to a knot, excepting close in shore or round the points. The ebb, however, is generally the stronger stream, and its rate is increased by westerly winds, as is that of the flood by winds from the eastward.

ISLAND OF ANTICOSTI.

ANTICOSTI ISLAND lies in the entrance of the N.W. arm of the Gulf of St. Lawrence. It is about 41 leagues long, 10 leagues in its broadest part, and 90 leagues in circumference. This Island is nowhere higher than 700 feet above the sea. Its south coast is low and shelving, with reefs of flat lime-stone, which dry at low water. There is, however, a range of highlands in the rear of the S.W. point, and extending for some miles both to the north-westward and south-eastward of it. The north coast, for 70 or 80 miles to the westward of the east point, is bold, precipitous, and of considerable elevation; the remainder of the north coast is low, with reefs of flat lime-stone, like the southern shores. Streams of excellent water descend to the sea on every part of the coast. They are, generally, too small to admit boats, becoming rapid immediately within their entrances, and even the largest of them, Observation River, to the westward of the S.W. point, is barred with sand, excepting for short intervals of time after the spring freshets or heavy rains.

This Island has been generally believed to be extremely dangerous. Its reefs of flat lime-stone, extending in some parts to $1\frac{1}{2}$ mile from the shore, the want of anchorage off most parts of the coast, and above all the frequent fogs, justify this belief in part, but not so in a degree, as to render reasonable the dread with which it seems to have been occasionally regarded, and which can only have arisen from the natural tendency to magnify dangers of which we have no knowledge.

The people in charge of the lighthouses and provision-posts, and one man at Fox Bay, are the only inhabitants of the Island. The provision-posts have been established by the government and legislature of Lower Canada, for the relief of the crews of vessels wrecked upon the island. Vessels are more frequently lost here in bad weather, at the

close of the navigable season, than at other times, and their crews would perish from want and the rigours of a Canadian winter, if it were not for this humane provision. The first of these posts is at Ellis Bay, the second at the lighthouse at the S.W. point, the third at Shallop Creek (sometimes called Jupiter River) and the fourth at the lighthouse on Heath Point.

LIGHTHOUSE ON THE SOUTH WEST POINT. This light-tower is of the usual conical form, and 65 feet high; the light, which is bright, and revolves every minute, can be seen from N.N.W. round by west, and south to S.E. by E. The lantern is elevated 100 feet above the sea, at high water; consequently the light can be seen from a distance not exceeding 15 miles, when the height of the observer's eye is 10 feet above sea. When the height of the eye is 50 feet, the greatest distance from which the light can be seen will be about $19\frac{1}{2}$ miles; and if the eye be elevated 100 feet, the light will be visible as far off as 23 miles nearly, in the average state of the refraction. Hence, by ascending the rigging, till the light just shows above the horizon, and then measuring the height of the eye above the sea, a very near estimate of the vessel's distance at night may be obtained.

LIGHTHOUSE ON HEATH POINT. This light-tower is of the same form, dimensions, and colour, as the above. It shows a bright fixed light from W.N.W. round by S. to N.E. by N. The lantern stands 100 feet above the sea.

THE EAST CAPE OF ANTICOSTI rises to the height of 100 feet above the sea; the ridge, of which it is the south-eastern termination, trends to the westward inland, and the extremity of the very low land to the southward of it is Heath Point, on which is the lighthouse, bearing from the east point N.E. $\frac{1}{4}$ N. $3\frac{1}{4}$ miles. Between the two points is Wreck Bay, which is dangerous, and affords no anchorage. Off to the S.E. from the east cape, a reef extends rather more than one-third of a mile.

HEATH POINT is about 10 feet high. This point being so low, is not seen at the distance of a few miles; the lighthouse then appears like a sail off the island, and is extremely useful, in marking the extent of the low land to vessels, either from the eastward or westward, as well as in showing its position from the southward, from which direction it cannot be made out at night, being hidden by the high land behind, or to the northward. The most dangerous reef off this end of the island, runs out from Heath Point to the E.S.E. nearly 2 miles, at which distance there are 5 fathoms of water. Within that distance, the reef is composed of large square blocks of limestone, with very irregular soundings, varying from 2 to 5 fathoms. The rocky and irregular soundings, from 5 to 7 fathoms, extend nearly 3 miles off Heath Point; so that vessels should not approach nearer, on any bearing from the Point, between S.E. by S. and E. by S. With the East Cape bearing N. by W. the vessel will pass just outside of the shallow and irregular soundings, in about 20 fathoms of water.

Off Heath Point, to the southward and westward, the shoal water does not extend beyond three-quarters of a mile, and further off on that side there is one of the best open anchorages on the island. The best berth is in 10 fathoms, over sand and mud bottom, with the lighthouse E. by N. and Cormorant Point nothing to the westward of W.N.W.; the vessel will then be 2 miles off shore, and will be sheltered from all winds from W.N.W. round by the N. to E. by N.

From Heath Point, Cormorant Point bears W. by N. distant 6 miles ; and the South Point bears W.N.W. $16\frac{1}{2}$ miles from Cormorant Point. This part of the coast may safely be approached by the lead, for the reefs nowhere extend further off than three-quarters of a mile, till you come to the South Point.

THE SOUTH POINT is a cliff of sandy clay, and is about 60 feet in height, having nothing remarkable in its shape. The reef off it, to the southward, runs out nearly $1\frac{1}{2}$ mile, and the sea usually breaks upon it. The light on Heath Point and Cormorant Point in one, bearing E. by S. clear this reef at the distance of 2 miles ; but it is to be feared that the light will seldom be seen up to the reef, which is distant 22 miles from it. The leading mark will nevertheless be of use to vessels between South Point and Cormorant Point. From South Point to the lighthouse on the South-west Point, a distance of 56 miles, there is such a sameness in the character of the coast, that it is very difficult to make out one part from another.

The houses, however, of Mr Hamelle, in charge of the provision-post, at Shallop Creek, will be seen 13 miles north-westward of the South Point ; and at the first lime-stone cliff to the north-westward of those houses is Pavilion River, 24 miles from South Point. In this distance the coast is very low, and may be approached safely by the deep sea lead, the soundings in moderate depths extending from 5 to 8 miles off. The coast begins to rise at Pavilion River, there being a high ridge close in rear of the coast all the way to the South-west Point, and beyond it for some miles. This distance of 32 miles, between Pavilion River and the South-west Point, should be very cautiously approached in foggy weather, as there is little or no warning by the lead. When far enough to the westward, the light on South-west Point bearing nothing to the westward of N.N.W. will be a sufficient guide. In the whole distance from South to South-west Points, the reefs nowhere extend further off from high water mark than 1 mile, and the island may therefore be safely approached to within 2 miles.

SALT LAKE BAY lies 11 miles south-eastward of South-west Point. It has fine sandy beaches, enclosing lagoons or ponds, into which the tide flows. Off the centre of this Bay, and with its N.W. point bearing N. by E. $\frac{1}{2}$ E. distant $1\frac{3}{4}$ mile, there is very indifferent anchorage, in 7 fathoms, sandy bottom. Vessels should be careful to anchor further to the southward and eastward, since there is some foul and rocky ground about a mile in that direction.

The South-west Point of Anticosti is a low, projecting mound of lime-stone, having a small cove on its north side, which forms it into a peninsula. The lighthouse, already described, stands on the western extremity of the Point, and forms a conspicuous land-mark. A reef extends out from the Point to the W. and S.W. not more than half-a-mile ; and 2 miles off, in the same direction, there are 35 fathoms, over rocky bottom, deepening rapidly to 65 fathoms, with sand and shells, at the distance of 3 miles ; at the distance of 6 miles, to the southward and westward of the Point, the depth is about 110 fathoms, with mud bottom, and increases to 200 fathoms nearly midway towards the coast.

On the north side of the Point, there is a Bay, in which vessels may anchor in 12 or 13 fathoms, over a bottom of sand, gravel, and broken shells, and with the extremity of the Point bearing S.S.W. $\frac{1}{2}$ W. distant three-quarters of a mile, when the cliffs to the eastward will be at the

same distance. The shelter is from N. by E. round by E. to S. by W. and small vessels may lie closer under the Point, but it is a dangerous state to be caught in by westerly winds, which are preceded by a heavy swell. There is no anchorage from South-west Point to Ellis Bay. The reefs of flat lime-stone extends from it, in most parts, fully a mile, and often have 10 or 12 fathoms of water close outside of them; but vessels, with the lead going, may safely stand in as near as 2 miles, or, which will be safer than an estimated distance, had better tack in 17 fathoms.

OBSERVATION RIVER lies $5\frac{1}{2}$ miles northward of South-west Point. It is the largest stream on the island, having 5 or 6 feet of water in its entrance, after the melting of the snows in the spring of the year, but soon becomes barred with sand by the S.W. gales. It becomes shoal and rapid immediately within, though it has a course from the eastward of many leagues.

BECSIE RIVER is a small stream, at the head of a small cove, affording shelter to boats, and where there is a hut, at which a hunter and fisherman occasionally resides. It is 7 miles north-westward of the St. Mary Cliffs, and 12 miles south-eastward of Ellis Bay.

ELLIS BAY affords the only tolerably-sheltered anchorage in the island. Vessels, whose draught is not too great for a depth of 3 fathoms, may safely lie there during the months of June, July, and August; but they should moor with an open hawse to the southward. Larger vessels may anchor further out, and in $3\frac{1}{2}$ and 4 fathoms; but neither the ground nor the shelter will be found so good as further up the bay. The best berth is in a line between Cape Henry and the White Cliff, bearing W.S.W. $\frac{1}{2}$ W. and E.N.E. $\frac{1}{2}$ E. from each other; Gamache House, N. by E. and Cape Eagle, between S.S.E. $\frac{1}{2}$ E. and S.S.E. $\frac{1}{4}$ E. The vessel will then be in 3 fathoms, muddy bottom, distant about 300 fathoms from the flats on either side, and about half a mile from those at the head of the Bay. The extremities of the reefs, off Capes Henry and Eagle, will bear S.W. by S. and S. $\frac{1}{2}$ E. respectively; thus leaving $3\frac{1}{2}$ points of the compass open, but in a direction from which heavy winds are of very rare occurrence, and never last long. These reefs are of flat lime-stone, and dry at low water; and as the tides only rise from 4 to 7 feet, the sea always breaks upon them when there is the least swell. The reef off Cape Henry runs out nearly a mile to the southward, and that off Cape Eagle nearly three-quarters of a mile to the westward. The entrance between them is 600 fathoms wide from 3 fathoms to $3\frac{1}{2}$ fathoms. Extensive flats project from these reefs quite round the Bay, and do not entirely dry at low, excepting in very low spring tides; but there are immense boulder-stones upon them which always show. These flats occasion the landing to be very bad, excepting at high water, which is the only time that supplies of good water can be obtained from Gamache River.

Ellis Bay can be easily made out, for Cape Henry is a bluff point, and the land being very low at the head of the Bay, occasions the opening to show distinctly. On a nearer approach, Cape Eagle and White Cliff on the east side, and the houses near the head of the bay, will be easily recognised; whilst two ridges or hills will be seen far back in the country, and to the northward and eastward.

Directions for entering Ellis Bay. The long line of breakers on either side, and the numerous large stones so far from the shore a-head, will

present anything but an agreeable appearance to those who may approach this Bay for the first time, but there will be no danger, if the following direction be attended to. In approaching the Bay from the westward, with westerly winds, run down along the outside of the reefs off Cape Henry by the lead, and in 10 fathoms, until the following leading marks come on, namely, the west side of White Cliff on with the east side of the westernmost of two hills, far back in the country, and bearing N.E. $\frac{3}{4}$ N.; then haul up with these marks on, and they will lead you into smooth water close under Cape Henry Reef, in $3\frac{1}{2}$ fathoms. Continue running in, with these marks on, till Gamache House bears N. by E.; then haul up for it, and anchor in the berth, previously recommended. The lead should be kept going; and the reefs on either side should not be approached nearer than 3 fathoms, in any part, until you arrive at the anchorage.

In running for the Bay from the south-eastward, with an easterly wind, come no nearer to the west point of Cape Eagle Reef than 7 fathoms, until the east side of White Cliff come on with the east side of the same hill, as before; then haul up with this mark on till the houses bear N. by E. and proceed as above directed. Take notice, that the west side of White Cliff is used for the leading mark in westerly winds, and the east side in easterly winds, the intention being to keep the vessels in either case from going too near the lee side of the channel. On the outside of Cape Henry, and continuing to the West Point of Anticosti, reefs extend $1\frac{3}{4}$ mile from the shore, and vessels approaching it should keep the lead going, and attend to the soundings.

WEST POINT is low and wooded, with reefs which do not extend beyond a mile from the shore, and vessels may pass it in 15 fathoms at the distance of $1\frac{3}{4}$ mile. Between the West and North Points, the coast is low, with reefs of flat lime-stone, extending 1 mile from the shore. There are soundings, in moderate depths, for more than 1 mile out from the reefs. Vessels should not go nearer than 25 fathoms. In the rear of the coast, and about half-way between the West and North Points, are the two hills or ridges, mentioned as forming one of the leading marks for Ellis Bay. From North Point to High Cliff, a distance of 13 miles, the coast is rather more bold and elevated, parallel ridges, in an east and west direction, and with small streams between them, beginning to abut upon the coast. High Cliff Cape is easily recognised, being the only Cliff on the island that has a talus in front of it, or that has not its base washed by the sea at high water.

From High Cliff to White North Cliff, a distance of 26 miles, the coast is low in front, with ridges of considerable elevation a few miles back in the country. This is the most dangerous part of the north coast, for the reefs extend nearly 2 miles out from high water mark, beginning at some low cliffs 7 miles eastward of High Cliff Cape, and continue to do so for 4 or 5 miles to the south-eastward; after which they gradually diminish in breadth, till at White North Cliff they are not more than half a mile from the shore. There is more or less warning by the deep sea lead all along this part of the coast, until you approach White North Cliff, off which there are 70 fathoms, at the distance of $1\frac{1}{2}$ mile from the surf. White North Cliff is very remarkable, for there is no other high cliff near it. It appears like a white patch on the land, and can be seen from a distance of 6 or 7 leagues.

Four miles south-eastward of White North Cliff the Low Cliffs commence, and continue to Carleton Point, under which vessels may anchor in fine weather and westerly winds, and obtain wood and water. Ten miles further to the south-eastward is Cape Observation, a bold, high, and remarkable headland. On its west side, there is a range of grey white cliffs, several hundred feet high. Vessels may anchor under it with westerly winds and fine weather, and obtain supplies of wood and water, very conveniently. Twelve and a half miles further south-eastward, along a bold coast with high greyish white cliffs and small bays between, brings you to Bear Head, also of greyish white cliffs 400 feet high, and resembling in some degree Cape Observation. This last named cliff has no equally high clifty headlands to the westward of it, whilst Bear Head has a difference which will prevent the one from being mistaken for the other. From the West Cliff to Bear Head the coast is extremely bold, there being in most parts 100 fathoms of water within 3 miles of the shore.

BEAR BAY lies between Bear Head and Cape Robert, which are distant nearly 6 miles from each other, in a N.N.W. $\frac{1}{4}$ W. and S.S.E. $\frac{1}{4}$ E. direction nearly. It is by far the best roadstead on the North Coast of Anticosti, and, indeed the only one in which a large ship would like to anchor, unless she had some particular object in view. It is sufficiently roomy, the bottom is excellent for holding, the depth of water moderate, and the shelter extends from N.N.W. round by west and south to S.E. by S. In order to recognise this anchorage, it may be observed that Cape Robert consists of Cliffs of the same colour and elevation as those of Bear Head; and that there are two other points of Cliffs 300 feet high within the Bay, the south-easternmost of which is named Tower Point. Between the latter and Cape Robert, at a distance of 1 mile from the former, as well as from the western shore, and in 13 fathoms of water, over a bottom of brown mud, is the best anchorage, where Tower Point will bear N.W. $\frac{1}{2}$ W. Cape Robert S.E. $\frac{1}{2}$ S. and Bear Head N. by W. $\frac{1}{4}$ W. Bear Bay is divided into three smaller Bays by the two high points of Cliff. In each of these Bays there are fine bold beaches of sand and lime-stone, shingle, and streams, where water may be easily obtained. But the principal stream is Bear River, which enters the southernmost of the three Bays close to the S.E. side of Tower Point. It is too shallow and rapid to admit boats, but the water is clear and good.

From Cape Robert to Table Head, a distance of 19 miles to the south-eastward, the coast is broken into small bays, with shingle beach, and small streams between high headlands, terminating in perpendicular cliffs, the basis of which are washed by the sea. None of these bays afford good anchorage.

Fox Point is 4 miles further to the south-eastward, and much lower than Table Head. FOX BAY, which is 2 miles to the southward of Fox Point, is about 1 mile wide and deep, with sandy beach at its head, where there is a considerable stream issuing from a small lake. Boats may enter the outlet of this lake at high water. REEF POINT is the southern point of Fox Bay, from which a reef of flat lime-stone, covered with only a few feet of water, runs out to the distance of fully $1\frac{1}{2}$ mile. There is a depth of 10 fathoms close off the end of this reef, so that it is extremely dangerous. To be sure of clearing it to the north-eastward, a vessel should not be brought nearer by the lead than 17 or 18 fathoms;

or, if any of the land to the north-westward of Table Head be open clear of it, she will pass in safety.

From the northern point of Fox Bay, which is a cliff of moderate height, another reef runs out more than half a mile to the south-eastward. A point of the southern reef before mentioned, extends to the northward in such a way as to overlap the reef off the northern point, leaving an entrance from the north-eastward between the two, only a quarter of a mile wide, and 13 feet deep at low water. Inside, there is a space half a mile wide, with 16 feet in the middle, over muddy bottom. A wind from E. by N. or E.N.E. blows right into the Bay; but it is said that the sea does not roll in, but in heavy weather breaks on the reefs and in the entrance.

Between Fox Bay and East Cape, the coast is of lime-stone cliffs, 100 feet in height, bold and free from danger. Between Cape Sand-Top and East Cape, vessels may anchor with all westerly winds, in from 16 to 20 fathoms, over fine sand, at a distance of 1 mile from the shore.

NORTH COAST OF THE GULF OF ST. LAWRENCE, FROM LAKE ISLAND TO THE RIVER ST. JOHN, INCLUDING THE MINGAN ISLANDS.

From Cape Whittle, the S.W. point of Lake Island, to Natashquan Point, the course is S. $85^{\circ}\frac{1}{2}$ W. true, or N. 66° W. magnetic, and distance 63 miles. The main land is seldom higher than 200 feet, even in the heads of the bays, and it diminishes in height towards the sea, as do also the innumerable small islands, islets, and rocks, which fringe the coast, and which in some parts extend fully 5 miles from the nearest point of the main land.

Seen from the distance of 4 or 5 leagues, this coast presents an outline so little diversified, that it is nearly impossible to distinguish one part of it from another; and it is only when a vessel approaches within 3 or 4 miles of the outer rocks, that its broken and dangerous nature becomes apparent.

The outer rocks, both above and under water, are so bold that there is no warning from the use of the hand lead; but, there are soundings with the deep sea lead in moderate, but irregular, depths off every part of this coast.

The TIDES are weak, irregular, and influenced, both in their strength and direction, by the winds. For the time of high water on the full and change days, and the rise of the tide at different places, see table at the end of the book.

WHITTLE ROCKS. There are many small rocks above and under water, off to the southward and westward from Cape Whittle. The two outermost of these, which are half-tide rocks, are distant from the cape $2\frac{3}{4}$ miles, and are called the WHITTLE ROCKS. All these rocks are steep, with from 20 to 40 fathoms of water between them.

WOLF BAY, the first to the westward of Cape Whittle, is 6 or 7 miles deep. There is plenty of water in its intricate channels, and no dangers that do not show, but a number of rocks and ledges extend across its mouth from Cape Whittle to Wolf Island, and are so scattered about that no directions would be of the least use. If ever any circumstances should render it desirable for a vessel to enter so dangerous a place, it can only be done by looking out for the ledges from the mast-head, or fore-yard, in fine clear weather, or by avoiding the broken water when there is a heavy sea running.

Wolf Island may be easily recognised, being higher and larger than the outer islands usually are off this part of the coast. It is about three-quarters of a mile long, and makes in two hills, which are about 150 feet high.

Outer Islet is small, low, and about 1 mile further off to the S.W. than Wolf Island. As its name implies it is the outermost of a chain of islands, which extends 4 or 5 miles out from the point of the mainland dividing Wolf and Coacoacho Bays. It bears W.N.W. $\frac{1}{2}$ W. 7 miles from Cape Whittle.

COACOACHO BAY is the only place affording anchorage to large vessels upon this part of the coast. It is not at all difficult of entrance, although the number of islets and rocks in every direction make it appear so. There is an excellent harbour in the head of the bay, called the Basin, and another formed by an arm running into the E. by N. and named Tertiary Shell Bay, which is equally safe. Further out than these harbours the bay is more than half a mile wide, and quite sufficiently sheltered from the sea, for the safety of any vessel with good anchors and cables.

TO ENTER THIS BAY, attend to the following directions: Outer Islet, Wolf Island, and the islets and rocks between them and the main land, may be considered as forming the south-eastern side of the bay; and the Audubon Islets and Rocks, as forming the north-western side of the bay. The entrance of the bay is, therefore, between the two extreme points, which bear from each other N. by W. and S. by E. and are distant about $2\frac{1}{2}$ miles. There are two small and dangerous ledges outside, off the entrance of the bay. The first, which is called the South Breaker, shows only in heavy weather, and has 12 feet least water. It bears W.N.W. $\frac{1}{2}$ W. 2 miles from Outer Islet, and there is a clear channel between it and the islet. It lies further out than any other danger off this division of the coast, and has from 18 to 20 fathoms of water all round and close to it. The S.W. Breaker has only 3 feet least water, and bears N.W. by N. $2\frac{1}{4}$ miles from the South Breaker, and west, $2\frac{1}{2}$ miles from Point Audubon. There is a clear and deep channel between these two ledges, which may be easily avoided by the chart, or if the weather be clear they will be readily seen from the fore-yard of any vessel.

IN RUNNING FOR COACOACHO BAY from the S.E. steer so as to leave Outer Islet, and the rocks to the northward of it, about 300 fathoms to the eastward of you. When abreast of these rocks, you will see, right a-head, a chain of low rocks, which project to the S.W. from Emery Island. Bring the point of this chain to bear N.E. $\frac{3}{4}$ N. when it will appear on with the extreme point of the main land on the N.W. side near the head of the bay. Steer in upon this leading mark, or bearing, until you are past some rocks which lie 600 fathoms from the

east side of the Audubon Islets. These rocks are dry at low water, and can always be seen. You must leave these rocks on your larboard or N.W. side, and, having passed them, haul to the northward a little, so as to leave the Emery Rocks, which are quite bold, on your S.E. or starboard side. Their outer point bears N.N.E. $\frac{1}{4}$ E. 3 miles from Outer Islet, and when up to them you will see the bay open before you, and clear of danger. The bottom, outside, is either of rocks or sand, with a depth of from 12 to 30 fathoms; but as soon as you arrive within the points of the main land, just within Emery Island, you will find mud bottom, with a depth of from 10 to 20 fathoms. The further in, the better the ground, and the less the swell with S.W. winds, which are the only winds that send any swell into the bay.

If you wish to run into Tertiary Shell Bay there is nothing in your way excepting a small rock above water, a quarter of a mile within the entrance, which you must leave on your starboard hand: and which, like the shores on either side, is quite bold. This bay is not more than 120 fathoms wide, half a mile from the entrance, but it becomes wider within, with from 5 to 11 fathoms water over mud bottom, and is there perfectly land locked.

In running in for the BASIN keep the N.W. side of the bay on board, leaving the entrance of Tertiary Shell Bay, and a point of low rocks to the northward of it, which are nearly joined to the shore, to the eastward, until you approach within half a mile of the island in the head of the bay. You must then steer over to the eastward, towards that island, to avoid a shoal of boulder stones which extends nearly 200 fathoms off the west side of the bay. The channel between this shoal and the island is only 100 fathoms wide, but deep enough for the largest ships. Give the island a berth of 50 fathoms, leaving it to the eastward or on the starboard hand, and as you pass through you will deepen your water from 9 to 19 fathoms, the latter depth being just within the island. As soon as you are past the inner end of the island haul to the N.W. into the mouth of a small bay; and you will soon shoal your water to 8 fathoms, muddy bottom, where you must anchor, and you will be perfectly sheltered from every wind. The basin becomes quite shoal immediately above this anchorage, where there is another island lying in the entrance of Coacocho River.

On the east side of the entrance of the river there is a house at which two men, who are engaged in the fur trade and salmon fishery, generally reside. This small river flows through a wide and shallow channel full of boulders; its shores are wooded with spruce trees, and water may be obtained near the trading post.

In running for Coacocho Bay from the westward, you may either pass between the S.W. and South Breakers, by bringing the inner or N.E. end of Wolf Island to bear east, and steering for it; or by bringing Outer Island to bear nothing to the southward of east, and running towards it, until you are within less than a mile, when you may haul in for the Emery Rocks, as before directed. There is very little stream of tide in Coacocho Bay, but a weak and irregular stream of flood and ebb sets through between the islands.

The coast, for the first 4 leagues westward of Coacocho, is formed of innumerable islets and rocks to OLOMANOSHEEBO, or Point River, which is called also by the Canadians, "La Romaine." This is a considerable river, falling 20 feet over granite into the head of a bay 4 miles

deep, but so shoal that boats can scarcely enter it at low water. There is a trading post of the Hudson's Bay Company on the east side near the falls, neither of which can be seen from the sea, being hidden by the islands; but the place may be known by the low sandy cliffs, thickly wooded with spruce trees, on either side of the entrance of the bay.

Treble Islet, and the Loon Rocks, lie to the westward, the latter at the distance of 6 miles from the above bay. The Loon Rocks, which can always be seen, are distant 3 miles from the nearest point of the main land, and are the outermost danger off this part of the coast.

WASH-SHECOOTAI BAY lies 10 miles to the westward of Olomanosheebo, is $2\frac{1}{2}$ miles wide, and has off its entrance several small rocky ledges that make it very difficult of entrance. *Cloudberry Point* is the west point of this bay, and is formed by the main land. The east point of the bay is formed by small rocks and islets. At the distance of 3 miles within Cloudberry Point this bay contracts to a very narrow inlet, having several rocks and islets in it, and from 4 to $2\frac{1}{2}$ fathoms water over muddy bottom, for the first 4 miles up; after which it becomes shallow for 4 miles further, to the falls of a considerable river, where there is a trading post and salmon fishery of the Hudson's Bay Company.

This inlet is completely open to winds from the southward and westward, and affords scarcely any shelter for the first 5 miles within Cloudberry Point. Vessels of considerable burthen might find shelter in it in time of need, but it is too intricate a place for the general purposes of navigation, or for any written directions to be of avail. Coasting schooners, which know where to look for all the ledges, enter it by keeping a person at the mast-head, or in the rigging.

MUSQUARRO RIVER is $4\frac{1}{2}$ miles westward of Cloudberry Point, and is situated 3 miles within the west point of a bay, full of small islets and rocks.

This river becomes rapid a short distance within the entrance; 6 feet can be carried in at low water, but it is a very intricate and dangerous place; useless excepting to boats, or very small schooners. It will be known by the houses which are on the east side of the entrance, and also by a remarkable red and precipitous ridge of granite, about 200 feet high, and about 2 miles to the westward of the river. Curlew Point, at half a mile off which there are several low bare rocks, and ledges which always show, is $4\frac{1}{2}$ miles to the westward of Musquarro, and it is the east point of Kegashka Bay.

KEGASHKA BAY, situated between Curlew and Kegashka Point, is 3 miles wide, and $1\frac{1}{2}$ mile deep. In the western half of this bay there are several small islets, too wide apart to afford much shelter from the sea. It is only in the N.W. corner of the bay, within Kegashka Point, that a vessel can be secure from southerly winds; there is room there for several small schooners, but for only one vessel of the size of a sloop of war, and she must be moored with an open hawse to the eastward, with a third anchor on-shore to the S.W. so as to be able to haul in close under the point when it blows hard from the southward. The depth of water within the islets is from 4 to 6 fathoms over fine sandy bottom. Wood and water may be obtained without difficulty in the western part of the bay.

KEGASHKA POINT is formed by an island, separated from a rocky peninsula by a very narrow channel, dry at low water; and the peninsula is united to the main land by a narrow sandy isthmus covered with grass.

There is a fine sandy beach, and low sandy cliffs in the N.W. corner of the bay : and there are also similar cliffs for about a mile to the westward of the isthmus above mentioned. There are several small islets and rocks within, and also to the eastward of Green Island, and one small and low black islet between it and the inner part of Kegashka Point.

The safest channel into Kegashka Bay is between this last named islet, and Kegashka Point, 170 fathoms wide, and 8 fathoms deep. The other channels have dangers in them, but this is quite clear, and the only direction necessary when coming from the westward is to give the south extremity of Kegashka Point a berth of a quarter of a mile, or to go no nearer than 8 fathoms : then run along the east side of the point, which is quite bold, leaving all the islets on your starboard hand. A distance of three-quarters of a mile on a N.E. $\frac{1}{2}$ N. course will bring you to the narrow channel before mentioned, between the westernmost islet and the inner end of Kegashka Point. Haul round the latter to the north-westward at the distance of half a cable, and when within it, not more than the same distance, let go your anchor in 5 fathoms, and secure your vessel by mooring, as has been before mentioned.

When approaching Kegashka from the eastward, give the low and small islets off Curlew Point a berth of half a mile, to avoid the ledges off them, which dry at low water : then steer N.W. $\frac{1}{2}$ N. or so as to pass outside of Green Island, going no nearer than 100 fathoms. Continue on that course till the inner or N.E. extremity of Kegashka Point bears north, which will be a distance of rather more than $3\frac{1}{4}$ miles from the ledges off Curlew Point ; then haul in, and pass between the point and the westernmost islet, as before directed, giving the south side of that islet a berth of at least a cable's length. Kegashka Bay has this advantage, that there are no ledges, or other dangers off its entrance : so that a vessel is no sooner outside of Kegashka Point than she has a clear sea before her.

Three miles westward from the east end of the sandy beach, and $1\frac{1}{2}$ mile off shore at Long River, (a small stream,) there is a shoal, on which breakers have been observed. Go no nearer to the shore than 17 fathoms, and you will avoid it. One and a half mile to the S.W. from the S.W. extremity of Natashquan Point, lies a small Cod Bank, with little more than 4 fathoms at low water, over gravel bottom.

MONT JOLI, mentioned in all former directions, has no existence, at least there is no mountain, nor even any thing that deserves the name of a hill ; but near the termination of the sandy cliffs, which end at the S.W. extremity of Natashquan Point, the sandy ridge with spruce trees rises into a slight mound, a very little higher than the rest of the country. This is Mont Joli ; but so little remarkable in its appearance that we should not have noticed it, had it not been for its name.

The remarkable sandy promontory of Natashquan Point is the most southern point on the north coast of the Gulf, to the eastward of the Seven Islands, and seems naturally to separate the eastern division of the coast. It may be said that though there are few coasts more dangerous either to a vessel unacquainted with its nature, or unaware of its proximity in a dark night or thick fog ; yet with the assistance of the chart, due caution, and a constant use of the deep sea-lead, it may be approached with safety ; and that a vessel may even stand close in to the outer rocks and breakers on a clear sunny day, provided there be a trusty person aloft to look out for shallow water, for the bottom can be seen in 4 or 5 fathoms of water.

From the south extremity of Natashquan Point to Collins Shoal, the outer danger off St. Genevieve Island, the course is N. $84^{\circ}\frac{1}{2}$ W. true, or N.W. by W. magnetic, 52 miles. The coast included in this distance is low near the sea, rising a short distance back into mounds and ridges, but nowhere exceeding 400 feet in height.

The coast is broken into numerous coves and small bays, affording shelter everywhere to boats, and occasionally to very small schooners. The small and bare islets and rocks are innumerable along it, but nowhere extend further out from the points of the main land than 2 miles.

When there is a heavy sea running, all these dangers show, or they can be seen from the mast-head in clear weather: but under other circumstances, 20 fathoms is as near to them as a vessel ought to approach, that depth being in many places not more than a mile from the outer ledges.

The current down along the coast in westerly winds has also been mentioned; its rate seldom exceeds half a knot, and is usually much less, so that a vessel can always make way to windward in moderate weather.

TIDES. In-shore there are weak tidal streams too irregular to be depended upon. It is however important to remark, that the flood draws strongly into Natashquan River, and the bay at Little Natashquan; while the ebb sets strongly off Natashquan Point to the S.E. and causes a very heavy sea upon the banks off it, in southerly winds. On approaching St. Genevieve, a strong in-draught of the flood towards the channel, between that island and the main, will be experienced; and the ebb will be found setting strongly out in the contrary direction: that is, to the S.E. The rate of these streams seldom exceeds a mile per hour.

NATASHQUAN RIVER enters the sea on the west side of the point of the same name, and 3 miles north-westward from its south extremity. The mouth of the river, between low sandy points, is fully a mile wide, but nearly the whole of this space is occupied by a low sandy island, having narrow channels on either side of it. The northern channel is nearly dry at times, but the southern one has a depth of 6 feet at low water, and from 9 to 11 feet at high water, according to neap and spring tides. The bar of sand, on which there is usually a heavy surf, extends out three-quarters of a mile, and is exceedingly steep to sea-ward, where 20 fathoms will be found within a quarter of a mile. Above the trading post the river is full of sand-banks, dry at low water, and only navigable for boats for a few miles to the first rapids; above which it is said to be lost in a great morass, about 12 miles inland from the entrance. The sandy beach continues for $3\frac{1}{4}$ miles to the N.N.E. of the entrance, terminating at the mouth of a small stream, called the Little Natashquan, which admits boats only at high water, and which is close to the eastward of the harbour of the same name.

LITTLE NATASHQUAN HARBOUR, formed by a number of islets and rocks, is only fit for vessels not exceeding 100 tons, although it has water enough for a sloop of war. The entrances, of which there are two, formed by a reef of rocks in the centre, are not more than 90 fathoms wide, between reefs, the extent of which under water cannot be seen, because the water is discoloured by the dark streams of the neighbouring rivers.

The depth that can be carried in at low water by the west channel is 3 fathoms, and 5 fathoms by that which is between the central reef and the islets on the east side. The space within the reefs in which vessels

can ride in from 3 to 5 fathoms, over sand and mud bottom, is only 250 fathoms in diameter. This anchorage is defended by the main and islets from all winds excepting the S.W. in which direction there are reefs of rocks, some parts of which are always above water. In a strong S.W. wind, some sea comes over these reefs at high water, but never enough to endanger a vessel during the summer months. There are several rocky patches, with from $2\frac{1}{4}$ to 3 fathoms off the harbour's mouth; these, with the want of space to work in, and the difficulty of getting out with the prevailing southerly winds of summer, render this place of little use for the general purposes of navigation, but it is a valuable harbour for the fishermen, whose schooners, of from 30 to 100 tons, are well suited to the size and nature of the place, which is contiguous to excellent fishing ground, and affords every facility for drying fish. The entrance of this harbour bears N. by E. 4 miles, from the southern entrance of Natashquan River, and a vessel, being off the bar of that river in 20 fathoms, should steer N.E. by N. nearly parallel to the sandy beach. When she has run rather more than 3 miles, and has decreased her depth of water to 12 fathoms, she will be about half a mile from, and will see the islets and rocks, which, commencing at the termination of the sandy beach, lie off the entrance of Little Natashquan Stream, and form the east side of the entrance to the harbour. The westernmost of these islets is much larger than those which lie further to the S.E. between it and the termination of the sandy beach. Bring the west point of that island to bear N.E. by N. in 12 fathoms of water, and the southernmost of the rocks at the termination of the sandy beach will bear E. $\frac{1}{2}$ N. From this position, by ascending the rigging for the purpose, you will be able to make out the reef on the west side of the harbour, which extends rather more than half a mile, S.W. by S. from a rather high and round-backed islet of grey granite, with a wooden cross upon it. This islet will bear N. by E. $\frac{1}{2}$ E. from the position above indicated, and the central reef, some part of which is always above water, will be seen between it and the islets, and the point of the main, which, together, form the east side of the harbour. Steer N. by E. $\frac{1}{2}$ E. for the islet with the cross on it, until abreast of the outer part of the reef to the westward, which will be distant a long cable's length, and you will be in about 7 fathoms water. Change your course now sufficiently to the eastward, to pass on that side of the central reef which you may prefer, giving its rocks above water a berth of not less than 60 fathoms, if you take the west channel. The central reef is quite bold to the southward, and also on its east side, so that you may approach it within 20 fathoms when entering by the east channel; but you must remember in hauling round its north and N.E. ends that it extends 70 fathoms under water from the rocks, which always show towards the centre of the harbour. The best berth to anchor in is in 4 fathoms, sand and mud bottom, with the rocks above water of the central reef, bearing S.S.W. $\frac{1}{2}$ W. distant 180 fathoms: then the cross will bear N.W. by W. $\frac{1}{2}$ W. and the vessel will be nearly in the centre of the harbour.

WASHTAWOOKA BAY, 5 miles north-westward of Little Natashquan, is full of small islets, rocks, and ledges, affording shelter to shallows and boats. It is an intricate and dangerous place, and may be known by Shag Islet, a large black rock lying off it, and further out than the rest, being $1\frac{1}{2}$ mile S.S.E. from the projecting point of the main.

AGWANUS RIVER, 10 miles north-westward of Little Natashquan, is

a large stream, having rapids and falls $1\frac{1}{2}$ mile from the entrance, which is narrow, and 6 feet deep at low water. There is no bar, but many small rocks, both above and under water, lie off its mouth to the distance of $1\frac{1}{2}$ mile, and render the approach extremely dangerous. The east point of entrance is of rock, the other of sand, and there is a small islet, three-quarters of a mile from the river's mouth. From 9 to 12 feet can be carried up to this islet, above which the river expands into a basin, half a mile wide, and 5 fathoms deep, close up to the foot of the rapids. There is sandy beach for $1\frac{1}{4}$ mile to the eastward of this river, and also westward of it to Nabesippi.

NABESIPPI RIVER, 5 miles north-westward from the Agwanus, enters the sea at the extremity of a sandy point, $17\frac{1}{2}$ miles N.W. $\frac{1}{2}$ N. from the entrance of Natashquan River. The Nabesippi is a much smaller river than the Agwanus, and will only admit boats in fine weather.

Pashasheeboo, Mushkoniatawee, and Washatnagunashka, are small bays, full of small islets and rocks, which render their entrances so difficult and dangerous, that no directions would be of the least avail. The first named is open to the S.E.; the second, less intricate than the other two, is 200 fathoms wide, and 5 fathoms deep in the entrance, with an equal depth within. It is open to the southerly winds, but is nevertheless tolerably secure for small craft, which may lie close to the rocks. The third is $1\frac{1}{4}$ mile wide, with a chain of rocks above and under water across its mouth, not large enough, or close enough to afford much shelter, yet too close and too numerous for a vessel to find her way through without great difficulty and danger. Three fathoms can be carried in, and there are 4 and 5 within.

WATCHEESHOO, 18 miles N.W. by W. from Nabesippi, and 14 miles E.S.E. from St. Genevieve Island, is a hill of granite, 127 feet high, and bare of trees. It is a peninsula, but appears like an islet, higher than the rest, when seen in a vessel from a distance. There is a fishing post of the Hudson's Bay Company in a cove among the rocks, to the westward of it. Watcheeshoo and the Saddle Hill, which is 374 feet high above the sea, are very remarkable, and serve to point out to a vessel her position off the coast. The latter is situated 6 miles inland from the former, in a north direction.

Quetachoo-Manicouagon, and Peashtebai, are two contiguous bays, 4 miles north-westward of Watcheeshoo. The first is the most to the eastward, $2\frac{1}{2}$ miles wide, and from 3 to 14 fathoms deep, but so full of rocks and ledges as to be useless, excepting to the smallest schooners. It is open to the westward. The other is a much smaller bay, capable of affording shelter only to boats, and open to the southward.

APPELETAT is a bay full of rocks, of no use to vessels, because of the ledges under water off its entrance, and also within. Four fathoms can be carried into this bay, which is not used even by small craft, because there is an excellent harbour within St. Genevieve Island, the S.E. point of which is distant only 3 miles from it in a S.W. by W. direction.

THE MINGAN ISLANDS.

The general character of these islands is low. They are estimated nowhere to attain an elevation exceeding 300 feet above the sea, and are in general much lower. They possess very little soil, but nevertheless are thickly wooded with spruce, birch, and poplar, on the side towards the main land; though towards the sea, barren tracts often occur, composed either of bare lime-stone, or of banks and ridges of lime-stone gravel. Supplies of wood and water can readily be obtained from the principal islands; wild berries are abundant in their season, and so are different kinds of wild fowl. Quadrupeds are scarce, but there are plenty of seals upon the lime-stone reefs, and a few cod-fish off the coast.

The coast of the main land, from St. John River to Mingan, is of sand and clay, low and thickly wooded, and with a fine sandy beach. Further eastward the shore is sometimes of granite, and at others of lime-stone, the latter rock lying immediately over the former.

The TIDES are not strong among these islands, never exceeding a knot, excepting in very narrow channels. They are often rendered irregular by the winds, but in fine settled weather there is a constant alteration of the streams of flood and ebb between the islands and the main, and also within the distance of 2 or 3 miles from the outer, or southern shores of the islands.

There are twenty-nine of these islands, in none of which are there any inhabitants; some of them are very small, and the largest does not exceed 11 or 12 miles in circumference. They are arranged parallel to the coast, and extend along it 45 miles from St. Genevieve Island, at the eastern end to the Perroquets at the western end of the chain.

Clear Water Point, which is 14 miles to the westward of St. Genevieve, projects out so as to interrupt the continuation of the chain of islands, and thus separates them into two divisions, the easternmost of which has been called the Esquimaux Islands, a name which should be confined to the island properly so called in the western division.

ST. GENEVIEVE, the easternmost of the Mingan Islands, is about 5 miles in circumference. Its N.E. point is a bluff headland, being the termination in that direction of the highest part of the island, which is about 200 feet above the sea, and slopes irregularly down to the southward.

MOUNT ST. GENEVIEVE is an isolated table hill on the main land, of lime-stone, 332 feet above the sea at high water, bearing N. $\frac{1}{2}$ E. rather more than 2 miles from the N.E. point of the island of St. Genevieve. This mountain, and the high N.E. point of the island, distinctly point out to a vessel at sea, the position of the channel between the island and the main. There are two patches of rock which render it necessary to approach the island of St. Genevieve with caution, viz. the Saints, and the Bowen Rocks.

THE SAINTS are two low and bare rocks, lying rather more than half a mile to the south of St. Genevieve. There is a channel of 5 fathoms deep, but with foul ground, between them and the island; and reefs under water extend from each of them fully 300 fathoms to the south, S.E. and S.W.

THE N.W. BOWEN ROCK, with 3 feet least water, lies $1\frac{1}{3}$ mile E.S.E. $\frac{1}{4}$ E. from the eastern Saint, and with the south side of the latter on with the centre of the western Saint.

THE S.E. BOWEN ROCK, with 6 feet least water, lies two-thirds of a mile S.E. $\frac{1}{2}$ S. from the north-west Bowen Rock, and S.E. by E. $\frac{1}{2}$ E. $1\frac{2}{3}$ mile, from the eastern Saint, which is just open to the northward of the western Saint. These very dangerous rocks lie nearly in a line from the S.E. point of St. Genevieve, at the distance of $1\frac{1}{3}$ and 2 miles respectively. There is very deep water between and close to them, and also for rather more than a mile to the southward of them and the Saints. The Soundings are here extremely irregular, varying from 4 and 6 fathoms rock, to 43 fathoms sand, sometimes in a single cast of the lead. The whole of this dangerous part should be avoided by vessels.

HUNTING ISLAND, the next westward of St. Genevieve, is low, thickly wooded, broken into many coves, fringed with small islets and rocks on all sides, excepting towards the main land, and is about 11 miles in circumference. Its longest diameter is parallel to the coast, and about 4 miles off its S.W. point, and extending to the distance of $1\frac{1}{2}$ mile, lie Wood and Gun Islands, leaving no passage between, and having reefs running out from them 300 fathoms to the southward. They are both low, and the latter is bare of trees, but covered with grass and peat, in which innumerable puffins burrow and rear their young.

THE GARDE ROCK, always above water, lies rather more than a mile off to the southward, from near the centre of Hunting Island; it would be highly imprudent for any ship to attempt a passage between it and the island, as there are many ledges scattered along the southern side of the island, and the Garde is itself the termination of a long ridge of sunken rocks. The south-eastern end of the island is likewise beset with several reefs, some of which extend three-quarters of a mile to the southward.

COLLINS SHOAL, a small patch of rocks, with 15 feet least water, lies $2\frac{3}{4}$ miles south, from the S.E. point of Hunting Island. The marks on this dangerous shoal are the east point of St. Genevieve just open to the eastward of the western Saint, bearing N. 38° E. and the north point of Wood Island on with the south side of the Garde Rock, bearing N.W. Between Collins Shoal and the reefs off the S.E. point of Hunting Island, the soundings are irregular, from 4 to 17 fathoms over rocky bottom, and vessels should not pass there, as in such a place it was impossible to be sure of having discovered every point of rock which may approach a few feet nearer the surface than the rest.

ST. GENEVIEVE AND BETCHEWUN HARBOURS.

ST. GENEVIEVE HARBOUR is situated between the island of the same name and the main land, and the second, between Hunting Island and the main. Both are excellent harbours, not difficult of access or egress, and fit for the largest ships. There are two channels leading to these harbours; namely, the East and the Saints channels.

EAST CHANNEL. To enter by the East channel with an easterly wind, observe the following directions:—Being at a distance from St. Genevieve Island, of not less than 3 miles, to be sure that you are further out than Bowen Rocks, bring the N.E. point of St. Genevieve in one with Indian Point, (a low wooded point of the main, forming the east point of Pillage Bay,) bearing N. 35° W. Run in with this mark on and you will leave the Bowen Rocks half a mile to the westward, and will pass them in between 20 and 30 fathoms over a bottom of fine sand and coral. When the S.E. point of St. Genevieve and the west Saint come in one, change your course a little to the northward, so as not to go too near a flat shoal, which extends nearly 300 fathoms from the east side of St. Genevieve. Give the N.E. point of St. Genevieve a berth of a cable's length, and passing as close to the shingly north point of that island as you please, bring up in 10 fathoms, mud bottom, half way between the latter and Anchor Island, which will be seen lying close within the N.W. point of St. Genevieve.

BETCHEWUN HARBOUR. If you wish to proceed to Betchewun Harbour instead of anchoring at St. Genevieve, pass to the northward of Anchor Island, which is quite bold on that side, and you will see the entrance of Betchewun (between the north point of Hunting Island and Partridge Point) bearing W. by N. Mount Partridge, on the N.E. side of the point of the same name, will be easily recognised, being a wooded and steep-sided hill, similar to, but much lower and smaller than Mount St. Genevieve. The north point of Hunting Island is also a cliffy mound, with a cove on the east side of it. It is quite bold, and you must pass close to it, to avoid the shoal off Partridge Point, which extends a full quarter of a mile to the southward, and diminishes the navigable breadth of the entrance to 350 fathoms. When in the entrance, you will see a low islet in the centre of the harbour; steer for it, and anchor with it bearing W. by N. and distant one-third of a mile. The depth of water in the harbour is from 9 to 18 fathoms over mud bottom.

The distance across from the N.E. point of St. Genevieve to the main is about a mile, but the navigable breadth of the entrance is reduced to half a mile, by the rocks and shoal-water off Ledge Point, which is composed of numerous rocks of granite close together. The shoal water extends from Ledge Point directly across Pillage Bay, to Partridge Point,

and you must not approach these shoals nearer than 7 fathoms. This East channel is the best with easterly winds, and may be used with moderate westerly winds during the flood tide, by vessels not too large to work in such narrow channels, but they must be careful in their boards to the northward, especially in that towards Ledge Point.

SAINTS CHANNEL. To enter these harbours by the Saints channel observe the following directions. Bring the west points of St. Genevieve and Anchor Island in one, bearing north, at a distance of not less than 5 miles from the former, to be sure that you are outside of Collins Shoal. Run in upon this leading mark, until the north sides of the two Saints come in one, bearing E.S.E. $\frac{1}{2}$ E. The east sides of Mount Partridge and of Hunting Island (or rather of an island joined to it at low water) will come in one at the same time, bearing N.W. by N.; steer upon this last named leading mark, (to avoid a reef which extends 280 fathoms from the S.W. point of St. Genevieve.) until the east side of Mount St. Genevieve, seen over the sandy S.E. point of Anchor Island, comes in one with the N.W. point of St. Genevieve Island, bearing N.N.E. $\frac{1}{2}$ E. Change your course now to north, which will take you in through the centre of the channel between St. Genevieve and Hunting Islands, and you may either proceed to St. Genevieve Harbour, round Anchor Island, giving its west end a berth of two cables' length, or to Betchewun Harbour along the N.E. side of Hunting Island, which is quite bold.

The directions just given for the Saints channel will lead a ship in between the dangers off St. Genevieve and Hunting Islands, in not less than 20 fathoms water, and she will not have a less depth until she is in as far as Anchor Island. The breadth of the channel between the shoal-water off the Saints, and the shoals off the S.E. point of Hunting Island, is a mile. It diminishes to half a mile between the reef off the S.W. point of St. Genevieve and the east end of Hunting Island, which is the narrowest part of the channel. Within this narrowest part, the ground becomes good for anchoring, as it is everywhere between St. Genevieve and Betchewun Harbours. Indeed so little sea comes in, that the whole space may be considered as a harbour capable of holding a great number of vessels of the largest class. Wood and water may be obtained, the latter from small streams, either on the main or on the islands.

There is an inner harbour at Betchewun, to the westward of the low islet which has been mentioned, but from thence there is no channel, excepting for boats, to pass out to the westward between Hunting Island and the main.

The **TIDES** between St. Genevieve and Hunting Islands, and the main land, are much influenced by the winds; but their rates seldom amount to a knot at any time, and are usually much less, excepting through the shallow and narrow channel at the west end of Betchewun Harbour, where there is at times a complete rapid.

CHARLES ISLAND, the next westward of Hunting Island, is 3 miles long parallel to the coast, and $1\frac{1}{2}$ wide. It is about 200 feet high, bold, and free from shoals; but at the distance of three-quarters of a mile south from its east point, there is a patch of rocky ground on which no less than 5 fathoms has been found, but which had better be avoided by large vessels.

The east point of Charles bears N.W. by W. nearly $2\frac{1}{4}$ miles from the west point of Gun Island. The former of these points is quite bold, and

so is the latter to the N.W. but to the S.W. it has a reef extending 200 fathoms. Between them is the entrance to PUFFIN BAY, which is open to southerly winds. Within the east point of Charles, and half way towards a shoal cove in this island, there is good anchorage in 7 fathoms, mud bottom, at the distance of two cables from the island; but the S.E. winds send in a considerable swell. In the N.E. corner of this bay is the narrow entrance (between shoals off Ragg Point and Hunting Island) to Ragg Bay, which has tolerable anchorage in its N.W. part, but has very deep water on the side towards Hunting Island, and is separated from the western part of Betchewun Harbour by the shoal and narrow channel for boats between the island and the main, before-mentioned.

CHARLES HARBOUR, between the island and the main, though very narrow, is perfectly secure, and deep enough for vessels of any size, but its entrances are only 80 fathoms wide. Within, the harbour expands to a quarter of a mile wide by three-quarters of a mile in length parallel to the shore. Both entrances are 7 fathoms deep, but you must pass over 4 fathoms if you enter from the eastward through Puffin Bay. The depth within the harbour is from 4 to $6\frac{1}{2}$ fathoms, with mud bottom.

TIDES. Strong winds occasionally cause the tides to run at the rate of 2 knots in the entrances of the harbour, but in general there is only a weak stream with either tide.

To enter this harbour from Puffin Bay, bring the N.E. point of Charles, which is high and clifty, to bear N.W. then steer for it, and give it a berth of between 100 and 180 fathoms, as you haul round it to the westward into the harbour.

To enter from Trilobite Bay, give the N.W. point of Charles Island a berth of between 60 and 140 fathoms, as you haul round it to S.E. by E. into the harbour. All the way from the eastern narrow entrance into Charles Harbour there is a broad zone of shoal water, which curves round parallel to the main land till it joins Whale Island, and nearly fills up all the N.W. part of Trilobite Bay.

WHALE ISLAND, lying one quarter of a mile from the east side of Ammonite Point, and with shoal water between them, is distant 800 fathoms to the westward of Charles Island. Both islands are bold and clifty, and Trilobite Bay is between them with excellent anchorage, well sheltered from all but southerly winds. The only danger to be avoided when working into Trilobite Bay is a reef off Ammonite Point, which includes a small islet, and extends half a mile off-shore. The mark to clear this reef, when running along the coast, is to keep Gun Island open to the southward of Charles Island, and when hauling in from the westward, into Trilobite Bay, keep the north point of Charles well open to the southward of Whale Island.

CLEAR WATER POINT, about 2 miles westward of Ammonite Point, and $2\frac{1}{2}$ miles westward of Whale Island, is low, and the shoal water does not extend more than a mile off it to the southward.

The coast forms a large bay between Points Clear Water and Esquimaux, along which there are high and conspicuous cliffs of sand and clay, that distinguish this part of the coast to a vessel at sea. The shoal water extends a considerable distance from the shore all round this bay, and opposite Sea Cow Island, the 3 fathom mark is a mile out from the sandy beach.

Due west, and $1\frac{1}{2}$ mile from Clear Water Point, lies a rocky 3 fathom

shoal; and there are three others, with 2 fathoms, lying to the northward of the first, and in a line from the point, towards Walrus Island; the outer or westernmost of them being rather more than 2 miles from the point.

The mark for the outermost of these shoals is the south side of the high land of Niapisca Island in one with the south point of Gull Island, bearing N.W. by W. $\frac{1}{2}$ W.; or the north point of Fright Island, on with the south side of Esquimaux Island, and open to the southward of Green Island, bearing N.W. by W. The leading mark for passing outside these shoals, at the distance of half a mile, is the south points of Gull and Fright Islands in one, bearing N.W. by W.

WALRUS ISLAND lies 4 miles to the W.N.W. from Clear Water Point, and Sea Cow Island, is close to the N.E. of it. The two islands together cover the space of $1\frac{1}{2}$ mile in a N.E. direction, and are steep and precipitous, excepting to the southward, in which direction the reef off Sea Cow Island extends three-quarters of a mile, and that off Walrus Island, 200 fathoms.

There is a clear channel to the eastward of these islands, and also between them and the Clear Water Shoals. This channel is $1\frac{1}{2}$ mile wide, and, although not the best, may be used in proceeding to Esquimaux Harbour from the eastward, by running upon the leading mark, which has been given for clearing the shoals to the westward of Clear Water Point, until the east sides of Esquimaux and Walrus Islands come in one. Then steer for the N.E. side of Sea Cow Island, and haul round it, at the distance of not less than 2 cables, to the north-westward for the east entrance of the harbour.

GREEN ISLAND, small, low, covered with grass, with reefs stretching north and south, 270 fathoms, but bold to the east and west, lies five-sixths of a mile W.N.W. from Walrus Island, and a third of a mile E.S.E. from Esquimaux Island.

GULL ISLAND lies a mile W. $\frac{1}{2}$ S. from Green Island, which it resembles, excepting that it is rather smaller. It is distant half a mile from the S.E. point of Esquimaux Island to the S.W. but there is no passage for ships between them. The south point of Gull Island is bold, and may safely be passed at the distance of 2 cables.

ESQUIMAUX ISLAND, $2\frac{3}{4}$ miles long parallel to the coast, and $1\frac{3}{4}$ mile wide, is 200 or 250 feet high towards its north side, sloping to the southward. From its S.W. point a shoal extends towards Fright Island, which also has a shoal stretching towards Esquimaux Island. The channel between these, leading north-eastward towards Esquimaux Harbour, is 380 fathoms wide, with extremely deep water, but as there are no leading marks for it, and the reefs on either side are extremely dangerous, it cannot be recommended.

FRIGHT ISLAND is nearly a mile from the west point of Esquimaux Island, and about $\frac{2}{3}$ of a mile long, in a N.E. direction; it is bold on the south and S.W. on which sides vessels may pass at a cable's length, but reefs extend off it to the east, N.E. and N.W. to the distance of three cables.

QUIN ISLAND lies within, or N.E. by N. from Fright Island, from which it is distant a short half mile; it is nearly $1\frac{1}{4}$ mile long in a N.N.E. direction, and its shores are bold, with the exception of a broad reef running out half a mile to the W.N.W. from its north point.

There is a channel, which is deep, but only two cables wide, between

Quin Island and the reefs off Fright Island. This channel may be used with a westerly wind for proceeding to Esquimaux Harbour, by hauling up to the east of Niapisca till the south end of Quin Island comes in one with the south side of the cove in Esquimaux Island, bearing E.S.E., then steering so as to pass close round the south point of Quin Island, which is quite bold, and thence E. by N. 2 miles, to the harbour.

QUIN CHANNEL. But the best channel from the westward towards Esquimaux Harbour is between Quin Island and the main, which, at Point aux Morts, is distant two-thirds of a mile to the N.N.E. from the north point of the island. The shoal water extends only a cable's length to the northward from the latter, but off Point aux Morts, and also off the small islets which lie rather more than a third of a mile to the W.N.W. from it, the reefs extend 200 fathoms to the southward, and the shoal water is continuous to the eastward, across the mouth of the wide bay, which is to the northward of the harbour, and between Point aux Morts and Esquimaux Point. The depth of water in Quin channel is from 5 to $7\frac{1}{2}$ fathoms, with rocky, gravelly, or sandy bottom.

ESQUIMAUX HARBOUR lies between the north and N.E. points of the island of the same name, and between that island and the main land. The island is 400 fathoms from Esquimaux Point, which bounds the N.E. part of the harbour. Esquimaux Point, having the entrance of a small river on its west side, consists of sand, and is quite bold to the S.W. although shoals extend from it across the bays on either side, as has been mentioned. The north and N.E. points of Esquimaux Island are also bold, and may be passed at the distance of 70 fathoms by the largest ships. The depth within the harbour is from 5 to 15 fathoms, over a sandy bottom. The space in which vessels may anchor is nearly $1\frac{1}{2}$ mile long, in a N.W. $\frac{1}{2}$ W. direction, which is the bearing of the points of the island from each other, and the average breadth of the harbour 4 cables' length. There is therefore room for a great number of vessels, which, if they anchor well over towards the island, (that is, within the line joining its north and N.E. points, and in not more than 11 fathoms water,) will be sheltered from all winds. Supplies of good water may be procured from the river at Point Esquimaux, or from small streams on the island, and wood is plentiful.

Brief directions have been already given for Sea Cow, Fright, and Quin channels, leading to this excellent harbour. For the best channels from the eastward and westward, observe the following directions:—

WALRUS CHANNEL. The best channel with easterly winds is between Walrus and Green Islands. This channel is three-quarters of a mile wide, with 8 fathoms least water, and it is only necessary to give either island a berth of 200 fathoms to be clear of all dangers. Being 2 or 3 miles outside of these islands, bring the N.E. point of Esquimaux Island to appear about half way between the two islands above-mentioned as forming the channel, and it will bear about north. Steer for it, and giving it a berth of a cable's length, haul round it to the north-westward into the harbour, and anchor in the depth and position which has been recommended.

NIAPISCA CHANNEL. The best channel with westerly winds is to the westward of Fright and Quin Islands, between them and Niapisca Island, in the first instance, and afterwards between Quin Island and the main. The extent and position of the reefs off Fright and Quin Islands have been already mentioned. Niapisca Island, however, has

reefs of flat lime-stone extending half a mile to the southward : and also a quarter of a mile to the eastward, from its S.E. and east points, between which a very remarkable group of flower-pot rocks will be seen standing on the lime-stone just above high-water mark. From its east point, which is the south point of a bay in the island, another reef runs out half a mile to the N.E. by E. but there is ample space between these reefs and Fright Island, the channel being over a mile wide in the narrowest part, and between 30 and 40 fathoms deep.

In running for this channel from the westward observe the following directions :—First, observe that the leading mark for clearing the south reef of Niapisca Island by more than 2 cables' length, is the N.W. point of Fright Island in one with the south end of Quin Island : do not therefore open those islands clear of each other, until you have brought Moniac Island (bearing N. $\frac{1}{2}$ E. $2\frac{1}{2}$ miles from the nearest point of Niapisca) in sight to the eastward of Niapisca. Having done so, haul in through the channel, steering N.N.E. $\frac{1}{4}$ E. and when you open Moutange Island (next westward of Moniac) to the northward of Niapisca, you will be clear of the N.E. by E. reef above-mentioned. Haul up now, if necessary, to clear the reef, which projects half a mile W.N.W. from the north point of Quin Island, until you not only open the north point of Esquimaux Island to the northward of Quin Island, but also the north point of Sea Cow Island to the northward of Esquimaux Island. Run in between Quin Island and the main, with the last-named marks just open, bearing about S. 54° E. and they will lead you past the north point of Quin Island, at the distance of about 200 fathoms.

Take notice, that the marks for the shoals off Point aux Morts, and the small islets westward of it, is the north and N.E. points of Esquimaux Island in one, bearing S.E. $\frac{1}{2}$ E. ; if you open them before you are as far to the eastward as Quin Island you will be ashore. Having passed Quin Island, continue your course towards the north point of Esquimaux Island ; and haul round it to the south-eastward into the harbour.

The TIDES usually run at the rate of about one knot through Esquimaux Harbour, the flood coming round Clear Water Point from the eastward, and passing to the westward between Quin Island and the main. The ebb flows in the contrary direction. The flood also draws in between Fright and Niapisca Islands, and the ebb sets out through the same channel. But these streams are much influenced, both in their rate and duration, by the winds, and the ebb is much accelerated by westerly winds in Esquimaux Harbour, running there at times fully 2 knots.

NIAPISCA ISLAND, the reefs of which have been already mentioned, is rather more than 2 miles long, on a north and south line of bearing : it is only partially wooded, and has three principal hills, not exceeding 200 feet high.

QUARRY ISLAND, nearly $2\frac{1}{2}$ miles long parallel to the coast, and about the same height as Niapisca, is separated from the latter by a channel 370 fathoms wide, with a small islet in it, but no safe passage for shipping, because of a shoal in the bay to the southward, and of a reef which stretches beyond the small islet. Other reefs also run out one-third of a mile from the west side of Niapisca, and from the south side of Quarry Island.

QUARRY COVE is on the north side, and two-thirds of a mile to the north-westward of the east end of the island. It is 230 fathoms wide, and about 400 deep, with 22 fathoms of water in the entrance, shoaling gradually to 5 fathoms with mud bottom close to its head. The islands and shoals along the main land are distant only 3 miles to the northward of this cove, which thus becomes a completely land-locked, though very small harbour. No other directions are requisite, than keeping the west side nearest on board when entering, and to anchor near the centre in 9 or 10 fathoms. Good water may be obtained from a small stream in the S.W. corner of the cove.

QUARRY CHANNEL. There is a clear channel between Quarry Island and Large Island, which is the next westward. This channel is 400 fathoms wide from island to island, in the narrowest part, where the shoal water off Large Island diminishes the navigable breadth to 330 fathoms. The only directions necessary are to bring the channel to bear N.N.E.; then run in, keeping in its centre until two-thirds of a mile within the S.W. point of Quarry Island, after which you may keep that island close on board, as the remainder of the channel, $1\frac{1}{4}$ mile, is quite bold on that side, while the shoal water extends 150 fathoms from Large Island. The flood runs slowly in through this channel, and the ebb as slowly out.

LARGE ISLAND, of an oval shape, the longest diameter 4 miles, and lying nearly north and south, is rather more than 11 miles in circumference, thickly wooded, and in its highest part estimated at 200 feet above the sea. Reefs of flat lime-stone extend off its south and S.W. points to the distance of nearly three-quarters of a mile, and the mark for the south point of these reefs, in 2 fathoms, is the south points of Niapisca and Fright Islands in one. On its west side, a mile to the northward of its S.W. point, there are many flower-pot and arched rocks, standing on the flat lime-stone above the present high-water mark.

The **MIDDLE REEF** lies just within the line joining the south points of Large and Mingan Islands, and 2 miles westward of the former. A part of this reef is always above water, but it is not 30 fathoms in diameter, though the shoal around it is half a mile long in a N.E. by N. direction, and one-third of a mile wide. The mark for the east side of this reef, in 4 fathoms, is the east sides of the two Birch Islands in one.

LARGE CHANNEL. The navigable passage between this reef and Large Island is called Large Channel, and is $1\frac{2}{3}$ mile wide, with a depth of 54 fathoms. This is the channel that should be used by a vessel proceeding to Mingan Harbour with an easterly wind, and in doing so the only thing necessary to be observed is, that the reefs extend to the westward off the shore of Large Island, from 3 to 2 cables' length, as far in as the Flower-pot Columns, after which the island becomes bold. There is little or no warning by the lead on the Large Island side, but the Middle Reef may be approached to 13 fathoms, which, on the east side, is more than half a mile from it. Further in, the Birch Islands form the west side of this channel, at the distance of nearly 2 miles from Large Island; the east side of the Outer Birch is quite bold, and the shoal water extends only 150 fathoms off the east end of the Inner Birch Island.

THE OUTER AND INNER BIRCH ISLANDS lie to the northward of the Middle Reef, and in a line from it towards the west side of Harbour Island. The channel between the Outer Birch Island and the Middle Reef is almost a mile wide, and 30 fathoms deep, and the shoal water

extends only 150 fathoms from the south point of the former. But there is a very dangerous reef off the west side of the Outer Birch Island extending 650 fathoms from the shore. The channel between the two Birch Islands is 300 fathoms wide, but the ground is all foul, and not more than $3\frac{1}{2}$ fathoms could be carried through by a stranger. The Outer Birch Island is about a mile in diameter, and about 300 feet in height, and it has a remarkable flower-pot rock on its S.W. point. The Inner Birch Island is rather larger; its N.W. point is long and low, extending half a mile to the westward from the body of the island, with a curve to the S.W.; off this point there is a reef running out half a mile to the westward, and having 12 fathoms within a cable's length of its edge.

Half a mile to the S.W. of the same point, there is a small low islet, close to the south point of which stands a very remarkable rock, called the Hulk Rock, from its resemblance to the hulk of a wrecked vessel. The reef of flat lime-stone, dry at low water, which connects this islet and rock to the low west point of the Inner Birch Island, extends 300 fathoms off the rock to the S.W. and also 200 fathoms to the westward. The flood tide sets out to the S.W. between the Birch Islands, and also between them and the Middle Reef.

BIRCH CHANNEL, between the Birch Islands and Mingan Island, is the best by which to proceed to Mingan Harbour with westerly winds. It is 3 miles wide, and all deep water.

MINGAN ISLAND, $3\frac{1}{4}$ miles to the westward of the Inner Birch Island, is nearly 2 miles long, in a N.N.E. direction: and, including two small islets close to its west side, nearly a mile broad. It is about 100 feet in height, and bare of trees. The shoal water does not extend above 300 fathoms off its south point, but to the S.W. and west, the reefs, including the islets, run out nearly 600 fathoms. The island is bold on its north and east sides.

MINGAN PATCH lies S.W. $\frac{1}{2}$ S. $3\frac{1}{4}$ miles from the south point of Mingan Island, and with the south point of the Outer Birch on with the north point of Large Island; it is a patch of rocky ground, with 9 fathoms on it least water, yet there is a very heavy swell on it at times. There are 22 fathoms of water between it and the island.

THE PERROQUETS, the westernmost of the Mingan Islands, are four small islets, low, and bare of trees. The north-westernmost is higher than the others, surrounded with cliffs, and has a superstratum of peat on its flat summit, in which great numbers of puffins burrow and rear their young. The two easternmost of these islets are distant 2 miles N.W. by W. from the centre of Mingan Island, and have a reef of flat lime-stone extending off them three-quarters of a mile to the S.S.W. There is also a shoal to the northward of them one-third of a mile, and a narrow channel between them and the other two, but of no use to vessels. The north-westernmost islet has shoal water off it to the distance of a quarter of a mile, both to the eastward and westward, but a vessel may pass to the northward of it, at the distance of 200 fathoms, in 14 or 15 fathoms of water. Perroquet Channel, between these islets and Mingan Island, is $1\frac{1}{2}$ mile wide, and with a depth varying from 30 to 40 fathoms in the centre. Both the flood and ebb set out through the channel, the former to the S.W. and the latter to the southward.

All the islands described in the last article are bold, and free from danger on their north sides, so that Mingan Channel, which lies between

them and the main, is safe throughout. On the main land side of this channel, **MONIAC ISLAND** is less than half a mile in diameter, and stands nearly opposite **Niapisca Island**, from which it is distant about $2\frac{1}{2}$ miles.

MOUTANGE ISLAND, $1\frac{1}{2}$ mile further westward, is about $1\frac{1}{2}$ mile in diameter, and situated off a bay full of little islets, and in which there are several small rivers. Moutange is directly opposite **Quarry Island**, at the distance of $2\frac{1}{4}$ miles. These islands, Moniac and Moutange, are distant three-quarters of a mile from the nearest point of the main, but the shoals within and between them are nearly dry at low water.

The shoals do not project above three cables' length off to the southward of these islands, but there is rocky ground, with irregular soundings between 4 and 10 fathoms, out to the distance of a mile to the southward of them both; so that a vessel beating in the **Mingan channel** had better not stand over to the northward beyond $1\frac{1}{4}$ mile from the northern shores of the outer islands, or into less than 10 fathoms.

SAND LARK REEF, $3\frac{1}{4}$ miles N.W. by W. of Moutange Island, $2\frac{1}{4}$ miles E.S.E. from **Harbour Island** **Mingan**, and rather more than a mile from the main land, is small and low, but always above water. The shoal water does not extend off it above a cable's length, and there is a clear channel with deep water on all sides of it; but there is a rocky patch, with 5 fathoms of water, $1\frac{1}{2}$ mile from it on a line towards the south side of Moutange Island. This shoal water has not been particularly examined, and should therefore be avoided.

Between the **Inner Birch Island** and **Harbour Island**, the **Mingan Channel** is $1\frac{3}{4}$ mile wide, with rocky and irregular soundings, between 7 and 20 fathoms. The deepest water is over towards the **Birch Island**, where the bottom is generally of sand, gravel, and shells.

Between the **Perroquets** and **Long Point**, and also between **Mingan Island** and the latter, the **Mingan Channel** is $2\frac{1}{4}$ miles wide, and free from all danger, excepting a sandy shoal which extends off the shore, immediately to the westward of **Long Point**, to within a mile of the **Perroquets**. There is often a great ripple off this shoal caused by the flood tide being turned off by **Long Point** toward the S.W. This channel may be conveniently used, in going to **Mingan Harbour** with a northerly wind.

Long Point consists of sand, and there is a fine beach from thence to the eastward, as far as **Mingan Harbour** inclusive.

MINGAN HARBOUR is the narrow and well-sheltered space between **Harbour Island** and the main land, which last is low and has a fine sandy beach, while the island is of lime-stone, about 100 feet in height, precipitous and bold towards the harbour, but shelving and shoal to the southward to the distance of a quarter of a mile from the shore. The length of the island is 2 miles; its greatest breadth does not amount to half a mile, and it is thickly wooded.

The reefs off the east and west ends of the island, and which are the principal things to guard against in entering the harbour, extend 240 fathoms out from the high water mark.

The main land recedes from the island in the eastern part of the harbour, which would, in consequence, be exposed to easterly winds, if it were not for a sandy shoal, dry at low water, which extends 700 fathoms out from the entrance of the **Mingan River**. This river is only capable of admitting boats at high water, and its mouth is opposite the east end of the island. The eastern entrance of the harbour, between the above

sandy shoal and the island, is 200 fathoms wide, the western entrance between the main land and the island is 170 fathoms wide, the whole breadth in both entrances being in deep water. The space within, in which vessels may anchor in safety, is about a mile long by 270 fathoms wide, with plenty of water for the largest ships, over a bottom of fine sand.

Although these entrances are so narrow, there is little difficulty in taking a vessel in of the size of a sloop of war, and large frigates have occasionally visited the harbour.

TO ENTER MINGAN HARBOUR, observe the following directions:—In approaching it from the eastward, bring the north or inner side of Harbour Island to bear N.W. and the houses of the Hudson's Bay Company's post, ought then to appear open fully their own breadth to the northward of the island. Steer for those houses so open, leaving the east end of the island 150 fathoms to the southward, or on your left, and taking care to keep the south side of the sandy point of the main, which forms the western entrance of the harbour, shut in behind the north side of the island, for when they are in one, you will be on shore on the sandy shoal off Mingan River. After you have passed the east end of the island, run along its north side at the distance of a cable, and choose your berth anywhere near the centre of the harbour in from 9 to 13 fathoms, sand bottom.

When running for the harbour from the westward, run in towards the sandy beach of the main land at the distance of three-quarters of a mile to the westward of the island, until the sandy point of the main land, which forms the west end of the harbour, comes in one with the face of the clay cliffs, to the eastward of the Hudson's Bay Company's houses, bearing E. by S. or until you are in 11 fathoms water. Run upon this mark, or course, along the beach, and give the above sandy point of the main land a berth of half a cable, as you pass into the harbour, and choose your berth as before directed.

Mingan Harbour is perfectly secure in all winds, and, like Esquimaux Harbour, it has this great advantage, that vessels can enter or leave it either with easterly or westerly winds. The Banks of Soundings which extend off the Mingan Islands towards Anticosti have been already mentioned, and it is only necessary to add here, that their southern edge, in 50 fathoms, is no less than 5 miles off from the islands, and that the banks become wider, or extend further off, as you proceed to the westward. There is much greater depth of water in some of the channels between the islands, than there is on these banks, as will be seen by the chart.

From Long Point, a broad beach of fine sand reaches to the river St. John, which was described previously; and the chart will show that an irregular band of shoal water lies outside of this beach, at the distance of three-quarters of a mile.

GENERAL DIRECTIONS
FOR NAVIGATING
THE GULF AND RIVER OF ST. LAWRENCE.

BY CAPT. H. W. BAYFIELD, R. N.

VESSELS bound to Canada, or to any of the ports in the Gulf of St. Lawrence, should endeavour to make the Island of St. Paul, which, being of considerable elevation and bold all round, may, with care and a good look out, be made at night, or even in fogs, unless the former be very dark or the latter very thick.

On this island a lighthouse is about to be erected which will be of the utmost assistance to mariners; it lies in the main entrance to the Gulf of St. Lawrence, between Cape Ray, at the S.W. extremity of Newfoundland, and Cape North, near the northern extremity of Cape Breton Island. From the south point of the Island of St. Paul, Cape North bears W.S.W. $\frac{1}{4}$ W. by compass, distant 13 miles; and from the north point of the same island, Cape Ray bears E. by N. distant $41\frac{1}{2}$ miles. In approaching St. Paul from the S.E. with northerly winds, the current, which at times comes from the northward, and sets towards the shore of Cape Breton, should be guarded against. The south coast of Newfoundland, eastward of Cape Ray, is broken, rocky, and dangerous. The tides and currents, being influenced by the winds, are irregular; whilst all southerly and easterly winds, and often also south-westerly winds, bring a thick fog, which is most dense near the lee-shore. On these accounts, this coast should not be approached, excepting with a decided northerly wind and clear weather.

After having made St. Paul, vessels bound to Canada should endeavour, if the weather be clear, to make the Bird Rocks, the largest or south-easternmost of which bears from the north point of St. Paul N.N.W. $\frac{1}{4}$ W. 55 miles.

There is a deep channel between St. Paul and the bank on which the Magdalens, Bryon Island, and the Bird Rocks are situated. This channel is 12 miles wide, and no soundings have been found in it with 60 fathoms of line. Twelve miles N.W. from St. Paul, on the S.E. extremity of the bank above mentioned, there are 50 fathoms of water over a bottom of fine sand; and $13\frac{1}{2}$ miles from the island, on the same line of bearing, there are 35 fathoms, the bottom being the same, with the occasional addition of gravel. From this point the water shoals gradually towards the Magdalens, distant 42 miles. Following the eastern edge of the bank to the northward, inclining gradually to the N.W. regular soundings extend from 28 to 35 fathoms, over sand, stones, and

broken shells; the latter depth being where the Great Bird Rock bears W.N.W.; and when the same rock bears W.S.W. $\frac{1}{4}$ W. distant $13\frac{1}{2}$ miles, there will be 50 fathoms over fine sand on the edge of the bank, off which there is no bottom with 70 fathoms of line. At the distance of 10 miles from the Rock, and on the same line of bearing, there are 43 fathoms; and at 6 miles 33 fathoms, shoaling gradually in to 24 fathoms, within a mile of the Rocks. This bank is an excellent guide up to the Bird Rocks at night, or in thick weather, which almost always accompanies easterly and southerly winds: but under such circumstances it will be safer to run along the northern edge of the bank, taking care not to come into less than 40 fathoms, than to attempt to make the Bird Rocks. When well past them by the reckoning, a course can be shaped up the Gulf.

In northerly winds the weather is usually clear; and, if the ship be far enough to windward, it will be advisable to stand to the westward and endeavour to make Entry Island, taking care to avoid Doyle Reef and the Sandy Spit off the east end of the Magdalens, by not approaching the islands in that part nearer than 20 fathoms. Under the lee of these islands a smooth sea will be found, sufficient guidance by the soundings, and good shelter and excellent anchorage in Pleasant Bay.

Another advantage of following this course arises from the circumstance that the N.W. winds very generally veer to the S.W. so that, if a vessel has passed to leeward of the Magdalens with the northerly or N.W. winds on the starboard tack, the succeeding S.W. wind will enable her to stand on the opposite tack towards Cape Gaspé.

From the north point of the Island of St. Paul to the east point of the Magdalens the course is N.W. $\frac{1}{4}$ W. distance 56 miles; and to Entry Island, N.W. by W. $\frac{3}{4}$ W. 63 miles.

From the north Bird Rock the lighthouse on the S.W. point of the Island of Anticosti bears N. $46^{\circ} 13'$ W. true, or N.N.W. by compass, 134 miles; and the east point of Anticosti N. $14^{\circ} 46'$ W. true, or N. $\frac{1}{4}$ E. by compass, 80 miles.

After leaving the Bank of Soundings, northward of the Bird Rocks, the water is very deep all the way until near the shores of Anticosti, there being no bottom with 80 fathoms of line, nor probably at much greater depths. In making this part of the voyage up the Gulf, the frequent current from the northward, mentioned as having been one of the causes of shipwrecks in the neighbourhood of Capes Rozier and Gaspé, Mal Bay, &c. should be considered. Accidents, however, from this cause can never occur if the lead be used; for, upon consulting the chart, it will be seen that there are soundings to be obtained nearly all the way upon, and to the southward of, a line joining the Bird Rocks and Cape Gaspé, whilst a few miles to the northward of that line there is no bottom with 80 fathoms of line.

With a fair wind the object should be to make the lighthouse or revolving light upon the S.W. point of Anticosti; and, with westerly winds, any part of the coast of that island which can be attained. When the lighthouse on Heath Point shall be lighted it will be easy to make the east end of the island at night, if the weather be clear; and, if the weather be thick, the Bank of Soundings, which extends off it 28 miles to the south-eastward, may serve to determine the vessel's position by the lead. At the distance from the island above-named there are 62

fathoms of water, shoaling gradually in towards the island, as will be seen by the chart.

In the event of a vessel being near the eastern extremity of Anticosti, and having succeeded in making the east point, or the light on Heath Point, with a S.W. wind, it will often be preferable to proceed to the northward of the island, where there is a good channel, rather than to tack and stand back to the southward and eastward. Under the lee of Anticosti she will, in this case, have a smooth sea, and often also clear weather, whilst there is a heavy swell and frequently a thick fog to windward of it. She will, moreover, avoid the current out of the St. Lawrence, which runs constantly with westerly winds between the south coast and Anticosti; and thus be able, at all times, to make way to the westward in moderate weather. At night, or in foggy weather, the Bank of Soundings off the north coast, and further westward the banks off the Mingan Islands, will safely guide her, even although the land should not be visible.

All the way from Natashquan Point to the River St. John, westward of the Mingan Islands, there are banks of sand, gravel, broken shells, and bits of coral extending off the coast many miles. Off the Mingan Islands these banks extend half-way across to Anticosti. The depth of water upon them is very various: to the eastward, or below the Mingan Islands, it is in general between 30 and 50 fathoms; but in some few places it exceeds the latter depth, whilst in others there is as little as 19 fathoms. Abreast the islands there is still less water occasionally; but to the southward of these banks, and between them and Anticosti, there is a very deep channel; in which, from opposite the east point to opposite the west cliff, the soundings exceed 100 fathoms. Proceeding westward, the soundings gradually decrease to 60 fathoms off the north point, where they become irregular for a few miles, varying from 50 to 70 fathoms, with occasional rocky bottom; and then deepen again, with mud bottom, further to the westward. In all this deep water channel, with the single exception which has been stated, the bottom is, for the most part, of blue mud. Such a remarkable difference in the nature of the bottom, as well as in the depth of water, renders it comparatively easy to take a ship through this channel at night, or in foggy weather. But in order to effect this with safety, the vessel should be furnished with Massey's patent sounding machine and lead, or other similar instrument, which must be freely used as she runs along the southern edge of the banks of sand, gravel, and shells, sheering occasionally to the southward into the deep water and muddy bottom, to make sure of not getting too far to the northward.

The dangers of this channel may be said to commence with the reefs off St. Genevieve and Hunting Islands; on approaching which from the eastward, the chart should be carefully consulted, for they are very dangerous, and there are some deep water soundings, between 50 and 70 fathoms inside the outer banks, which might lead to a mistake if care were not taken to keep on the southern edge of the outer banks.

These deep water soundings commence off the high peninsula Watcheshoo, and extend irregularly, being deep holes in the banks, to within a very short distance of Bowen Rocks off St. Genevieve Island. But the ship, if properly conducted, will be at least 3 leagues to the southward of the rocks of St. Genevieve; and as there are soundings, in a moderate depth of water, 5 or 6 miles from Collins Shoal, the outer danger off

Hunting Island, and the channel, excluding the reefs, is there 23 miles wide, there seems no difficulty in this part which may not with common prudence be avoided. Proceeding westward, the channel contracts gradually to the narrowest part, which is between the reefs off the north point of Anticosti and off Mingan Island, where it is $13\frac{1}{2}$ miles wide. To pass this safely, at night or in foggy weather, it is necessary that the lead should be kept constantly going as the vessel runs along the southern edge of the bank off the Mingan Islands, and she should not be allowed to go to the northward into less than 30 fathoms water.

If the vessel should be met by a westerly wind, down the channel, it will be attended with clear weather, and the white cliffs of Anticosti, which extend from the east point westward to opposite St. Genevieve, will easily be seen. A vessel may stand in without fear to within a mile or two of this part of the coast, which, with the exception of the reefs off Fox Bay, is bold and free from danger. Further westward the coast is low and shelving, and reefs extend further off. In the board to the northward at night, the soundings on the bank will show when to tack.

It has been remarked already that, in westerly winds, there is a weak current down this channel, but it is not constant, and its rate seldom exceeds half a knot. Sometimes it is imperceptible during the flood tide, and runs even the other way on the approach of easterly winds. Vessels, however, should be aware that on arriving off the north point of Anticosti with a west or S.W. wind, this current will almost always be found setting over to the N.E. being turned off into that direction by the west end of the island. Confined within a comparatively narrow channel, it is here stronger than elsewhere, running in the ebb tide, about a knot, and in the flood tide, half a knot in the offing.

Vessels meeting with a westerly wind in the south channel should stand over towards the Island of Anticosti, and make boards, off and on, of 3 or 4 leagues, to avoid the current out of the St. Lawrence. In beating between Cormorant Point and South Point, off which there is a dangerous reef, keep the lighthouse on Heath Point open of Cormorant Point. In standing in-shore at night to the eastward of the S.W. point, do not bring the revolving light to bear to the westward of N.N.W. or when standing in-shore to the westward of it, to the southward of S.S.E. $\frac{1}{4}$ E.

In moderate weather, a vessel will generally gain ground to windward all along the south coast of the island, but care should be taken to avoid being becalmed, near the shore, between the S.W. and west points, where both the swell and current set in-shore, and where the bottom being of clean flat lime-stone, an anchor will not hold. It is by no means uncommon off this part of the coast, for the fine weather W.N.W. breeze of summer to die away suddenly to a calm, so that a vessel beating here, should stand off-shore on the first appearance of a decrease of wind.

From the S.W. point of Anticosti to Cape Henry (Ellis Bay) the bearing is N. 52° $\frac{1}{4}$ W. true, or N.N.W. $\frac{1}{2}$ W. by compass, and the distance 39 miles; and 8 miles further, nearly in the same direction, brings us to the west point of the island. Having made South-west Point, and being 4 or 5 miles off it, with a fair wind, a course should be steered along the coast, so as to pass 8 or 10 miles to the southward and westward of Cape Henry and West Point. N.W. $\frac{1}{4}$ N. will be a safe course at night or in thick weather, when the lead should be hove every half hour.

With this precaution there is no danger of being set too near the coast, since there are soundings in less than 40 fathoms, at a distance varying from 5 to 3 miles off shore all the way from the S.W. point to the west end of the island.

From the west point of Anticosti, the south extremity of Point de Monts bears S. $73^{\circ} \frac{1}{4}$ W. true, or W. $\frac{1}{2}$ N. by compass, distant 116 miles.

An inspection of the chart will show that there are soundings in various depths, between 50 and 100 fathoms, from the western end of Anticosti to nearly opposite the Seven Islands, whilst to the southward there is no bottom at a much greater depth. These may be of use in discovering the situation of a vessel when light winds and fogs prevail for several days in succession, and the land in consequence has not been seen.

When the vessel has arrived off the west point of Anticosti, with a fair wind still continuing, a course should be steered well to the northward, especially with northerly winds, say for about Egg Island. She will thus avoid the strength of the current, and the possibility of being set over too near the south shore by its acting on her starboard-bow. When she has run about half way across she should haul more to the southward, so as to insure clearing Point de Monts.

If the weather be clear, there will be no difficulty in making the lighthouse on Point de Monts, and the fixed light at night can be seen, under favourable circumstances, 7 or 8 leagues from the fore-yard of a ship. But if the weather be thick, as it commonly is with a fair wind for running up, great caution is necessary. In such circumstances, after having run within about 15 miles of Point de Monts by the reckoning, sail should be reduced, so as to have the vessel under complete command, and she should be rounded to, and a good deep cast with Massey's patent lead obtained, so as to insure that she is not to the north-eastward of the Point, and this should be repeated every half hour, until the light be seen, or it is certain that it is past.

If the vessel be to the north-eastward of Trinity Bay, soundings will be obtained in less than 60 fathoms, from 4 to 6 miles off shore. Directly off Trinity Bay, there is the same depth 3 miles off shore; whilst, at the same distance off Point de Monts, there is no bottom at 100 fathoms. If the distance to Point de Monts has been run by the reckoning without finding bottom at 70 fathoms, it will be almost certain that the vessel is not to the northward; but still, as the effects of currents cannot be exactly calculated, and reckonings are liable to error, it will be prudent to shape a course well to the southward of the Point, till there remains no doubt of its having been passed.

In making the light on Point de Monts, remember that it is not on the extremity of the Point, but has been placed $1\frac{1}{4}$ mile to the north-eastward, along the coast towards Trinity Bay.

ROCKS OFF POINT DE MONTS. Point de Monts may be approached as nearly as three-quarters of a mile with safety, but not nearer in a large ship, since there is a ledge of rocks, with only 9 feet at low water, nearly half a mile south-eastward of the extremity of the Point, and south-westward of the lighthouse. There are also one or two patches of rock, with 12 feet water, to the southward and south-eastward of the lighthouse, but these are not more than a third of a mile off shore at low water.

The foregoing remarks apply where the object is to make the lighthouse, or light, on Point de Monts, which should always be attempted when there is any chance of success, because it is extremely desirable to

obtain a fresh departure before running up the comparatively narrow Estuary. But if the weather be so thick, as to leave no reasonable hope of succeeding, or if the wind be from the southward, a course should be steered more to the southward, so as to pass well clear of the Point.

Vessels beating up against westerly winds should stand over to the northward, as soon as they can weather Anticosti, unless the barometer, or other indications, render it probable that the wind will veer to the southward. During the flood tides, make short boards off and on the north coast, to take advantage of it, for it runs strongest in-shore. During the ebb, keep further off the land, for that tide also runs strongest near the shore. The tides, in general, are weak along this coast, and a vessel will always make way to windward in moderate weather.

From the Seven Islands to Point de Monts is, in general, the easiest part of the passage, for the W.N.W. wind, which, in this part, is the most common westerly wind, is off the land, so that a vessel can frequently fetch up to Point de Monts in smooth water, particularly at night, when the wind, in fine weather, generally veers a point or two to the northward. She will also have the benefit of the flood tide, whilst the ebb, being turned off by Point de Monts, is scarcely felt.

If it blow fresh, and the flood nearly done on arriving near Point de Monts, there will be no use attempting to beat round it till the next tide, and then only in fine weather. In this case, Trinity Bay, where with westerly winds a pilot will generally be found, is a good anchorage with moderate depth of water, good ground, and plenty of room to get under weigh.

From the south extremity of Point de Monts, the north side of Bicquette Island bears S. 48° W. true, or W.S.W. by compass, 79½ miles; and the south point of the Manicouagon Shoals S. 84° W. by compass, 33 miles; but as this great shoal extends towards English Bay, its N.E. point is only 28 miles distant from Point de Monts.

We have now arrived at the comparatively narrow Estuary, where the tides and currents are much stronger, and more various in their direction, than in the wider parts previously treated of: and where there are shoals extending on the north side several miles off the shore; hence, a good look out, and constant attention to the soundings, become indispensably necessary at night, or during the fogs which are so prevalent and embarrassing in this navigation.

After taking a departure from Point de Monts, the course to be steered must vary under different circumstances of wind and tide. The downward current is not only turned off to the southward by Point de Monts, but the Manicouagon and Bersimis Points also produce the same effect, although in a less degree, during the ebb tide; to which must be added the streams out of the large rivers Manicouagon, Outard, and Bersimis. During the flood tide, the streams out of these rivers cease, the general current is checked in the offing, whilst in-shore, within a few miles of the north coast, a stream of flood will be found.

A vessel taking her departure from Point de Monts with a whole ebb tide before her, is therefore very differently circumstanced from one which does the same at the commencement of the flood; and must reckon upon being set over towards the south coast much faster in the former than in the latter case.

Having made the light on Point de Monts, and being 3 or 4 miles off

it to the southward, with the usual easterly winds, nearly or right up the Estuary, steer W. by S. by compass, until up nearly as high as the Manicouagon Shoals, then keep half a point more to the southward, W.S.W. $\frac{1}{4}$ W. These are safe courses with either ebb or flood, and if the vessel has left Point de Monts at or near the commencement of the ebb tide, will usually bring her into soundings off Metis, where 30 fathoms, over sandy bottom, will be found 3 miles off shore; and 50 fathoms 5 miles off shore, and on the edge of the bank.

If, on the contrary, the vessel has left Point de Monts early on the flood, she will probably be further to the northward. I say, probably, because the strength of the current is too uncertain to allow of my saying that she positively will be so. However, the degree of uncertainty, which the irregular rate of current gives rise to, must be met by the use of the lead. If, therefore, the weather be thick, and the land not be seen, round to in time, particularly if you have had the ebb tide against you, and get a cast of the lead, to make sure that you have not been set too near the south coast. If no bottom be found at 60 fathoms, the W.S.W. $\frac{1}{2}$ W. course may be continued, until you are up as high as Metis by the reckoning, then let soundings again be tried for, and if still without finding bottom, haul in gradually to the southward, under easy sail, and with the deep sea lead going, so as to endeavour to strike soundings on the bank off Father Point, which may be accomplished safely, since the bank in that part extends several miles off shore. When Father Point bears south, by compass, distant 5 miles, the depth is 30 fathoms, over a bottom of soft clay: and with Barnaby Island on the same bearing, distant 7 miles, the same soundings will be found.

If the object be to pass the islands of Bic and Bicquette in the night, or foggy weather, run along the northern edge of the bank of soundings, with the lead going, taking particular care not to go to the southward into less than 30 fathoms. When you judge that you are approaching near to Bicquette, having passed Barnaby Island, haul out a little to the northward until you are out of soundings, and then steer W.S.W. $\frac{1}{4}$ W. still heaving the lead, and having the vessel under moderate sail for the purpose of getting bottom, till you are certain that you are well above the north-west reef off Bicquette. If you strike soundings at all, whilst running past this dangerous island, on which many vessels have been wrecked, you must haul off immediately to the northward out of soundings, and then steer as before.

When you are undoubtedly past Bicquette and its reefs, haul in to the southward by degrees, till you get hold of the edge of the bank again, and keep it up to Green Island.

Bicquette and its dangerous north-west reef lie very near the northern edge of the Bank of Soundings, and were difficult to pass safely, without a chart containing correct soundings; but now that that want is supplied, it may be safely accomplished with the assistance of Massey's patent sounding machine, by any seaman of common prudence and intelligence. Two miles north of Bicquette there are 30 fathoms: and only $1\frac{1}{2}$ mile north of the N.W. reef there is the same depth, with sandy bottom. Further off no bottom will be found at 50 or 60 fathoms. Both the island and reef are very bold to the northward, having 12 fathoms close to them.

I do not recommend vessels, without a pilot, to attempt running inside of the Island of Bic in foggy weather, unless very well acquainted. If,

however, it be necessary to do so, for the purpose of anchoring, see directions for that island.

It must be remembered, that the courses which I have recommended are independent of the *deviation*, or local attraction; and also, that its effect, although varying in amount in different vessels, is always to make it appear that they are steering less to the southward than they are in reality, if the compass be, as usual in the after part of the ship, and if there be no large masses of iron, as an iron tiller for instance, still further aft: for, in this latter case, the attraction of all the rest of the iron in the vessel may be neutralized or overcome by that of the iron abaft and close to the compass. I believe, however, that it very seldom is so, since the iron tiller and rudder chains in the *Gulnare* produced no such effect. To render the effect of deviation apparent, I will suppose it to amount to a point of the compass, no uncommon occurrence on a 6 or 8 point course, and the ship to be steering W.S.W. $\frac{1}{2}$ W. by the compass in her binnacle. She will then in reality be making a S.W. by W $\frac{1}{2}$ W. course, which would soon put her on shore on the south coast, an event that would be accelerated by the current, which, instead of stemming, she would have on her starboard bow checking her in-shore.

A case exactly similar to the one I have supposed occurred on the night of the 8th September, 1831, when the ship *Jane*, of Belfast, having several large chain cables, and other extra iron on board, by which the deviation must have been greatly increased, ran stem on to *Bicquette*, with a fair wind, but thick fog. She was steering the regular course up the middle of the Estuary; but her master was quite unaware of the effect of the great mass of iron in her hold upon her compasses, and equally so, that previous to the accident which caused the total loss of his vessel, he had been running for many miles in less than 20 fathoms water, the Bank of Soundings not being laid down in his chart.

These remarks, and others which I have made respecting the deviation, will, I trust, show how important a knowledge of it is to the safety of a vessel, and will, moreover, point it out as the duty of every commander, to endeavour to ascertain its amount during the voyage, and before he arrives in a difficult navigation like the *St. Lawrence*, where the fogs may frequently oblige him to run as high as *Green Island* without having been able to obtain a pilot.

Pilot schooners are often to be met with off *Point de Monts*, and pilot boats frequently wait off *Caribou Point*, at *Trinity Bay*, near the light-house on *Point de Monts*, and in *St. Augustin Cove*. If, however, a pilot should not have been obtained, and it be in the day time, you may safely stand in under easy sail, and with the lead going, and endeavour to make the houses on *Father Point*, although the weather be thick; running along the land from the eastward for that purpose, and going no nearer than 10 or 11 fathoms, at low water. Many pilots live there, and there is almost always one to be obtained.

Even in a foggy night you may form a tolerably correct opinion whether you are up to *Father Point*, or not; for an inspection of the chart will show, that the soundings shoal more gradually in to the southward there than they do further to the eastward. If you heave to, in 10 or 11 fathoms, low water, with the ship's head off-shore, a gun or two will be almost sure to bring off a pilot, unless the weather be very bad, for the pilots are fearless and excellent boatmen.

I have hitherto been speaking of the case when vessels are running up with easterly winds and thick weather; but a second case is when the wind is from the southward, then the direct course, W. by S. $\frac{1}{2}$ S. may be steered, if the vessel be, as before, close off Point de Monts, or W. by S. if she be nearer the south coast: allowing still for the set of the current to the southward, according to the tide, and sounding in time if the land be not in sight. Whenever the weather is foggy, and the land cannot be seen, the object should always be to strike the Bank of Soundings along the south coast about Metis, or Father Point at farthest, and then follow it as a guide to the westward.

A third case, of frequent occurrence in the autumn, is when there is a fresh northerly wind. The weather is then invariably clear, and, as the land can be seen, there is no danger of getting on shore with a good look out; but the strength of the current to the southward is increased by this wind, and therefore the vessel must be kept well to the northward, to prevent being set over to the lee-shore, and being, in consequence, obliged to tack (upon the wind veering a point or two to the westward) and stand all the way back again.

Supposing the ship to be in the same position as before, 3 or 4 miles to the southward of Point de Monts, you may fearlessly steer west for the first 20 miles, or as long as you can see the light. Take the bearing of the light every half hour, and lay it down on the chart, in order that you may perceive the effect of the current; and if you thus find that it sets you very fast to the southward, as you probably will, particularly during the ebb tide, haul up still higher, but take care not to bring the light to bear to the eastward of E. by N. lest you get too near the Manicouagon Shoals. When you reckon yourself up to the Manicouagon Shoals luff up in the wind, and get a deep cast of the lead, for although those Shoals are very steep on their east side, and also to the westward of Manicouagon Point, yet there are soundings off their south point. When the Manicouagon Point bears north by compass, you will have from 50 to 60 fathoms, at the distance of $5\frac{1}{2}$ miles off shore, and from 30 to 40 fathoms when you are 4 miles off shore, the bottom being of very fine sand. In the first case, you will be $3\frac{1}{4}$ miles off the south point of the shoals, and in the latter case, only $1\frac{1}{2}$ mile.

When past these dangerous and extensive shoals, the south point of which extends $2\frac{1}{2}$ miles off a low point of the same name, which can seldom be clearly distinguished at night, in consequence of the higher land behind it; you may haul well up under the north shore, coming no nearer than 3 miles, and taking care to avoid the shoal off Bersimis Point, which extends nearly $1\frac{1}{2}$ mile off a low point, also difficult to be seen at night.

There is also a rocky shoal, first discovered by us, and named the Gulnare Shoal, which lies nearly 2 miles off Cape Colombier. And, lastly, give a good berth to the low Point Mille-Vaches, off which the shoals extend 2 miles, as will be seen by the chart. All these shoals are extremely steep, and there is, in consequence, no trusting to the lead in approaching them with a vessel going fast. After passing Point Mille-Vaches, the north coast is bold, and without anchorage, all the way to within 3 miles of the Saguenay River. Although I have said that the strength of the current down the Estuary of the St. Lawrence is uncertain, yet it may be useful to give an idea of its rate and effect, as experienced on two occasions. First, when running up from close off Point

de Monts, which we left at the commencement of ebb tide, with a strong breeze from the northward, we found that we were retarded by a stream of 2 miles per hour, and that the set to the southward, at right angles to our course, was at the same time 11 miles in 7 hours, the wind being free and the rate of sailing 8 knots. This occurred in the month of October.

The second refers to an effect of the tidal stream, which is more local, and higher up the Estuary, but of which it is most important to the safety of a vessel to be aware.

We had been becalmed 5 or 6 miles south of Bersimis Point, when a breeze sprang up from the eastward, at 10 h. 30 m. P.M. Although we steered W.S.W. and S.W. by W. $\frac{1}{2}$ W. yet at 4 A.M. we saw Bicquette bearing south 2 or 3 miles, and were obliged to haul up to clear the N.W. reef. Had this occurred in a vessel where the lead was neglected, and had the weather chanced to be foggy, she would have run on shore, and been in all probability lost. On this occasion the ebb tide appears to have set diagonally across the Estuary, about E.S.E. by compass, and at the rate of 2 miles per hour; being evidently thrown off to the southward by Point Mille-Vaches and its shoal. During the flood tide, however, it must be remembered, that no such stream will be found; on the contrary, I have reason to believe, that the remark of Mr. Lambly (the experienced harbour-master of Quebec) will then prove correct, that "the current between Bicquette and Point Mille-Vaches sets to the N.E. instead of E.S.E." for the eddy flood meets the proper flood flowing up along the Bank of Soundings, and between Bicquette and Bic, and the united streams are turned off to the northward after the first quarter flood, as we have ourselves observed.

From the north side of Bicquette Island, the lighthouse on Green Island, which shows a fixed light, bears S. 44° W. true, or S.W. by W. $\frac{1}{2}$ W. by compass, distant $30\frac{1}{2}$ miles; and the light can be seen, in clear weather, from a distance of 17 or 18 miles, if the observer be elevated 60 feet above the sea. The lighthouse stands on the north side of the island, and when first seen, from a vessel on the south Bank of Soundings, appears like a white sail a short distance from the shore.

In running up to Green Island, after passing the N.W. reef of Bicquette, a W.S.W. course, by compass, will, in general, take a vessel along the edge of the bank, up as high as the Razades; but above those islets both flood and ebb set to the S.E. and render it necessary to steer more to the westward, or even to the northward of west with a scant northerly wind. But the lead, and a reference to the soundings in the chart, are the only sure guides. With an easterly wind, the fog will seldom be so thick as to prevent either the Razades, Basque, or Apple Islands from being seen in the day-time. They may be safely approached by the lead, and I recommend the attempt to make the two last, especially Apple Island, which is very bold on the north side, in order that the position of the vessel may be exactly ascertained before hauling out into deep water, for the purpose of clearing the dangerous Green Island Reef. In the circumstances which I am supposing, of an easterly wind with fog in the day-time, it is much more safe to attempt to make Apple Island than the lighthouse, since a vessel can approach within less than two cables of the former, but would be ashore before she saw the latter, if the fog were thick, since the reef extends nearly $1\frac{1}{2}$ mile to the north-eastward of it.

Having succeeded in making Apple Island, the vessel may be sheered out to the edge of the Bank of Soundings; and as the distance is short, it is easy to judge when the vessel is coming near the reef, taking, of course, the tide into account, whether it be flood or ebb, and keeping the lead constantly going. Then, if the lighthouse be not seen, sheer out to the northward into more than 30 fathoms water, and shape a course up towards the Brandy Pots, according to the tide.

If the lighthouse be seen, or the light at night, there is still less difficulty in avoiding the reef, and regulating the course afterwards, provided the chart be consulted, the lead used, and the tide considered.

But Green Island Reef is extremely dangerous, and is rendered doubly so, by the strong tides which set upon it, and which produce breaking ripples, that try the nerves of strangers during a dark night, or foggy weather. Therefore, in a strong easterly gale, dark night, fog; or snow so thick that there is little chance of seeing the light, I consider the attempt to run through between Red and Green Islands to be attended with great risk, especially during the ebb tide, which, coming from between Hare Island Reef and Red Islet, sets over towards the Green Island Reef, at the rate of 5 knots. It requires an experienced pilot to take a ship safely through this dangerous passage under these circumstances: I should, therefore, recommend, in the case of a vessel approaching Bic, in such weather, towards the close of the day, and without a pilot, rather to heave to, or stand on and off the south bank, than run this risk, although there may be some danger in so doing from other vessels running up. If the soundings about Bic be well known, or that island, or Bicquette, has been seen, the safest plan would be to run under the lee, and anchor to the westward of them, in from 8 to 10 fathoms low water, where the holding ground is excellent, and the vessel would ride in perfect safety till day-light. Even as far as 6 or 7 miles to the westward of these islands, in from 12 to 13 fathoms at low water, I have rode out a very heavy breeze from the eastward; the sea, although considerable, being nothing in comparison with that which was running, at the same time, in the deep water outside of us and off the bank.

In beating up from Point de Monts to Green Island, against westerly winds, which are almost always accompanied with clear weather, there is little difficulty, with the assistance of the charts, other than that which arises from the set of the tides and currents.

It requires a tolerably good sailing vessel, and a flood tide, to beat past Point de Monts against a wind right out; but short boards round the Point, and along the north coast, up to Cape St. Nicholas, will most readily succeed. It is not, however, advisable to keep this shore close on board much further to the westward, lest the wind should fall to a calm, for there is a strong in-draught towards the mouth of Manicouagon river, during the flood tide; and if an easterly wind should chance to spring up, after the vessel had been drifted in near the mouth of English Bay, it might be difficult to beat out, or to weather the eastern side of the Manicouagon Shoals. The light on Point de Monts cannot be seen on any bearing to the southward of east, being intercepted by the high land to the westward of it; and when it disappears, a vessel off Goodbout River will be only 1 mile from the Bar, or off Cape St. Nicholas little more than 2 miles off shore: so that it is a safe rule, in standing in towards the coast at night, to tack as soon as the light bears E. $\frac{1}{4}$ N.

When the ebb makes, stretch over to the southward into the middle of the Estuary, where that tide is less strong than near either shore ; but do not go further to the southward, and be back again to the north coast at the return of flood.

The best time to get past Point de Monts, when fine weather and westerly winds prevail, is at night, or in the first hours of the morning, for then vessels are often assisted by a northerly land wind. If it has blown freshly from the westward during the preceding day, a heavy head sea may be expected off the pitch of the Point: the flood from along the land in the direction of the Seven Islands meeting the downward current off the Point assists in causing this.

If, after passing Point de Monts in the morning, with a northerly land wind, there are signs of its dying away, or veering to the westward as the day advances, continue the board to the southward and westward, instead of tacking to keep the north land on board, as directed when the wind is settled right down ; for the land wind of the night will be probably succeeded by the fine weather day wind, which usually becomes a steady breeze about 9 A.M. after commencing at W.S.W. and thus affords an advantageous board towards the north coast.

In the fine weather of the summer, the wind will probably veer by degrees during the day back to west and W.N.W. thus offering another good board to the south-westward. Pilots and others, who are experienced in reading the indications of the winds and weather, frequently gain more ground to the westward by calculating upon these probable changes of the wind, than by keeping on the north shore out of the current.

With the exception of the low Points Manicouagon, Bersimis, and Mille-Vaches, of which I have already warned the seaman, the land can in general be plainly seen at night during the continuance of westerly winds : and where its features are sufficiently remarkable, there will be little difficulty in making it out, from its representation in the charts. Mount Camille, especially, being an isolated mountain, 2036 feet above high water mark, can easily be distinguished ; as well as the summit of the high land of Bic, 1234 feet high. Their bearings will often be of great service to vessels in clear nights, and will show when they are high enough up to fetch Father Point ; where a pilot should be sought for, if one has not been already obtained.

On arriving off Father Point, or anywhere between it and Bic, if the flood be done, and the wind be light, it will be better to anchor on the Bank of Soundings, weighing again, if there be a breeze, in sufficient time to stand over and meet the first of the flood on the north shore. By this mode of proceeding, vessels will gain much more ground to the westward than by remaining on the south shore, for although there be a weak stream of flood upon the Bank of Soundings, from Father Point to the Island of Bic, yet there is little above that island, and none after the first quarter flood, excepting so close in-shore as to be useless to large vessels.

From the Bay of Mille-Vaches to within 3 miles of the entrance of the Saguenay River, with the exception of a shoal extending a short distance off shore from the bay next westward of Cape Bondesir, as will be seen in the chart, the coast is moderately high and very bold, the flood strong, and the ebb comparatively weak. Vessels should, therefore, make short boards along this shore until up to Bergeron coves, and then stretch

over to the anchorage under Green Island Reef, to wait for the next flood ; for it will require a whole tide, even with a good working breeze, and a fair sailing merchant vessel, to beat through between Green Island and Red Islet, and reach good anchorage above, before the ebb makes.

In standing across from the north shore, beware of the Red Islet Reef, which extends $2\frac{1}{2}$ miles to the eastward, from the low shingle islet of the same name. There is a beacon above and behind the lighthouse on Green Island, which has been erected at the recommendation of Mr. Lambly, the harbour-master, to lead vessels clear of this danger, and it answers the purpose extremely well. It is white, like the lighthouse, but much smaller ; and when they are in one bearing S.S.E. $\frac{1}{4}$ E. by compass, the beacon appears in the middle of a lane cut through woods behind it. A vessel standing over with this leading mark on, will pass over the tail of the Red Islet Reef, in from 5 to 8 fathoms, according to the time of tide. This beacon will be readily distinguished in the day-time, but if a stranger should have any doubt of it, let him be sure not to bring the Green Island lighthouse, or light at night, to bear at all to the eastward of S.S.E. and he will be in no danger. Crossing, below the reef, with the light upon that bearing, there will be found from 9 to 12 fathoms, according to the time of tide, at a mile distance from the reef.

Violent breaking and whirling rippings of the tide, which can be heard at a great distance in a still night, will be met with in crossing, and are alarming enough to strangers, but there is no danger with the lead going, and an anchor clear to let go in the event of its suddenly falling calm near the reef.

The Red Islet Reef is, however, very dangerous, and the first of the flood sets strongly over it, in a direction from Bergeron coves towards Green Island. The ebb out of the Saguenay also sets upon it, so that a stranger should not make too free with it. If a vessel cannot fetch the anchorage under Green Island Reef, she may anchor anywhere, in fine weather, along the south bank between Bic and Green Island, and will have good ground in 12 fathoms, at low water, and plenty of room to get under weigh.

In coming up with a N.W. wind, the north shore should be kept close on board until up to Bergeron, and if it be flood tide, the vessel may pass either northward or southward of Red Islet, as may be preferred ; but the former passage should not be attempted with this wind during the ebb, or yet the other, unless by those who are well acquainted with the set of the tides.

Although the passage to the northward of Red Islet is the quickest, there being a much stronger stream of flood in that channel, yet I do not by any means recommend it : on the contrary, I think it should never be attempted unless the breeze appears certain to continue, for if it fell calm, the vessel would run great risk of being drawn in by the stream of flood among the dangerous shoals off the mouth of the Saguenay, or being set down upon Red Islet Reef when the rapid ebb made out of that river, which is so strong, and the water so deep, that no anchor would hold.

To pass to the southward of Red Islet with the same wind, haul round the east end of the reef, and as close to the southward of it as is prudent, coming no nearer than 20 fathoms until past the islet. To those who

are well acquainted both with the soundings and set of the tides, it may be desirable to keep closer in attempting the passage with an ebb tide, but I cannot recommend it to strangers.

For the return voyage, down the Estuary and Gulf, little or no instruction seems necessary, as long as the wind remains fair and the weather clear, beyond what may be gathered from the charts and the preceding remarks. But where vessels are met by easterly winds and thick weather anywhere above Point de Monts, great caution, attention to the soundings and set of the tides and currents, become necessary to ensure safety, particularly during the long nights and wild weather in the fall of the year.

Vessels beating down the St. Lawrence usually stop at the Brandy Pots for a fair wind. But supposing, after they have passed Green Island, that the fair wind fails, and they are met with an easterly wind before they have arrived near the island of Bic, I should recommend them, in that case, to run up again to the Brandy Pots, especially if late, or very early in the navigable season; for all that they will gain by beating about in thick weather, probably for several days and nights in succession, will not be worth the risk. But if they have reached far enough down at the commencement of the adverse wind, the island of Bic affords good shelter and anchorage, which should be sought in time, before the fog commences.

There is no other anchorage which I can recommend lower down nearer than the Seven Islands, and after that Gaspé. There are other places, which will be mentioned hereafter, in some of which vessels ride for taking in timber, but there they are moored close in-shore, with lower yards and topmasts struck, by which means they ride out very bad weather, with very indifferent shelter; but such places are not fit for occasional anchorages, or for a heavy laden ship to run for on an emergency.

In a vessel beating down, the south bank should be the guide in thick weather, or at night. She should tack from it, after striking soundings on its edge, and should not stand to the northward more than half-channel over in any part: thus keeping in the strength of the downward current, and avoiding the possibility of accident from the shoals of the north coast, which being very steep, and affording little or no warning by the lead, have proved fatal to many vessels under these circumstances.

It will be almost always seen when the vessel comes upon the south Bank of Soundings, by there being so much less sea there than in the deep water, and strength of the weather current, outside: a strong ripple will be observed at the edge of the bank during the flood tide.

In the board from near Bicquette, during the flood tide, the vessel will go to the northward rather faster than to the southward back again, whilst in the ebb, the contrary will be the case. But above the Razade Islets, she will go much faster to the southward than to the northward, in both tides. Lower down the Estuary, and as far down as Cape St. Anne, she will generally go faster to the southward than to the northward during the ebb tide: whilst in the flood, an in-draught into the rivers will be felt on approaching near the north coast from Bersimis Point, nearly down to Cape St. Nicholas. The least reflection upon what has been said of the set of the tides and currents will account for these effects.

In a vessel beating down in a dark night, or thick weather, there is

no safety unless the lead be kept constantly going : when she is approaching the south coast, in the board to the southward, sail should be sufficiently reduced for soundings to be easily obtained, and everything in readiness to tack, or veer, at the shortest notice. These precautions become the more necessary as the vessel descends the Estuary, and the Bank of Soundings becomes narrower. Off Matan there are 30 fathoms, sandy bottom, $1\frac{1}{2}$ mile off shore, and 60 fathoms, at 3 miles off : whilst, at the distance of 5 miles from the land, no bottom will be found at 100 fathoms. The south bank becomes narrower still to the eastward of Matan, and ceases, in consequence, to be of use to vessels. Off Cape Chatte there are 30 fathoms of water, little more than half a mile from the shore ; a short distance further off there are no soundings at 70 fathoms ; and between it and Point de Monts, from 150 to 170 fathoms, blue mud bottom.

Below Point de Monts there is plenty of sea-room, and although the lead will there be of little use, yet the south coast is so high and bold that it may generally be seen, if the fog be no thicker than is usual with a regular easterly wind up the St. Lawrence.

Lower down still, with a beating wind and thick weather, soundings may be struck off the west end of Anticosti, or between the west and S.W. points of that island, if it be wished to ascertain how far the vessel is over to the northward before night. Eastward of the S.W. point of Anticosti, to Pavilion River, the Bank of Soundings off the south side of the island is very narrow ; but from the latter to the east point, there is plenty of warning by the deep sea lead, as will be seen by the soundings in the chart.

I do not recommend the channel to the northward of Anticosti, in the voyage down the St Lawrence, because there is not only less room, but also less current in favour. Neither do I recommend the route by the Strait of Belle Isle, on account of the stragglings ice-burys, which are in general to be met with there through all the navigable season. Towards the fall of the year, however, vessels occasionally pass through it, in anticipation of the northerly winds which prevail at that season in the Atlantic : they should be well acquainted with the currents, and should know the anchorages on the north side of the Strait.

CAPE GASPE' TO BRETON ISLAND.

CAPE GASPE' lies at the distance of 6 miles to the southward of Cape Rosier ; and Point Peter, or flat Point, lies 6 miles to the S. by W. $\frac{1}{2}$ W. of Cape Gaspé. At the distance of about 5 miles S.S.E. from Cape Gaspé is a small fishing bank, with 15 fathoms over it, around which there is, at a short distance, a depth of 55 and 60 fathoms.

GASPE' BAY. The entrance of Gaspé Bay is formed by Cape Gaspé and Point Peter. In this bay, at the distance of 11 miles N.N.W. from the entrance, within a point on the southern side, near its head, there is an excellent anchorage in from 9 to 12 fathoms water, sheltered from all winds. Here the river divides, one branch running N.W. by N. the other, or S.W. branch, west, and south-westerly. There is also good anchorage with westerly winds off Louisas Cove, on the western side of the bay, at about 6 miles N.W. by W. from Cape Gaspé, in 9 or 10 fathoms. Throughout the bay there is deep water, nearly 50 to 40 fathoms in the middle, and 20 very near the shore on the eastern side. On the western side it shoalens more gradually towards the coast. The tide flows until 3 o'clock, on the full and change.

DOUGLAS TOWN is at the entrance of the River St. John, on the S.W. side of the bay. On the opposite shore of the same river is the side of the town of Haldimand.

From Point Peter, off which there is a little islet called Hat Island. The bearing and distance to Bonaventure Island are S. by W. $\frac{1}{4}$ W. 6 miles. Between lies Mal Bay which is nearly 5 miles wide.

MAL BAY. Very near the southern point of Mal Bay is Percee, a remarkable rock, rising about 200 feet out of the water, and of about 1200 feet in length, in which there are three arches, completely wrought by nature ; the central one is sufficiently large to admit a boat under sail to pass through it with ease. From this rock along Mal Bay to Point Peter, there is an excellent beach for fishing, part of which is named La Belle Anse, or Lobster Beach. Close to this place is the house of the late Governor Coxe. Percee Village is situated on the rising ground that forms the southern point of Mal Bay, inhabited principally by fishermen ; in front of it, the beach is convenient for the curing of fish, and off it are some of the best banks for catching them. The Isle of Bonaventure lies at about a mile and a quarter from the shore, opposite to the point ; it is little better than a barren rock, but yet a few persons are hardy enough to winter there, for the sake of retaining possession of the fishing places they have occupied during the summer. There is a passage between the Island and the shore, with 16 fathoms water.

The bearing and distance from Bonaventure to Cape Despair are S.W. by W. 8 miles, and thence to the north end of Miscou Island S.W. $\frac{1}{4}$ S. 26 miles. Nearly S.S.E. 2 miles from Cape Despair, lies the

Leander Rock, over which is a depth of 16 or 18 feet water. As this rock lies in the fairway of ships coming from the northward, with northerly winds, for Chaleur Bay, it should be avoided by giving the Cape a berth of 3 miles. The bearing and distance from Cape Despair to Point Macquereau, or Mackarel Point, are W.S.W. $\frac{1}{4}$ W. about 7 leagues. Between these points lie the two coves called Pabos and Petit Pabos, or Pabou and Little Pabou.

On the western side of the entrance of Pabou Harbour is a small village; and, on the opposite side, on a projecting point, stand the summer habitations of the fishermen. Several streams descend into this harbour, from a numerous chain of small lakes to the north-westward. Next, to the westward of Pabou, is the township and inlet of Port Daniel, where vessels may find convenient shelter during westerly and N.W. winds.

CHALEUR BAY. Point Macquereau and Miscou Island form the entrance of Chaleur Bay, and bear from each other S. $\frac{3}{4}$ E. and N. $\frac{3}{4}$ W. distant $4\frac{1}{2}$ leagues. From the entrance of Chaleur Bay to that of Ristagouche Harbour, which is at its head, the distance, on a west and N.W. by W. course is 22 leagues. The bay is of moderate depth near the shore, on both sides, and has, towards the middle, from 45 to 20 fathoms water. Nouvelle Harbour lies about 14 miles W. by S. from Point Macquereau, where are a church and several houses.

NEW CARLISLE. The town of New Carlisle, the principal town of Chaleur Bay, is situate in Coxe Township, on the north shore. The houses are all built of wood: it has a church, a court-house, and a gaol. The situation is very healthy, and the surrounding lands some of the most fertile in the district. In front is an excellent beach, where the fish are cured and dried.

BONAVENTURE. In the adjoining township of Hamilton, on the west, is the village of Bonaventure. It is entirely dependent on the fishery, and appears to be in an improving condition. From Bonaventure the land turns N.W. by N. towards Cascapedia Bay, along an iron-bound shore, and having several rivulets of fresh water; within this bay is anchorage, in 4, 5, and 6 fathoms water. This is the township of Maria; the head of the Bay is shoal, into which the Great Cascapedia River empties itself.

In Ristagouche Harbour, at the head of Chaleur Bay, there is good anchorage in from 8 to 12 fathoms, land-locked from all winds; but it is so difficult of access, that it should not be attempted without a pilot. The tide flows here on full and change, until 3 o'clock, and its vertical rise is $6\frac{1}{2}$ or 7 feet.

NIPISIGHT. Vessels bound into Chaleur Bay should make for the Island of Miscou, which they can round by the lead, for it shoalens gradually from 20 to 3 fathoms, the latter depth being near Miscou Point. Should it be foggy, which in summer time is frequently the case, it will be advisable to steer from thence towards the northern shore, when you will most probably fall in with Nouvelle Harbour; here stands a church upon some rising ground to the northward of the town or village, which is built along the beach and lies low. Proceeding up the Bay of Chaleur from hence, you will pass round a low point and reach Carlisle; this is somewhat similar to Nouvelle, for the town stands on a low point, and has a church above it; both are near the beach. Having got abreast of Carlisle, if you are bound across for Nipisight Roads, or St. Peters,

then, by keeping on the northern shore as thus directed, you will readily know how far you have proceeded up the bay; and may then haul across, with greater certainty for the land, between Caraquet Point and Cape Idas, which you may approach to by your lead without the least danger; the land on the northern shores of Chaleur Bay, is in a high state of cultivation, when compared with the southern shores, and this, perhaps, is the principal cause why the fogs that obscure it are less heavy on the former than on the latter.

From Cape Idas to Nipisighit Roads the shore is clear of all danger, and when the weather is dark or foggy, you may safely run along the land by your lead, only observing to come no nearer than 5 fathoms water, for in that depth you will be only 3 miles off the land. From abreast of Cape Idas, steer W. by S. about 9 miles; you will have from 5 to 7 fathoms all the way, clear of all danger, and get good anchorage. In opening the bay, you will see Mr. Miller's house and store standing on Carron Point, on the larboard hand, and appearing like an island. There is a large grove of trees to the southward of the house; and the open space between that and Mr. Sutherland's gives it that appearance; steer for the house and store on Carron Point until you get about 4 miles distant from it, then bring Mr. Miller's house on Carron Point to bear S.W. and anchor in from 7 to 5 fathoms, where you may heave your ballast; here a pilot will board you, but should no one come, and you are inclined to enter the river, your vessel having but a small draught of water, then the following directions will prove acceptable, and lead you over both bars; and when you get inside of them, you will find good anchorage to the northward of Carron Point, in 3 and 4 fathoms good ground.

Bring Mr. Miller's house half a handspike's length of Indian Island. This has a round tuft of trees on it, and will lead you in mid-channel clear of all danger; when you arrive abreast of Carter's Point, you should open the upper part of Lathwood House; steer in that direction close to the beach, until you open the beach of Carron Point with Mr. Miller's house, then run a little further up and anchor in 12 or 14 feet water, sandy ground. From Carron Point to Munro's Wharf, there are three bars, with not more than 6 feet over them, but there are places between them, with 16, 15, and 14 feet, where a number of vessels load. The Tatigouche, or Little River, is only navigable by canoes; the Middle River is deep, but bars run across the channel in many places. The banks on each side, from the village to Carron Point, dry at low water.

TIDES. It flows full and change at 3 o'clock, and the water rises on the inner bar 8 feet, on the outer bar 5 feet, and in harbour 8 feet, with regular springs, but it is much influenced by the winds which prevail in the Gulf of St. Lawrence; in summer time no vessel should load down to more than 13 feet, and then the bar should be attempted with the first of the springs. From abreast of the north point of Miscou Island to the south point of Shippigan Island, the distance is 19 miles, and the course is nearly S.W. by S. From the south point of Shippigan to Tracadie, the course and distance are S.W. $\frac{1}{2}$ S. $\frac{1}{4}$ leagues. From Tracadie to Point Esquiminac, or Escuminac, on the south side of the entrance of Miramichi Bay, the course is S. by W. $\frac{1}{2}$ W. distance 9 leagues.

MIRAMICHI BAY. This is a spacious bay, having at its entrance several islands. The northern shore is fronted by some small sand islands, having channels between them and the main, into which boats

may enter; behind these is an Indian Village, called Negowack, but the chief passage into the harbour is between Waltham, or Portage Island, and Fox Island: to enter this, you must borrow towards the southern point of Escuminac, and pass to the southward of a long narrow shoal which stretches in front of Fox's Island, and forms the channel of $1\frac{1}{4}$ mile wide, with 4 and 5 fathoms water in it; having advanced to the northward of Fox Island, you must turn westerly, and pass between the southern point of Waltham Island and the northern point of Fox Island; on your starboard hand lie 3 black buoys, which make the edge of the Horseshoe Sand; there is also a red buoy on the larboard side of the western part of the Bay de Vin Island. Through this part of the Channel you will have $3\frac{1}{2}$ fathoms, and having arrived abreast of the Red Buoy de Vin, you may steer W.N.W. for Oak Point, in 3, $3\frac{1}{2}$, and 4 fathoms; here the greatest care must be observed, in order to take the passage between Sheldrake Island and the Sandy Spit which runs off Point Cheval; run very near the N.E. point of that island, steer south-westerly for Nappan Bay, and round the south part of Sheldrake Island, you will then see the old custom-house situated upon the northern shore; from whence, by keeping mid-channel, and following the sinuosities of the river, you will safely pass Middle Island, and have 7 and 6 fathoms without any danger, until you reach the town of Newcastle. Here the water lessens to 3 fathoms; a-head you will perceive Beaubac, or Frazier's Island, dividing the channel into two passages, that to the south-eastward is the better one, and runs into the S.W. branch of the river, that to the northward leads into the N.W. branch; both these have their rise a considerable distance up the country. The custom-house stands on the southern shore, about 2 miles beyond the Middle Island: there are several places of good anchorage about this harbour, but the navigation is in general so intricate that a pilot will always be necessary, and he will point out the best places for riding. Spring tides rise 5 and 6 feet, and the buoys are frequently shifted.

There is good anchorage with off-shore winds in the Outer Bay, but you must not go into less than 7 fathoms water. The pilots' houses are 4 or 5 miles to the westward of Escuminac Point, and pilots for this place are sometimes obtained from the Gut of Canso. From the northern part of Miscou Island to Escuminac Point, the soundings are regular, and in thick weather the shore may be approached by the lead to the depth of 12 or 10 fathoms. In passing Escuminac Point, you must give it a good berth, for a sandy spit runs off it a full league.

From Escuminac Point to the entrance of RICHIBUCTO HARBOUR, the course and distance are S. by W. $\frac{1}{2}$ W. 7 leagues. From Richibucto Harbour to the entrance of BUCTUSH, S. $\frac{3}{4}$ W. 19 miles. From Buctush to COCAGNE HARBOUR, S. $\frac{1}{2}$ E. 5 miles. From Cocagne to CHEDIAC HARBOUR, the distance is $2\frac{1}{2}$ leagues. From Chediac to CAPE TORMENTIN, the coast trends S.E. by E. $\frac{1}{2}$ E. 10 leagues. The harbours here mentioned are not of sufficient depth to admit large ships for lading. At the distance of 2 miles E.S.E. from Cape Tormentin, there is a shoal, having over its shoalest part a depth of only 6 feet. Its shape resembles a fan; small vessels pass within it. The outer part, on which there is a depth of 20 feet, lies 3 miles from the point. Within Cape Tormentin is the isthmus and boundary between New Brunswick and Nova Scotia; the narrowest part of which, from the Bay Verte to Cumberland Basin, at the head of Chignecto Bay, is only 15 miles in breadth.

THE NORTHERN COASTS OF NOVA SCOTIA,

&c. &c.

THE general features of the Northern Coast of Nova Scotia are pleasing : the land low and even, or slightly broken by agreeable inequalities. The few harbours are of a very limited capacity ; the soil of the country is fertile, and the woods abound with beech, oak, elm, birch, maple, ash, pine, spruce, larch, juniper, hemlock, and fir. In the Strait of Northumberland, to an extent, from end to end, of not less than 100 miles, the bottom in many places is nearly level, and varies in its depth only from 20 to 10 fathoms : being, generally, a stiff clay, and the ground holding well. Between Cocagne, on the west, and the high rock called the Barn, on the east, the shore is in general bound with red cliffs and beaches under them ; and the inland which lies between Tatmagouche and the basin of Cobequid, appears remarkably high to vessels in the offing. Having rounded Cape Tormentin, either inside or outside of the 6 feet ledge which lies off it, you will open to the westward the Bay Verte.

THE BAY VERTE is wide at its entrance, and narrows as you advance. The shores are lined with flats, on which the water becomes shallow, but mid-channel the anchorages are good ; here vessels of considerable burthen may take in their cargoes of timber. On the northern side of the Bay, and near its head, is the small River of Gaspereau ; on the southern shore of which stands Fort Monkton, and on the southern part of the Bay is another small rivulet, called the River Tidnish. They are both shallow for shipping to enter.

RIVER PHILIP. To the southward of Cape Tormentin, at the distance of $4\frac{1}{2}$ leagues, is the entrance to the River Philip, a bar harbour, having only 10 feet at the entrance. In advancing towards this place, when in the depth of 5 fathoms, another harbour will be seen on the eastern or larboard side, which is called Pogwash. In the latter, ships drawing 17 feet load with timber. This harbour is safe ; but the entrance is so narrow as to require a pilot. Ships commonly anchor outside in 5 fathoms, at 3 miles distance from shore, with the entrance bearing to the S.E. E.N.E. $\frac{1}{2}$ E. about 8 miles from the entrance to the Bay of Pogwash, is the Cliff Cape ; and from Cape Tormentin to Cliff Cape, the bearing and distance are S. by E. $\frac{3}{4}$ E. 16 miles. From Cliff Cape to Shoal Point S.E. 3 miles ; and from Shoal Point to Cape John S.E. by E. 11 miles. Between the two latter, lie the harbours of Ramsheg and Tatmagouche, which are good and well sheltered, but each requires a pilot.

RAMSHEG HARBOUR. Off the Northern or Shoal Point is Fox Island, the flats from which extend so far from shore, at the entrance of the harbour, as to leave but a narrow channel, through which at all times, excepting at slack water, the tide runs with great velocity, and renders

the navigation into it very unsafe, although the depth up to the anchorage is sufficient for a frigate ; there being, in mid-channel, $3\frac{1}{2}$ fathoms at low water. In sailing in steer south-westerly towards Gravois Cliff, giving Shoal Point a berth of a mile, until the beach to the N.W. of Gravois Cliff bears S.W. by W.

TATMAGOUCHE is $6\frac{1}{2}$ miles to the westward of Fox Island, and the channel on the western side of Amet Isle is quite clear ; but, in sailing in from the eastward, between Cape John and the Isle, you should keep nearest to the cape, as a ledge extends from the isle to a considerable distance.

Amet is a low island, without trees, and it will be most prudent to keep at least three-quarters of a mile from it. The best anchorage for ships is in Harbour or River John, on the east side, in 4 or 5 fathoms, muddy bottom. Small vessels may run up to Tatmagouche, and anchor off the town in 10 or 12 feet at low water. Here the tide rises 5 feet, on full and change, and flows till 7 o'clock.

In coming from the eastward, when between Amet Island and Cape John, your course toward River John will be W. by S. In passing between the island and cape, you will have $4\frac{1}{2}$ fathoms, until you open the River John, on the larboard side. You will then have 7, 8, and 9 fathoms ; and, if bound for this river, or for Tatmagouche, may obtain a pilot, by making the usual signal. There is anchorage at 2 miles from shore.

In Ramsheg, Tatmagouche, and John Harbours, ships of 15 feet draught, load timber.

The *Ranger*, in 1831, anchored off Cape John in $9\frac{1}{2}$ fathoms, with Amet Island W. by S. 3 to 4 miles. She passed over a ledge of rocky bottom, having over it $2\frac{1}{2}$ to 5 fathoms, at about 2 miles to the eastward of the island, and on which lobsters abounded.

On any part of this coast you may anchor in the summer season. It is high water in the offing at 10 o'clock, and the rise is from 6 to 7 feet. The stream of flood sets to the N.W. as far as Cape Tormentin, expending its strength in the Bay Verte ; but from Miramichi and Cape North (Prince Edward Island,) the flood sets to the southward, about 2 knots an hour, (till 9 o'clock,) to Cape Tormentin, whence it appears to run toward Hillsboro' Bay. The time of high water off Cape Egmont, full and change, is 10 h. The stream runs 2 knots in the hour. Vertical rise, 4 feet : the flood sets to the southward. The tides meet at Cape Tormentin, off which the dangerous ledge, above mentioned, extends to the S.E. and over which the sea generally breaks.

CARIBOU HARBOUR. From Cape John to Caribou Point the course and distance are E.S.E. 6 leagues. Here the water gradually shoalens to the shore, from the depth of 8 or 9 fathoms, at 2 miles off. To strangers it may be dangerous to approach Caribou Harbour, as it has frequently been mistaken for Pictou, which lies to the south-westward, and some have run on shore before the error has been discovered. For it is to be observed that, ships are seen riding, not in the entrance of the harbour, but within a sand-bank, stretching from side to side, with not more than 3 or 4 feet over it, and which appears like a good channel. Small vessels load with timber here.

Caribou may be known from Pictou by observing that the hollow land over it appears like a deep inlet ; but the high lands of Pictou seem to fold over each other, and blind the entrance. The ledges about

Caribou extend more than a mile from shore, and some of them are dry at low water.

Nearly in mid-channel, to the northward of Caribou Point, is a rocky shoal of 10 feet, lying as shown on the chart. It is a quarter of a mile in circumference, and around it the depths are 4, 5, and 6 fathoms. The tide, both ebb and flood, sets rapidly over it.

PICTOU.

Pictou Harbour is the principal port of the north coast of Nova Scotia. It has a bar at its mouth, of 15 feet, inside of which is a capacious and beautiful basin, with 5, 6, and 9 fathoms, muddy bottom. The town is situated at about 3 miles from the entrance, and many houses are built of stone. It contains an Episcopal, a Roman catholic, and two Presbyterian chapels. There are, also, the academy, grammar school, courthouse, and a public library. The population in 1828 was nearly 1500 souls, and it has since very rapidly increased: it cannot now be less than between 2500 and 3000. Pictou has been declared a *free warehousing port*, and its trade is very considerable in lumber, coal, and the fishery. Coasters from all parts of the Gulf of St. Lawrence resort to Pictou, and its exports have amounted to £100,000 in a single year. One hundred vessels have been loaded here with timber for Great Britain, and its exports to the West Indies were not less extensive and important.—*Bouchette*, Vol. II. page 19.

Within the bar and the beach the water deepens to 5, 6, and 7 fathoms, muddy bottom. This depth continues up to the town, opposite to which a mud flat extends outward so far as to leave the channel midway between the two shores. Above the town the river divides into three branches, as shown in the chart; of these, the eastern one is winding, but navigable to vessels drawing 15 feet, about 4 miles upward, at which distance the river is impeded by a bar, although above it the water increases. At 9 miles above the town of Pictou are the well known coal-pits, the produce of which is brought down to the bar in large flat boats. The Middle and West Rivers are navigable upward to a considerable distance.

The town of Walmsly, on the north side of this harbour, is the residence of the principal merchants who load timber in these parts.

PICTOU ISLAND, which lies off the entrances of Pictou and Merigomish, is cultivated, and contains about 3000 acres. Fine quarries of free-stone have been opened here, and strong traces of coal are visible in several places about the cliffs. From the east end a spit of rocks extends about a mile; and at the E.N.E. from it, one league and a half, is a shoal of 21 feet. Between the island and Merigomish the bottom is muddy, and the depth from 11 to 7 fathoms.

H.M. sloop *Ranger*, in passing between Pictou Island and Caribou Point, 18th of August, 1831, while in stays, struck on a sunken rock, the circumference of which, on examination, was found to be 400 yards, and the tide set over it at the rate of $2\frac{1}{2}$ miles an hour, the flood setting to the N.N.W. making high water, on the full and change, at 9 h. 30 m. The position of the rock renders it extremely dangerous to ships leaving Pictou Harbour for the westward, as it lies immediately in the fairway. The channel to the westward of the shoal is generally adopted, in which there is from $3\frac{1}{2}$ to 4 fathoms of water, with irregular soundings.

The channel between Pictou Island and Caribou was shortly after sounded

by *Mr. Dunsterville*, the master of the *Ranger*, who found that the sunken rock, lying at about one-third of the channel across from the island, had about 12 feet over it, with the west end of Pictou island bearing E. $\frac{1}{4}$ S. At about two ships' length of it, eastward and westward, are from 4 to 5 fathoms, and between the rock and Pictou Island, in the centre, were $6\frac{1}{2}$ fathoms at low water; but westward of the rock, from $3\frac{1}{2}$ to $4\frac{1}{2}$ fathoms, hard ground: and, from the irregularity of the soundings generally, it is recommended that no vessel of more than 16 feet should ever attempt this passage.

The long mark to clear the shoal to the westward is a high hill, inland, (the westernmost in sight,) on with the highest part of the land at the south side of the entrance of the harbour, bearing about S. by W. $\frac{3}{4}$ W.: and the mark to go over the rock is the top of the above-mentioned hill on with the rise of the northern point of the entrance to the harbour of Pictou, which has, or had, a clump of trees upon it.

The *Harbour of Pictou* is capable of containing ships of any burthen. The mark for running over the Bar, and clearing a spit of gravel, that extends from the northern point of the entrance of the bay that forms the harbour, is a stone on the south point of the town, just within the spit of low gravelly beach on the southern side of the entrance into the harbour. The *Ranger* turned in, with the stone from end to end of the beach, and had from 3 to $4\frac{1}{4}$ fathoms. The beach to the northward of the narrows is very bold; and as you approach the town, in beating up, do not approach the southern shore into less than 4 fathoms in a large ship, as a shoal bank extends nearly one-third of the channel across.

With a fair wind you borrow on the north shore, where the water is the deepest, carrying from 6 to 8 fathoms, muddy bottom, and anchoring off a stake, near the south end of the town, in 7 fathoms. In fine settled weather here are land and sea breezes. The tide runs at the rate of two knots. High water on the full and change at 9h. rise 6 to 7 feet. Every article of provision was found very cheap: butter, 7d. to 8d. the lb.; sheep, 15s.; eggs, 5d. the dozen. Fish very scarce, but lobsters in abundance.

Off *Pictou Island* to the southward, there is good anchorage on muddy bottom, in from 10 to 12 fathoms.

MERIGOMISH, which is an excellent bar-harbour, lies 7 miles to the E.S.E. of the entrance of Pictou: the merchants of which place have ponds here, for the reception of timber, with which a number of ships are annually laden.

To sail in for this place, bring the east end of Pictou Island nearly north, and keep it so until off the harbour's mouth, where you may either obtain a pilot, or anchor in 4 fathoms. A stranger should not venture to enter the harbours without a pilot, as a ledge stretches off from either side. There is a depth of 14 feet on the bar at low water, and the vertical rise of tide is about 8 feet. The depth within is from 4 to 7 fathoms, soft mud.

There is no harbour between *Merigomish* and *Cape St. George*; but the coast is clear, high, and bold, and vessels may sail along it in safety, at the distance of a mile. As a place of refuge for small vessels in distress, there is a new pier on the coast, at 7 leagues to the eastward of Pictou, and at the indent formed by the rock called the BARN. There is good anchorage under *Cape St. George*, in from 10 to 7 fathoms, sheltered from westerly winds.

ANTIGONISH. The entrance of the Harbour of ANTIGONISH lies 10 miles to the S. by W. from Cape St. George. Here small vessels load timber and gypsum, or plaster, of which there is abundance in the neighbourhood; but the harbour is so shoal, that even these complete their cargoes without the bay, although the anchorage is not safe. The rivers which fall into this harbour run through many miles of fine land, and the population is considerable.

At POMKET ISLAND, 6 miles eastward from Antigonish, ships of any size may load in safety. In sailing in, when from the northward, leave the island on the starboard side, keeping close to a rock, which appears 5 or 6 feet above water. This rock is steep-to, and lies off the east end of the island. Without it, at the distance of three-quarters of a mile, lie several sunken ledges, which are dangerous. After passing the rock, a bay will open on the starboard side, which you stand into, till you are shut in with the island, where there is anchorage in $3\frac{1}{2}$ fathoms of water, at about half a mile from the island.

AUBUSHEE, which lies between Cape Jack and the Gut of Canso, is a small harbour, occupied by an industrious and thriving people. Here a number of small vessels have been built, carrying from 15 to 50 tons. A rocky ledge extends without the harbour, in a north-westerly direction, as shown on the chart.

Between Cape St. George and the Gut of Canso, in fine weather, the winds draw from the southward and south-eastward; and from the cape, which is high, to Pictou, from the S.W.; but, in general, near the cape, the winds are very variable. Off the cape, at about a quarter of a mile to the N.E. the pilots say that there is a ledge of sunken rocks, which extends to the northward.

Westward of Cape St. George, and hence to Pictou Island, sheep and other stock are the same as at Pictou. Water cannot always be procured, as the springs dry up occasionally.

THE GUT OF CANSO TO INHABITANT BAY.

The GUT of CANSO forms the best passage for ships bound to and from Prince Edward Island and other places in the Gulf of St. Lawrence. It is shorter, and has the advantage of anchorage in case of contrary winds or bad weather. Its length is about 4 leagues, and breadth more than three-quarters of a mile. The east side is low, with beaches, but the west shore is mostly high and rocky; and that part of it called *Cape Porcupine* is remarkably so. The deepest water is on the western shore; but both shores are bold-to, and sound, excepting a *sunken rock*, which lies near a cable's length from the eastern shore, and about midway between the southern entrance of the Gut and Ship Harbour, and two other rocks under-mentioned. *Mill Creek*, *Gypsum* or *Plaster Cove*, *Venus Creek*, *Ship Harbour*, *Holland Cove*, or *Pilot Harbour*, and *Eddy Cove*, afford excellent anchorage, in a moderate depth, out of the stream of the tide, which generally sets in from the southward, but is very

irregular, being influenced by the winds. After strong north-west winds, which happen daily during the fall of the year, the water in the Gulf of St. Lawrence is rendered low, which causes the current to run northward through the Gut, at the rate of 4 or 5 knots, and the contrary happens after southerly winds.

The time of high water in the Gut is 8 h. 30 m.; but the tide in the middle runs strongly up and down, at least an hour after high and low water: again, in or after strong winds the currents appear as if not influenced by the tide, but run sometimes at the rate of 3 to 4 knots.

CAPE ST. GEORGE, which is a remarkable promontory, lies at the distance of $10\frac{1}{2}$ leagues to the eastward of Pictou Harbour; and a course of 6 leagues, thence to the south-eastward, will lead to the entrance of the Gut, whence you may run along the Breton-shore. It is to be observed, that there is a ledge of rocks, in the offing, between Aubushee and the Gut, already noticed; some of these are nearly dry at low water, and nearly in the direct course for the Gut; they must, of course, be carefully avoided.

Opposite Mill Creek, at the upper end of the Gut, on the Nova-Scotia side, you may stop tide, or lie wind-bound, if it does not overblow. Keep the creek open, and come to anchor in 8 or 10 fathoms, within a cable's length of the steep rocks, on the south side of the creek. The best water is with the creek's mouth open. It will be necessary to carry a hawser on shore to the rocks, to steady the ship, as the tide here runs in eddies. You may obtain fresh water from the creek at low water.

Upon entering the Gut, there will be seen on the larboard hand, a red house, on a point called *Belle Ashe's Point*, off which, at nearly a cable's length from shore, there is a sunken rock, which may be readily distinguished by the eddy of the tide. Within this point, on the S.E. is *Gypsum* or *Plaster Cove*, where shipping frequently anchor.

When abreast of Gypsum or Plaster Cove, the remarkable headland on the western side, named *Cape Porcupine*, will bear nearly S.W. To sail into the cove, keep nearly in the middle; and, when in 10 fathoms let go your anchor. You will find sufficient room for swinging round, in 7 fathoms.

SHIP HARBOUR, which lies half way down the Gut, on the eastern side, is a good harbour for merchant-shipping. It is, however, more particularly useful to those sailing northward, being a good outlet. It is a very proper place for ships of 16 feet draught. If bound in, from the *southward*, give the starboard side a berth of a cable's length, (it being flat,) and run in until you shut the north entrance of the Gut, and come to anchor in 4 or 5 fathoms, soft bottom; where you may wood on the Breton side, and water on the opposite shore, at Venus' Creek; the larboard side of this harbour is bolder than the starboard side, and deepest water. Without the harbour, one-third from the Breton side, you may anchor in 9, 10, to 13 fathoms, loose ground, in the strength of the tide. The *Ranger* anchored in 10 fathoms, with the church on the hill bearing E. by S. and the south point of the harbour south, about one mile off shore.

SHIPS BOUND THROUGH THE GUT, from the *northward*, may proceed through it with safety, by keeping nearly in the mid-channel, there being no danger until they arrive off the south point called *Eddy Point*; but, from this point extends a long spit of sand, with large round stones, which must be left on the starboard side, at the distance of half a mile

from what may be seen above water. The race of the tide will serve to guide you from it.

Having passed the spit of Eddy Point, you may steer to the S.S.E. until abreast of an island which appears covered with green spruce-trees, having red bark. Hence you proceed to sea, according to the Charts.

Be cautious of running in the direction of a dangerous steep rock, called the *Cerberus Rock*, with only 10 feet of water over it, and on which the sea breaks with a wind. This rock lies with Verte or Green Island in a line with Cape Hoagais, or Iron Cape, on the Isle of Madame, at the distance of about $4\frac{1}{2}$ miles from that island.

At the entrance of the Gut, within a mile of Eddy Point, there is a middle ground of 7 to 12 fathoms, on which ships may stop a tide in moderate weather. To the westward of this ground there is a depth of 18 fathoms, and to the eastward of it 20 to 25 fathoms. With the wind inclining from the southward, steer in nearly west, and keep the lead going, until you shoalen to 11 fathoms, when you may let go your anchor.

Gypsum or Plaster Cove, is so called from its valuable quarry of gypsum, which appears to be exhaustless. The anchorage at the mouth of this cove has from 10 to 14 fathoms; bottom of soft mud. Cape Porcupine, opposite to this cove, is 562 feet in height, and this is the narrowest part of the strait. On the banks of the Gut, in general, the hills rise in easy acclivities, which present settlements, on the whole range of the shore.

INHABITANT BAY, &c.

Those who wish to anchor in Inhabitant Bay or Harbour, may bring the farm to bear that is opposite to Bear Head* open, Bear Head bearing W.S.W. This mark will lead you clear, and to the southward, of the Long Ledge,† and in the mid-channel between it and the steep rocks on the east or opposite shore: at the same time, take your soundings from the Long Ledge or north shore, all the way till you arrive at Flat Point; then keep in mid channel between Flat Point and the island opposite, from the N.E. side of which runs off a spit or ledge of rocks, at the distance of a cable and a half's length; then port your helm, and run under Island Point, and come-to in 5 fathoms, muddy bottom. Up the River Trent are plenty of salmon, in the season, and there you may find wood and water.

N.B. The leading mark to clear the steep rocks of Steep Point is, to bring the peninsula in a line over the point of Turbalton Head, bearing S. or S. $\frac{1}{2}$ E. until you open the island to the northward of Island Point; then haul up for the outer harbour, and come-to in 10 or 12 fathoms, muddy bottom.

Those who are bound up the Gut of Canso, and taken short by a N. or N.W. wind, at the south end of the Gut, and who are desirous of good and safe anchorage in 10 to 12 fathoms of water, may come-to on the north side of Bear Island; but, should it blow hard, to a gale of wind, down the Gut, this anchorage is not altogether so secure as a careful

* Bear Head is the south-easternmost part of the Gut.
 † See the Charts of Inhabitant Bay and Harbour, and of Breton Island, published by the proprietor of the present work.

master or pilot would wish. You must then leave the road of Bear Island, and sail round the south end of Bear Point, giving a berth to the spit that runs off it, of 3 cables' length, and haul round to the N.E. into Sea-Coal Bay, and come to anchor in 4, 5, or 6 fathoms, sandy and muddy bottom.

Marks for anchoring, viz. bring Bear Head in a line over Flat Head, bearing W.S.W. or W. by S. and Carriton Cliffs to bear N. by E. or N. in 5, or 6 fathoms, and you will have a good berth, sheltered from the W.N.W. and N. winds. Here is sufficient room to moor ten or twelve sail of any ships of war, of the sixth to the third rate.

Ships coming down the Gut of Canso, which may have reached past Eddy Point, or as far as Cape Argos, and caught with a S.E. to a S.S.W. wind, and cannot hold their own by beating to windward, may bear up and come to anchor in Turbalton Bay, under Turbalton Head, where they may ride safely in from 5, 6, or 7 fathoms of water, muddy bottom. The marks for anchoring in Turbalton Bay are, to bring the peninsula point in a line over Turbalton Head, bearing S. or S. $\frac{1}{2}$ W. ; or a point of land inland, a little up in the country, from Cape Argos shore, with pine-trees on it, open to the eastward of the Red Head ; or the said point of land with pine-trees on it, over the pitch or point of Turbalton Head ; you are then sheltered by the rocks or spit that runs from Turbalton Head, in 4 to 5 and 6 fathoms of water, and will ride very safely on good holding ground. But, should the wind shift to the S.W. or N.W. you must take up your anchor, and beat out of the bay into Chedabucto Bay, and proceed on your passage to the southward. Should the wind over-blow, at S.W. so as to prevent your beating to windward into Chedabucto Bay, you may come to an anchor in Eddy Cove, bringing the low part of Eddy Point to bear S.S.E. or S. by E. in 5, 6, or 7 fathoms of water, taking care to give the ship sufficient cable, lest you drive off the bank into deep water, from 15 to 20 fathoms.

TIDES ON THE SOUTH SIDE OF THE GULF OF ST. LAWRENCE.

THE tide rushes with great rapidity through the Gut of Canso : and, in the narrowest part of the Gut, or at Cape Porcupine, it seldom runs at a slower rate than 4 or 5 miles in an hour. Here it flows, on the full and change, at $9\frac{1}{4}$ h.

Along shore, past Aubushee and Antigonish, it sets toward Cape St. George ; and, sounding that cape, proceeds thence in a north-westerly direction. On the south shore of Northumberland Strait, the time of flowing, on the full and change, is from 7 to 8 h. The perpendicular rise is from 3 to 7 or 8 feet.

The tides here are very materially varied by the winds ; and it has been found that, at times, the stream of the Gut of Canso has continued to run one way for many successive days.

PRINCE EDWARD ISLAND.

THIS island is a distinct government, though subordinate to the British commander-in-chief in North-America. It is well settled, and possesses a good soil, fit for all general purposes. The island is exempted from fog, while the surrounding coasts of Nova-Scotia, Breton Island, and New Brunswick, are frequently covered with it. The climate is generally healthy and temperate, and not subject to the sudden changes of weather experienced in England. The winter here sets in about the middle of December, and continues until April; during which period it is colder than in England; generally a steady frost, with frequent snow-falls, but not so severe as to prevent the exertions of the inhabitants in their various employments. The weather is generally serene, and the sky clear. In April, the ice breaks up, the spring opens, the trees blossom, and vegetation is in great forwardness. In May, the face of the country presents a delightful aspect. Vegetation is so exceedingly quick, that, in July, peas, &c. are gathered which were sown in the preceding month. The country is generally level, or in rising slopes, and abounds with springs of fine water, and groves of trees, which produce great quantities of excellent timber, &c. The greater part of the inhabitants are employed in farming and fishing. Charlotte Town, situate between York and Hillsborough Rivers, on the southern side of the island, is the seat of government.

The coast forms numerous harbours, many of which are, however, fit for small vessels only. The principal loading ports are, on the eastern side, CARDIGAN BAY, or the THREE RIVERS, and MURRAY HARBOUR; on the S.E. HILLSBOROUGH BAY and RIVER; BEDEQUE BAY on the southern side; RICHMOND BAY and HOLLAND HARBOUR on the north.

CARDIGAN BAY, or the Three Rivers, lies between Broughton Island and Panmure Island; it is the common entrance to three rivers; namely Cardigan River, Brudenell River, and Montague River. In the former there are from 7 to 3 fathoms of water, and in the others from 4 to 2 fathoms. GEORGE TOWN stands on a peninsula between the Rivers Brudenell and Cardigan. In these places many large ships have loaded timber. There is anchorage without, in Cardigan Bay, in from 10 to 15 fathoms, where a pilot may be obtained.

MURRAY HARBOUR lies close to the north-westward of Bear Cape; and the entrance is narrow and shoal, difficult of access, and not having more than 12 feet of water. But small ships have frequently loaded here. Vessels from the eastward, and bound to THREE RIVERS or MURRAY HARBOUR, must avoid coming too near the east point, from which a ridge of sunken rocks stretches off about a mile, the ground of the eastern coast is clear between the east point and the Wood Islands, and there is a depth of 3 fathoms of water all the way, near the shore, and good anchorage.

HILLSBOROUGH BAY is the finest bay in the island, and the River Hillsborough is a fine navigable river; but timber here is not plentiful. Before Charlotte Town, in this river, there is good anchorage in from 6 to 9 fathoms. Vessels from the eastward, when bound to Hillsborough Bay, and passing Pictou Island, must cautiously avoid the rock of 10 feet which lies to the northward of Caribou Point, and 5 miles N.W. $\frac{3}{4}$ N. from the west end of the island: at the same time, also, they must equally avoid the INDIAN ROCKS, which lie off the shore of Prince Edward Island: the latter are covered at high water, and are very dangerous in the night.

At about three miles to the N.W. of the Indian Rocks is a shoal on which H. M. sloop *Rifleman* grounded, 23rd of June, 1826. The bearings taken at anchor in 7 fathoms, at $2\frac{1}{2}$ or 3 cables' length S.S.W. from the spot on which the vessel grounded, were, Point Prim N.N.W. $\frac{1}{2}$ W.; South Woody Island E.S.E. $\frac{1}{2}$ E.; a point (supposed Point Jenyns,) N. $\frac{1}{2}$ W.; a merchant brig on shore on the Indian Rocks, S.E. The least water found upon the shoal was 8 feet, at about half a cable's length to the northward of where the *Rifleman* grounded. It appears to be a rocky shoal, of considerable extent, two miles from the nearest shore; that of Belle Creek.

PICTOU TO CHARLOTTE TOWN. From the harbour of Pictou, when bound to Charlotte Town, H. M. sloop *Ranger* passed between Pictou Island and Caribou Point, and had from $3\frac{1}{2}$ to 4 fathoms, hard bottom, in approaching Point Prim: the point is low, and forms the eastern side of the entrance of Hillsboro' Bay. Give it a berth of nearly 3 miles before you haul to the northward for Charlotte Town, or for Governor's Island on the N.E. From the S.W. side of Governor's Island, a long spit of hard ground extends 2 miles. The long mark for hauling to the N.N.E. is a tower on the western part of Charlotte Town, open to the westward of the blockhouse tower, on the larboard side of the entrance to the harbour, and on which signals are made to the town, signifying vessels in the offing. In the channel up, the *Ranger* had from 5 to 7 fathoms; and on approaching the blockhouse, 10 to 12 fathoms, clay bottom.

From the starboard point of the entrance extends a sandy spit, the way to clear which is, to run to the northward till the signal-staff on the fort, (which is at the west end of the town,) is on with the church-steeple: you will then have from 8 to 10 fathoms, to the anchorage. On steering for the town keep rather near the larboard shore. The *Ranger* anchored in 10 fathoms, at about 50 fathoms from the town, with the flag-staff at the fort N. by W. $\frac{1}{2}$ W. and the church-steeple N. $\frac{1}{2}$ E. Here it is high water, on the full and change, at 10 h. The rise is about 8 feet.

BEDEQUE BAY, which lies between Cape Egmont and Carleton Point, has good anchoring ground in from 6 to 8 fathoms. The harbour will admit ships of 400 tons, but the channel is narrow, crooked, and requires a pilot. It is the chief port for loading timber: but the water freezes much sooner than at Pictou, or the harbours on the Nova Scotian coast. Between CAPE EGMONT and WEST CAPE, in Halifax or Egmont Bay, there is good anchorage with northerly and easterly winds, in 6 or 8 fathoms.

WEST CAPE. About the West Cape of the Island a hard sand bank, of 10 feet water, extends to the distance of 3 miles from the cape.

There is a swash or channel within it for small vessels, close in shore.

NORTH SIDE OF THE ISLAND. At the east point there is a reef extending two miles from the land, and which should not be approached in the night nearer than to the depth of 17 or 18 fathoms. At a league to the southward of it, and parallel with the shore, is a shoal of 2 fathoms, named *Wright's Bank*. In the passage between it and the land, which is half a league broad, are 6 and 8 fathoms.

All the Inlets on the north side of the island have bars at their entrance, with from $1\frac{1}{2}$ to 3 fathoms over them, and are not to be attempted by strangers without a pilot. Those going through the Strait of Northumberland, if bound to **HOLLAND HARBOUR**, or any port on the north side, must be careful to give the North Cape of the Island a good berth, as the sunken rocks stretch off full 2 miles. All the rest of the coast of the north side of the island is perfectly clear of foul ground; to within a quarter of a mile of the shore, and there is good anchorage as near the shore, in 3 fathoms of water.

The only harbours on the north side of the island, for ships of large burthen, are **HOLLAND HARBOUR** and **RICHMOND BAY**; and off these harbours the sand-banks, which form the bars, run off more than a mile from the shore.

SHIPS from the **EASTWARD**, bound to harbours on the **NORTH SIDE**, if the wind be favourable, should prefer sailing down by the north coast to going through the Strait of Northumberland; not only on account of sea-room, but because the most prevailing winds are from the S.W. They may run down the coast, till they approach Richmond Bay, to within a mile of the shore.

ST. PETER'S is the first harbour on the north side, when coming from the eastward; it is fit for small vessels only. The bar runs out about a quarter of a mile.

The next is **TRACADIE** or **BEDFORD BAY**; this has about 8 or 10 feet of water on the bar, which extends outward half a mile.

RASTICO, or **HARRIS BAY**, is very shallow on the bar, and calculated to admit fishery schooners only. The bar stretches off nearly half a mile.

NEW LONDON, or Grenville Bay, has about 8 or 10 feet of water, but the bar is very difficult. The latter extends off nearly half a mile.

RICHMOND BAY, or **MALPEC**, is a spacious harbour; has about 17 or 18 feet upon the bar. The sands which form the bar extend more than a mile off the harbour. The shoals on each side are generally discernible from the swell on them, and the course in and out is east and west. On a vessel's anchoring off the bar a pilot will come off. There are two entrances into the bay: between them is Fishery Island. The eastern is the only channel by which a vessel of burthen can enter: the western channel being very shallow and intricate. Vessels usually complete their lading at about a mile within Fishery Island, but a considerable current runs there; rafts of timber frequently break adrift in blowing weather; and, on the ebb-tide, are frequently carried to sea, when a great part is lost. The anchorage is good, and vessels lie in perfect safety.

HOLLAND HARBOUR, or **CASCUMPEC**, is the westernmost harbour on the north side. Here the sands form a bar as at Richmond Bay, and run off about a mile and a half. The harbour is easily known

by the sand-hills which extend along the coast. At about half-way between the entrance of Richmond Bay and Holland Harbour, is one sand-hill, near Conway Inlet, much higher than the rest. Holland Bay may be known by its being at the west end of all the range of sand-hills. There is good anchorage close to the bar in from 5 to 8 fathoms.

There is a depth of 18 feet of water on the bar, and it is not difficult for a stranger to run in with a ship not drawing more than 12 feet of water. There being two leading-marks, painted white, bearing W. by N. by compass, a vessel of this draft, by keeping the two marks in one, with a leading wind, may run in with perfect safety.

But, as these marks will carry a vessel over the south tail of the northern sand, vessels drawing more than 12 feet should not venture without a pilot. There is a buoy on the end of the south sand; between that and the tail of the north shoal there is 18 feet of water. Vessels entering the port, if drawing more than 12 feet of water, should not bring the marks in one till they are within the bay. The soundings off the harbour are regular, and the ground clear. Ships, on coming to anchor off the bar, will immediately be attended by a pilot.

There is shoaler water between the outer and inner harbour, on which is about 14 feet of water in common tides. Vessels generally load to 13 feet in the inner harbour, and complete their cargoes in the outer one. In the former, they lie alongside a wharf at HILL'S TOWN, in 4 fathoms of water, where they lie without any current, as in a dock. In the outer harbour the spring-tide runs strongly, but the water is smooth, the sea being broken off by the bar.

HOLLAND HARBOUR is the most convenient port in the island for loading timber, at which there is a very large quantity; also a saw-mill, for cutting plank and board.

The CURRENTS around the island are very irregular, frequently running many days along the north coast, from east to west, and at other times from west to east.

The TIDES, also, in the north-side ports, are irregular, excepting spring tide. These sometimes keep flowing for forty-eight hours, and at other times not more than three. In common tides, the water seldom rises more than two feet; in spring-tides, (except in strong winds from the northward and eastward,) not more than five feet.

BRETON ISLAND.

GENERAL DESCRIPTION OF ITS COASTS AND HARBOURS.

THE N.W. coast of Breton Island, from Cape North to Cape Linzee, is, in the inland parts of the country, very high, but in some places it falls down gradually towards the shore. Sailing along on this side of the island, from the northward, you may safely stand in to the distance of two leagues from shore, until you arrive off Justau Corp, or Henry Island, when you may stand within one mile of the shore.

The eastern extremity of Breton Island, which is commonly made by navigators on proceeding from Europe to Nova Scotia, appears on the sea shore, and to some distance up the country, barren and rocky: and the tops of the hills, being much alike, have nothing remarkable to distinguish them. The White Beacon placed upon the East Head and town of Louisbourg serve, however, to point out that part of the island on which they stand. The coast continues rocky on the shore, with a few banks of red earth, which appear less barren.

The N.E. coast of Breton Island, from Cape North to Cape Ensumé, the water is deep, except very near the shore. From Cape Ensumé to Cape Dauphin is high land, but from Cape Dauphin to Scatari Island it becomes rather low; between Port St. Anne and Scatari Island, a vessel may stand in shore to 15, 10, and 5 fathoms in clear weather, the water gradually decreasing in depth.

BLANCHEROTTE, OR WHITE CLIFF, is on the south coast of Breton, and lies in latitude $45^{\circ} 39'$, and longitude $60^{\circ} 20'$. Four miles to the westward of it is a small woody island, distant 2 miles from the shore, off the little harbour called Esprit; without this island, at the distance of a mile and a half on the S.E. is a breaker. The land hence to Isle of Madame, or Richmond, is generally low; it presents several banks of bright red earth, with beaches between them. Albion Cliff, on the south side of Madame, is rocky, remarkably high, and precipitous.

THE GUT OF CANSO is formed by the Island of Breton on one side, and by the land of Nova Scotia on the other: its length is about 5 leagues, and breadth more than three quarters of a mile. The east side is low with beaches, but the west shore is, for the most part, high and rocky. The deepest water is on the western shore, but both shores are bold-to and sound, excepting some sunken rocks, one of which lies near a cable's length from the eastern, and about midway between the southern entrance of the Gut and Ship Harbour; a second is between Ship Harbour and Bear's Head; and a third lies off Bear's Island, about 100 fathoms from the land: the depth of water over these rocks is about

6 or 8 feet. Mill Creek, Gypsum or Plaster Cove, Venus' Creek, Ship Harbour, Holland Cove or Pilot Harbour, and Eddy Cove, afford excellent anchorages with a moderate depth, and out of the stream of the tide, which generally sets in from the southward, but is very irregular, being much influenced by the winds. After strong N.W. winds, which happen daily during the fall of the year, the water in the Gulf of St. Lawrence is rendered low, which causes the current to run northward through the Gut at the rate of 4 or 5 knots, and the contrary happens after southerly winds.

CAPE ST. GEORGE is a remarkable promontory lying at the distance of $10\frac{1}{2}$ leagues to the eastward of Pictou Harbour; a course of 6 leagues, thence to the south-eastward, will lead to the entrance of the Gut, whence you may run along the Breton shore. It is to be observed that there is a ledge of rocks, in the offing, near Aubushee; some of these are nearly dry at low water, and nearly in the direct course for the Gut; they must, of course, be carefully avoided.

Opposite Mill Creek, at the upper end of the Gut, on the Nova Scotia side, you may stop a tide, or lie wind-bound, if it does not over-blow. Keep the creek open, and come to anchor in 8 or 10 fathoms, within a cable's length of the steep rocks, on the south side of the creek. The best water is with the creek's mouth open. It will be necessary to carry a hawser on shore to the rocks, to steady the ship, as the tide here runs in eddies.

Upon entering the Gut, there will be seen on the larboard hand, a red house, on a point called Belle Ashe's Point, off which, at nearly a cable's length from shore, there is a sunken rock, which may be readily distinguished by the eddy of the tide. Within this point, on the S.E. is Gypsum or Plaster Cove, where shipping frequently anchor. When abreast of Gypsum or Plaster Cove, the remarkable headland on the western side, named Cape Porcupine, will bear nearly S.W. To sail into the cove, keep nearly in the middle, and when in 10 fathoms let go your anchor; you will find sufficient room for swinging round in 7 fathoms. Here, off the western side of the cove, is the sunken rock said to have been discovered lately, having only 6 and 8 feet over it, and lying about 60 fathoms off the shore.

SHIP HARBOUR lies half way down the Gut; on the eastern side is a good harbour for merchant shipping; it is however, more particularly useful to those sailing northward, being a good outlet. It is a very proper place for ships of 16 feet draught: in entering from the southward, give the starboard side a berth of a cable's length, which is flat, and run on until you shut the north entrance to the gut, and anchor in 4 or 5 fathoms, soft bottom: here you may wood, and water on the opposite shore, at Venus' Creek; the larboard side of this harbour is bolder-to than the starboard side, and deepest water. Without the harbour, one-third from the Breton side, you may anchor in 9 to 13 fathoms, loose ground, in the strength of the tide.

Ships bound through the Gut, from the northward, may proceed through it with safety, by keeping nearly in the mid-channel, there being no danger until they arrive off the south point, called Eddy Point; but from this point extends a long spit of sand, with large round stones, which must be left on the starboard side, at the distance of half a mile from what may be seen above water; the race of the tide will serve to guide you from it. Having passed the Spit of Eddy Point, you may

steer to the S.S.E. until abreast of an island which appears covered with green spruce trees, having red bark.

Be cautious of a dangerous steep rock, called the Cerberus, with only 10 feet water over it, and on which the sea breaks with a wind. This rock lies with Verte or Green Island in a line with Cape Hoagais, or Iron Cape, on the Isle of Madame, at the distance of about $4\frac{1}{2}$ miles from that island. To clear the Cerberus Rock to the westward, bring Arachat Church open of the west end of Seymour Island; to clear it to the southward, bring Bear Island just to touch Eddy Point; Green Island in a line with Point Hogan, will lead directly upon it.

At the entrance of the Gut, within a mile of Eddy Point, there is a middle ground of 7 to 12 fathoms, on which ships may stop a tide in moderate weather; to the westward of this ground there is a depth of 18 fathoms, and to the eastward of it 20 to 25 fathoms. With the wind inclining from the southward steer in nearly west, and keep the lead going until you shoalen to 11 fathoms, when you may let go your anchor.

INHABITANT HARBOUR is well sheltered, and has good anchorage throughout; when you are sailing in keep near Evans' Island, to avoid Long Ledge, stretching off the northern shore, then run mid-channel; at the same time take your soundings from the Long Ledge, or north shore, all the way till you arrive at Flat Point; then keep in mid-channel between Flat Point and the island opposite, from the N.E. side of which runs off a spit or ledge of rocks, at the distance of a cable and a half's length; then port your helm, and run under Island Point, and come-to in 5 fathoms, muddy bottom. The leading-mark to clear the steep rocks of Steep Point is, to bring the peninsula in a line over the point of Turbalton Head, bearing S. or S. $\frac{1}{2}$ E. until you open the island to the northward of Island Point: then haul up for the outer harbour, and come-to in 10 or 12 fathoms, muddy bottom.

Ships bound up the Gut of Canso, and having passed the dangers off Cape Canso, must be careful to avoid the Cerberus Rock, already described, and round Eddy Point at the distance of at least half a mile, in order to clear the shoal stretching off, which shoal will readily be perceived by the race of the tide it forms. You may stop a tide, in moderate weather, abreast of Eddy Cove, within a mile of the point, in from 7 to 12 fathoms, and thence, by keeping about mid-channel, you may run through the Gut free from danger. When you have got beyond Cape Porcupine, steer N.N.W. about 5 leagues, or until Cape St. George bears W.N.W. distant 7 miles; you will then have passed to the westward of the Houdje Bank of only 2 fathoms water, which lies opposite Jestico, and by adopting a N.N.E. course, you will clear the east point of Prince Edward's Island, and be in a fair direction for the Magdalen Islands. Those who are bound up the Gut of Canso, and taken short by a N. or N.W. wind, at the south end of the Gut, and who are desirous of good and safe anchorage in 10 or 12 fathoms water, may come-to on the north side of Bear Island; but should it blow hard, to a gale of wind, down the Gut, this anchorage is not so secure. You must then leave the road of Bear Island and sail round the south end of Bear Point, giving a berth to the spit that runs off it, of 3 cables' length, then haul round to the N.E. into Sea Coal Bay, and come to anchor in 4, 5, or 6 fathoms, sandy and muddy bottom. There is also a rock under water, said to lie about 100 fathoms to the southward of Bear Island, having

only 6 or 8 feet water over it : it will be necessary to give this point a good berth, for fear of this danger.

Marks for anchoring, viz. bring Bear Head in a line over Flat Head, bearing W.S.W. or W. by S. and Cariton Cliffs to bear N. by E. or N. in 5 or 6 fathoms, you will then have a good berth, sheltered from the W.N.W. and N. winds.

JESTICO, OR PORT HOOD, situate on the western side of Breton Island, is a safe harbour for frigates with any wind ; the anchorage is in from 4 to 5 fathoms, mud and sandy bottom : here you may get both wood and water. The leading mark going in is, Cape Linzee on with the highest sand-hills that are on the N.N.E. side of the beach, bearing N. by E. or N.N.E. ; these kept in a line will lead you clear of Spit-head, in 4 to 6 fathoms. On the opposite shore is a long and broad flat, stretching from the shore three-quarters of a mile, called the Dean, to which come no nearer than in 4 fathoms. From hence the shore runs in nearly a straight N.E. direction to Cape St. Laurent, whence it turns easterly to Cape North. To the southward of Cape North 4 or 5 miles is Ashpee Harbour, where there is a settlement formed for the relief of shipwrecked seamen, and to the southward of that, about 30 miles, is the entrance to St. Anne's Harbour.

ST. ANNE'S HARBOUR, situate on the N.E. side of the island, is a very safe and spacious harbour. It has but a narrow entrance and carries $4\frac{1}{2}$ fathoms at low water, until you join the beach.

DIRECTIONS FOR ST. ANNE'S HARBOUR. After you have passed the Siboux or Hertford Isles, on the east side of the entrance, keep the south shore on board, if the wind be to the S.E. : and as you approach Passage Point, bring Cape Ensumé, or Cape Smoke, which lies to the northward nearly on with Black Point : steer with these marks in one, until you are nearly abreast of Passage Point, off which lies a sunken rock of 6 feet water, and opposite to which begins the spit of St. Anne's Flat, and the narrowest part of the channel. Now keep a small hummock up in the country, nearest to the shelving high land to the westward of it : which hummock is on the middle land from the water-side, in a line over the fishing-hut, or fishing-stage erected on the beach : this will lead in the best water, until you enter the elbow part of the beach. When advanced thus far in, keep the opening open (about the size of two gun-ports), which makes its appearance up to the S.W. arm. This opening looks like two steep cliffs, with the sky appearing between them, and will lead you between the beach and the south shore, in mid-channel, through 9 and 10 fathoms, and past the beach-point, off which a spit stretches to the S.W. about 2 cables' length. Having passed this spit, come to anchor in either side of the harbour in from 5 to 10 fathoms, muddy bottom, and sheltered from all winds.

LA BRAS D'OR. There are two entrances to this lake or inlet, the Northern, or Great Entrance, and the Southern or Little Entrance ; they are thus described by Mr Thomas Kelly, the only pilot of the place ; but the names of the places he refers to are generally unknown, and cannot be applied to any publication extant.

Sailing Directions for the Grand Bras d'Or Entrance. Ships from the southward must give Point le Conie a berth of about 2 miles, and steer from thence for the eastern end of the inside of Bird Island, until you bring M'Kenzie Point and Carey's Beach in one. Make for the Black

Rock Point until you have Messrs. Duffus's Store just open of Point Noir; then steer for Gooseberry Beach, until you bring a clearing on Duncan's Head over M'Kenzie's Point. It is to be observed, that ships coming in with the tide of flood must keep Point Noir well aboard, to avoid the eddy and whirlpools on the north side of the Gut, which has various settings. You must then steer for Point Jane, to keep the fair stream of tide as far as the Round Cove, where there is fair anchorage in 7 or 8 fathoms, good holding ground. When abreast of the Round Cove, steer over for Duncan's Head; and when abreast of this Head, steer for Long Beach, until you bring a tall pine-tree on the Upper Seal Island, in one with a notch or valley in the mountain. You will then make for the point of the Upper Seal Island, which will carry you clear of the shoals on the islands, as also the South Shoal, or Middle Ground. The marks for this shoal are a white rock in the bank for the eastern end, and a white birch-tree for the western end. When abreast of the western end of this shoal you may keep the middle, there being no difficulty until you come to Red Head. If bound to Kent Harbour, after doubling the Red Head, steer for a remarkable red bank covered with small bushes, until you bring Mr. Duffus's house entirely open of the beach which is on the island: there is a depth of from 4 to 5 fathoms in this harbour, and good holding ground.

Directions for that arm of the Lake, called St. Patrick's Channel and up to Whookamagh. From Red Head you will steer well over for the Duke of Kent's Island, to avoid a mud-shoal which runs off from M'Kay's Point. When abreast of the western end of the Duke of Kent's Island, sail for Wassaback Head until abreast of Stoney Island. Then steer for Cranberry Head so as to clear a shoal lying off from Wassaback Head; when abreast of Cranberry Point, sheer well over for the Bell Rock, to avoid a shoal lying on the south side of the channel; when abreast of the Bell Rock, steer for Green Beach, observing to keep Baddock River shut in until you are well up with Green Beach. You will then steer for a beach on the south shore, until you cross the opening of the Narrows; you may then sail through the Narrows, keeping the middle until you come to the western end, when you must haul round the southern shore (beach), keeping the south shore until abreast of the Plaster Cliffs; you are then clear of all, and in the Whookamagh Lake.

The first anchorage is the Round Cove, where you may ride in 7 or 8 fathoms. You may anchor in 5 or 6 fathoms, in the centre of the harbour, on a middle ground: the marks for which are, to bring the Table Island a handspike's length open of Black Rock Point, and Point Jane bearing N.W. On the north side of the harbour there is good anchorage as far up as the Lower Seal Islands, and to the eastward of the Upper Seal Islands, in 5 fathoms, and to the westward of the same islands in 7 fathoms. There is no other place of anchorage from this to the big harbour, where you may ride in 7 or 8 fathoms, from thence you may anchor at any time.

The first quarter flood sets from the northward, directly over the shoal last quarter W.S.W. being directly through the channel, and meeting with the tide coming over the shoal, sets toward the Black Point, which occasions it to shoot across the Gut, making a number of whirlpools and strong eddies on each side of the channel, which slacks two or three times during the tide. The first quarter ebb sets over the shoal to the northward, last quarter directly through the channel.

N. B. The tide of ebb is the fairest setting tide. The tide runs in until half-ebb, and out until half-flood, in regular tides; but the winds make a great alteration, N.E. winds making high tides, and S.W. neaping them; also tides running out with S.W. winds until high water, and in until low water with N.E. winds. Tides rise four feet, unless affected by winds. High water ten minutes past eight o'clock full and change.

SYDNEY HARBOUR. The entrance to this harbour lies 4 leagues to the S.E. of that of St. Anne's, it is an excellent harbour, having a safe and secure entrance, with soundings regular from sea into 5 fathoms. In going in, give the two points of the entrance a berth of two or three cables' length, approaching no nearer than 6 or 5 fathoms. The soundings are regular to each shore to 5 and 4 fathoms. In the inner part of the entrance, Beach Point and Ledge, on the south side, are steep-to; but Sydney Flats, on the opposite side, are regular to 4 fathoms. When past the Beach Point, you may run up the river Dartmouth to the S.W. and come to anchor in any depth you please, to 5 and 10 fathoms, a fine muddy bottom.

This harbour is capable of containing the whole navy of Great Britain. On Flat Point, without the east side of the entrance, is a light-house which shows a fixed light. The tide in the harbour flows at 9 h. and rises 6 feet.

West of Sydney Harbour are Indian Bay and Windham River, both places of anchorage, and fit for vessels to run into, although little frequented at present: beyond these is Murgain or Cow Bay, at the northern point of which is Flint Island; there is a passage between this island and the main, with 14 fathoms water, but this should be adopted with the greatest caution, on account of the numerous rocks under water that are scattered about; this bay is open to the north-eastward, and its further end is encumbered with an extensive shallow flat which dries at low water.

Miray Bay is to the southward, and its entrance is bounded by Cape Murgain and the Island of Scatari; the Bay is wide, and runs in 3 leagues, branching off at its upper part into two rivers: there is deep water in it, from 20 to 6 fathoms, and clear from dangers, but it affords no shelter for shipping.

SCATARI ISLAND lies in about the latitude of 40° north, its length E. and W. is nearly 2 leagues, and its breadth about one; it is separated from Cape Breton by a channel into Miray Bay, but this is too hazardous for strangers, and frequented only by those coasters who are well acquainted with its dangers.

LOUISBOURGH HARBOUR, situated on the S.E. side of Cape Breton, to the westward of Scatari Island, is very easy of access; you may be soon in, and you may likewise be soon out, if you please. In doing so be careful to avoid the Nag's Head, a sunken rock on the starboard hand going in. A white beacon is now placed upon the East Head leading to Louisbourg Harbour, upon the sight of the old French lighthouse, which may be seen at a considerable distance. The Nag's Head Rock lies nearly one-third of a mile from the beacon point, and has no more than 3 feet on it at low water. The larboard side going in is the boldest.

GABARUS BAY. From the entrance of Louisbourg to Guyon Isle, called also Portland Isle, the course is S.W. by W. and the distance more than 3 leagues. Between lies the bay called Gabarus Bay, which is

spacious, and has a depth of from 20 to 7 fathoms. Off the south point of this bay, called Cape Portland, lie the Cormorants, a number of islets and rocks, which are dangerous. About 4 leagues to the westward of Gabarus Bay is the Forked Harbour, a narrow winding inlet, where small vessels may run into, and lie landlocked. And 5 miles south-westward of this is the remarkable white cliff, already noticed, and called Cape Blancherotte. The shore now winds to the westward, to Cape Hinchinbroke and the Isle of Madame.

ARACHAT, OR AROGHETTE. Arachat Harbour, in the Isle of Madame, has two entrances, the N.W. one being very narrow ought never to be attempted without a leading wind, as there is not room for a large ship to swing to her anchors should she be taken a-back. When going in, give the ledge, to the westward of Seymour Island, a good berth, not approaching it nearer than 8 fathoms, and keep as near as possible in mid-channel. To enter by the S.E. passage, steer for Point Maracha, rounding it in 8 fathoms, at about two cables' length off; keep that shore on board, at nearly the same distance and depth of water, until the church bears north; you will then see a small house (the dead house) on the top of the hill behind the church, bring that on with the east end of the church, and then steer in that direction; you will thus pass mid-way to the eastward of the 11 and 5 feet shoals, and also to the westward of the Fiddle-head Shoal; proceed with this mark on, until a red house on Fiddle-head Point comes on with the dark rocky extreme of the point, bearing E. $\frac{1}{2}$ S.; you will then be to the northward of the Twelve-feet Shoal, and may haul up to the westward, where you will find excellent anchorage on soft mud, opposite to the low sandy beach, on the middle of Seymour Island, in 10 fathoms.

CHEDABUCTO BAY is wide and spacious; it is bold-to on both shores, and free from danger; on its southern side, which is high and nearly straight, are Fox's Island and Crow Harbour. Fox's Island is small and lies near the shore.

CROW HARBOUR is on the south side of Chedabucto Bay, is capable of containing ships of war of the fifth rate, merchant vessels, &c. The bottom is good, and the mark for entering is, to keep the beacon, on the south side of the harbour, in a line with a remarkable fine tree upon the high land, which will lead you clear of the Corbyn Rocks, and also of Rook Island Rock, which lies 25 fathoms from the N.W. point of Rook Island.

Fox Island Anchorage is one of the greatest mackarel fisheries in North America, during the months of September and October. When sailing in you must pass to the westward of Fox Island, giving it a berth of a quarter of a mile as there are rocks both above and under water, with 3 and 4 fathoms close to them. You may anchor in from 4 to 10 fathoms, with the west end of the Island bearing from E.N.E. to N.N.E. keeping about midway between the island and the main. The water shoals gradually to the bar, which extends from the island to the opposite shore; it has not more than 6 or 7 feet on its deepest part, and dries in one place about one-third of the distance from the island to the main: with northerly and with westerly winds, the fishing vessels ride to the eastward of it in from 2 to 4 fathoms, and shift to the westward with easterly winds.

MILFORD HAVEN, or the Harbour of Guysburg, at the head of the Bay, is impeded by a bar, but a sloop of war may pass over it. Within

the bar vessels lie in perfect security ; the tide, however, sets in and out with great rapidity. The town is, at present, a place of little trade, but it is protected by a battery. On the northern side of Chedabucto Bay you will see several red cliffs ; this shore is sandy, with regular soundings in the middle of the Bay, the water is deep, from 25 to 50 fathoms.

At Milford Haven, it is high water full and change at $8\frac{1}{2}$ h. and the common spring tides rise 8 feet. At the Bay of Rocks, at $8\frac{1}{4}$ h. rising 7 and 8 feet ; and at the Gut of Canso, at $8\frac{1}{2}$ h. common spring tides rising $5\frac{1}{2}$ feet.

CHEDABUCTO BAY TO HALIFAX HARBOUR.

CAPE CANSO is the outer, or easternmost point of St. Andrew's Island. From this Cape, westward, to Torbay, the coast makes in several white heads or points ; here the country is much broken ; and near the S.E. extremity many white stones appear from the offing, like sheep in the woods. During a southerly gale the sea is dreadful here. From Torbay to Liscombe Harbour there are banks of red earth and beaches ; and from Liscombe Harbour to the Rugged Islands, (excepting the White Isles,) the Capes and Outer Islands are bound with black slaty rocks, generally stretching out in spits from east to west ; and from the Rugged Islands to Devil's Island, at the entrance of the Harbour of Halifax, there are several remarkably steep red cliffs linked with beach.

A lighthouse has been erected upon Cranberry Island, being a *fixed* light ; this forms a conspicuous and useful object, and is calculated to be of essential service to mariners who frequent this dangerous coast, particularly those who intend passing through the Gut of Canso. There is also a smaller light shown upon an island a little to the north-westward ; this is intended to facilitate the passage between George's and Durell Islands.

Of the many rocks hereabout, the outer breaker, called the Bass, a rock of 3 feet water, lies more than 2 miles E. $\frac{1}{2}$ S. from the lighthouse on Cranberry Island ; nearly a mile S.E. from Cape Canso is a similar rock, called the Roaring Bull ; and at 1 mile to the E.S.E. of the latter, there is said to be another, but its existence is doubtful.

THE HARBOUR OF CANSO, within St. Andrew's Island, is well sheltered, with good ground and sufficient depth for vessels of any burthen. In a rough sea the dangers shew themselves ; but with smooth water, it is hazardous to enter the passages without a pilot. Canso Harbour has a passage through from the bay to the south ; but it is not recommended for ships of burthen to attempt it, unless they answer their helms very quick, and even of those not such as draw more than 16 feet.

Sailing from the westward into this harbour, so soon as you have passed the Roaring Bull, over which the sea generally breaks, run for Pitipas or Red Head, taking care, when above the Black Rocks, to keep them open of the rocky islets off Cape Canso, until you bring Glasgow Head and the north end of Inner Island in one, which will carry you above Man of War Rock ; then steer westerly, being careful to avoid Mackarel Rock, and make for Burying Island, the north end of which you must not approach nearer than to have a depth of five fathoms, then anchor to the north-westward of it on a bottom of mud.

Coming from the eastward, pass between Cape Canso and Cranberry Island, giving the latter a sufficient berth, to avoid a shoal which stretches

to the southward of it, and steer for Pitipas Head, as before directed. The Northern Passage between Durell's and George's Islands, notwithstanding its narrowness, yet having a depth of water and a clear channel, will be found to be the best passage. In sailing in keep mid-channel between Bald and Net Rocks, the former being above water, and the latter drying at one quarter ebb, when you may steer with safety by attending to the chart, and the situation of Burying Island. At Cape Canso it is high water full and change at 50 minutes after 8 o'clock—and the tide rises from 5 to 8 feet.

DOVER BAY is a wild deep indent, with a number of islands and sunken rocks at its head; yet shelter may be found on the western shore, or during a south-east gale, by giving a berth to the rocks, that lie off the south end of Big Dover Island, these are very visible in bad weather; haul up under the island and anchor between the small islands on the eastern side; within these islands Little Dover passage continues out south-eastward, having 5, 6, and 7 fathoms water and quite safe.

Eastward of little Dover is St. Andrew's Channel leading to Glasgow Harbour: it is so thickly encumbered with rocks, that it can only be navigated by those who are well acquainted with its dangers.

RASPBERRY HARBOUR is to the westward of that of Canso or Port Glasgow; it is small and the shores within quite bold. At the entrance on the eastern side, is an island, having a ledge close to it on the S.E. By rounding this ledge, you may steer directly into the harbour and come to an anchor under the island, which lies in the middle of it, in the depth of 7 fathoms, where you will ride safely. The country here is rocky and barren, and there is a quarry of granite, much in request for mill-stones. The outlet between Raspberry Island and the main, is a complete dock, where vessels can lash themselves to both shores, and ride in 30 feet water; but half-way through it has only 10 feet.

WHITE HAVEN, which is two leagues to the westward of Raspberry Harbour, is a place of hideous aspect. Of its rocky islets, the larger and outer one, called White Head, from the colour of its sides, is 70 feet above the level of the sea. This islet appears round and smooth, and is a useful mark, as the passage in, on either side, is in mid-channel. Off the head are two breakers, one S.S.E. and the other E. by S. half a mile off.

TORBAY. The entrance of this bay is formed on the west by a bold headland, called Berry Head. The channel in is between this head, and the islets to the eastward. E.S.E. from the head, and south of George's Island, are three very dangerous rocks, which do not break when the sea is smooth. Within the bay, under the western peninsula, there is excellent anchorage in from 6 to 4 fathoms, muddy bottom, up to the eastern part of the bay. There is also anchorage on the western side of the bay, in from 7 to 3 fathoms, similar ground, where a vessel may ride in safety during any gale.

From Torbay, westward, to Country Harbour, the land in general continues rocky and sterile, with deep water close in, but regular soundings without, and from 30 to 20 fathoms of water.

Coddle's Harbour, which is $3\frac{1}{2}$ leagues westward of Berry Head, affords shelter to small vessels only; and these enter on the eastern side, to clear the breakers. There is a deep inlet, called New Harbour, which lies about 7 miles from the islands. This place is so much exposed, that even small vessels which occasionally resort there, in the fishing season, are under the necessity of leaving it the moment a southerly wind arises.

COUNTRY HARBOUR. The fine harbour called Country Harbour, is navigable, for the largest ships, 12 miles from its entrance. Vessels entering this harbour must use the utmost caution in steering between the ledges and rocks which are scattered about; fortunately they commonly show themselves whenever there happens to be any sea; this will render the entrance less difficult; but having passed the Black Ledge, which is the innermost danger, the navigation will be perfectly safe for the largest fleet. The tide is scarcely to be perceived, except when, in spring, the ice and snow dissolves, and heavy rains are prevalent.

On advancing from the eastward, there are two rocks to be avoided, which lie as shown on the charts; proceeding inward, you should give Green Island a small berth, and the dangers on that side will be avoided. The rocks on the west side of the entrance, named Castor and Pollux, are above water and bold-to. When above them, give Cape Mocodame a good berth, so as to avoid the Bull, a dangerous sunken rock, that breaks in rough weather, and lies about half a mile from the extremity of the cape. The black rocks are partly dry, and from them upwards, there is no danger, and the anchorage is good.

HARBOUR ISLAND. The Island on the east side of the entrance, Green Island, Goose Island, and Harbour Island, or the William and Augustus Islands of Des Barres, are low and covered with scrubby trees. Within Harbour Island is excellent anchorage.

Inland Harbour lies between Harbour Island and the main, and affords excellent anchorage on a bottom of mud; it is particularly convenient for going to sea with almost any wind.

Isaac's Harbour is on the north-east side of Country Harbour, and has good holding ground, with sufficient depth of water for any vessel. Between Isaac's Harbour and Harbour Point the ground is foul and rocky.

FISHERMAN'S HARBOUR. In entering this place, between Cape Mocodame and the Black Ledge, great care must always be taken, in order to avoid the Bull Rock, which dries at low water, but is covered at high water, and only breaks when the weather is bad. At 2 miles to the west of it is Hollin's Harbour, a place of shelter for coasters, and resorted to by the fishermen. Indian Harbour is a shallow and unsafe creek, but has good lands well clothed with pine, maple, birch, and spruce. The next inlet, called Wine Harbour, has a bar of sand, which is nearly dry.

ST. MARY'S RIVER. The navigation of this river is impeded by a bar of 12 feet water, which extends across, at the distance of a mile and three-quarters above Gunning Point, the west point of the entrance. Below the bar, towards the western side, is a middle ground, which appears uncovered in very low tides; and above the bar, nearly in mid-channel, is a small rocky islet. The passage over the bar is on the eastern side of this islet. The tide, which is very rapid, marks out the channel; the latter is devious, between mud-banks, extending from each shore, and dry at low water. The depths upward are from 24 to 18 feet. Sailing in you should proceed for 4 miles N.N.W. then 2 miles N. by W. and afterwards N.N.W. to the Fork, where it divides, the western branch terminating in a brook; the eastern branch continuing navigable a quarter of a mile further up to the rapids. The town of Sherbrook is, at present, a small village, at the head of the river, about three leagues from the sea.

WEDGE ISLE. The islet, called Wedge Isle, which lies at the distance

of half a league south from the S.W. point of St. Mary's River, is remarkable, and serves as an excellent guide to the harbours in the neighbourhood. The side of this islet, towards the main land, is abrupt and its summit is 115 feet above the sea. From its S.W. end ledges stretch outward to the distance of half a mile; and some sunken rocks, extending towards it from the main, obstruct the passage nearly half-way over. About $2\frac{1}{2}$ miles south from the Wedge, is a fishing bank of 30 to 20 feet, the area of which is about 200 acres.

THE HARBOUR OF JEGOGAN may be readily found, on the eastward, by Wedge Isle, above described; and on the westward by the bold and high land called Redman's head. The passage in is at the distance of a quarter of a mile from that head, because at the distance of three-quarters is a dry ledge called the Shag. Within the small island on the east side of the entrance, called Tobacco Isle, there is anchorage in 4 or 5 fathoms muddy bottom.

LISCOMB HARBOUR. The entrance of this harbour, which is one of the best on the coast, is between Liscomb Island and the head-land on the west, called Smith or White Point. From the S.E. end of Liscomb Island, a ledge, with breakers, extends to the distance of three-quarters of a mile. Within and under the lee of the island is safe anchorage in from 13 to 8 fathoms. On the N.E. of the island, a vessel caught in a S.E. gale may be sheltered by Redman's Head, already described, with the head S.S.E. in 6 and 7 fathoms, on a bottom of clay.

On the west side, the ground from Smith Point is shoal to the distance of nearly a mile S.S.E.; and at $2\frac{1}{2}$ miles south from the point, is a rock on which the ship Black Prince was lost. It constantly breaks, and is partly uncovered. The island side is bold. The first direction of the harbour is nearly north, then W.N.W. Opposite to the first fish stage, at half a mile from shore, is as good a berth as can be desired, in 7 fathoms. From this place the harbour is navigable to the distance of 4 miles: it is however, to be observed, that there are two sunken rocks on the north side.

BAY OF ISLANDS. The coast between Liscomb and Beaver Harbours, an extent of 6 leagues, is denominated the Bay of Islands. Within this space the islets, rocks, and ledges, are innumerable: they form passages in all directions, which have, in general, a good depth of water.

The White Islands nearly half-way between the harbours of Beaver and Liscomb, appear of a light stone colour, with green summits. The latter are about 60 feet above the level of the sea. The isles are bold on the south side; the passage between them safe; and there is good anchorage within them, in from 10 to 7 fathoms. From these the rocks and ledges extend 5 or 6 miles from E. to E.N.E. they are bold-to and mostly dry, the water within them being always smooth.

BEAVER HARBOUR. The Pumpkin and Beaver Islands are very remarkable to vessels sailing along the coast, particularly Pumpkin Island, which is a lofty and dark barren rock; but they afford a smooth and excellent shelter inside of them during a southerly gale. Sutherland Island has, on its N.W. side, a deep and bold inlet, where a vessel may lie concealed and secure as in a dock. When in the offing, the harbour is remarkable on account of the small island which lies north of the Black Rock, having at its southern end a red cliff, being the only one on this part of the coast: having entered the harbour, you may choose your anchorage according to the direction of the wind, the bottom being

generally mud. The basin on the west side is so steep-to that a small vessel may lie afloat, her side touching the beach.

SHEET HARBOUR. This harbour is nearly half-way between Country Harbour and Halifax. It is very extensive; the deep navigable water continues to the falls, which are about 9 miles above the entrance of the harbour. Without the harbour are the several ledges shown on the charts: these ledges show themselves, excepting the outer one, called by the fishermen Yankee Jack, and which, when the sea is smooth, is very dangerous. It has been asserted, that a rocky shoal lies half a mile to the south of the Yankee, but its position has not been ascertained. Within the entrance is a rock, two feet under water, which will be avoided by keeping the Sheet Rock open of the island next within it on the eastern side. Sheet Harbour is dangerous for vessels to approach in thick weather; the narrow channel between Sober Island and the main affords secure anchorage, on a bottom of mud. The flood at the entrance of Sheet Harbour sets S.S.W. about one mile an hour.

MUSHABOON, to the westward of Sheet Harbour, is a small bay, open to the S.E. which affords shelter at its head only, in from 7 to 5 fathoms, muddy bottom. It is connected with Sheet Harbour by a clear, deep, and bold passage, between an island and the main land. Here you may lash your vessel to the trees, and laying in 5 fathoms, soft bottom, with the side touching the cliff, be perfectly sheltered from all winds. In going through the passage to Sheet Harbour you must guard against a sunken rock at its mouth, which, from the smoothness of the water, seldom shews its position; this rock lies 400 yards off Banbury Islands, and may easily be cleared by keeping the Sheet Rock open of the island.

SPRY, or TAYLOR'S HARBOUR. Cape Spry, or Taylor's Head, divides Mushaboon from Spry, or Taylor's Harbour. On the west side of the latter are two large islands, now called Gerard's Islands. Cape Spry is destitute of trees; and, being composed of large white rocks, is distinguishable afar off. From the point of the cape, westward, is a low shingly beach, which is shoal to the distance outward one-third of a mile. When sailing into this harbour, you will perceive the land in the centre of the harbour, appearing like three distinct hills; keep the valley between the two easternmost on with Bald Rock, and it will lead clear, between Mad Moll Reef and Maloney Rock. You may then steer up for the anchorage at the western head of the harbour; where a fleet may lie landlocked on a muddy bottom. The tide, at the entrance of Spry Harbour, sets in with the velocity of about one mile an hour. This harbour is open to S.E. and E.S.E. winds.

At the distance of about three miles S.S.E. from Cape Spry is a dry rock, called by the fishermen the Taylor's Goose. At about midway between it and the Beaver Island lie the Shag Ledges, which are partly dry, and extend nearly a league east and west. Within and about them the depths are from 20 to 7 fathoms.

DEANE, or POPE'S HARBOUR, on the western side of Gerard's Isles abovementioned, has a ledge at its entrance, forming an obtuse angle at the two points, three-fourths of a mile from each, and from which a shoal extends to the southward half a mile. It may be passed on either side: but, on the west, care must be taken to avoid a shoal extending from the outer Tangier Island. The best shelter is under the smaller island on the eastern side, where there are from 8 to 6 fathoms, with good clay ground.

TANGIER HARBOUR is formed by craggy barren islands, which secure vessels from all winds. At about two miles from its mouth is a ledge that dries at low water. The anchorage is under the eastern shore, in 5 to 4 fathoms, stiff mud.

SHOAL BAY (Saunder's Harbour of Des Barres.) This Bay has a good depth of water and excellent anchorage. The latter is to the northward of the island, now called Charles's Island, and vessels lie in it, land-locked in 7 fathoms. Off the mouth of the harbour is a rock, that always breaks; but it is bold-to, and may be passed on either side. Some parts of the harbour will admit large ships to lie afloat, alongside the shore, over a bottom of black mud.

SHIP HARBOUR, is easy and safe to enter, having good anchorage in every part, the bottom being a tough clay of blueish colour; it leads to Charles's River, above the narrows of which a fleet of the largest ships may lie alongside of each other, without the smallest motion. A white cliff, which may be seen from a considerable distance in the offing, is a good mark for the harbour: at first it resembles a ship under sail, but on approaching seems more like a schooner's topsail.

BRIER'S ISLAND, is a low rugged island, and ledges, partly dry, extend from it three-fourths of a mile to the eastward: avoiding these, when entering this way, you may range along the western island, and come to an anchor under its north point, in 6 or 7 fathoms, the bottom of mud. Ship Harbour, proper, commences about 7 miles to the N.W. of Brier's Island, at a beach in the western shore, which has 6 fathoms close to its side; its entrance is one third of a mile broad, widening as you ascend it; above Green Island are some shoals and ledges, but the anchorages below them are capacious and good.

OWL'S HEAD, OR KEPPLE HARBOUR, may be known at a distance, by Owl's Head on the western side, which appears round, abrupt, and very remarkable. The neighbouring coast and isles are rugged and barren. The entrance is of sufficient breadth to allow a large ship to turn into it: and, within the harbour, shipping lie land-locked, when in 6 and 7 fathoms, with a bottom of mud. In taking a berth you will be guided by the direction of the wind; as, with a S.W. gale the western anchorage is to be preferred, and the eastern with a S.E. The tide sets into this harbour from the S.W. at the rate of one mile an hour.

LITTLE HARBOUR is somewhat to the westward of Owl's Head Harbour, and is a place of safety for small vessels; but its entrance is intricate, and requires a good knowledge of the passages leading to it, in order to enable a vessel to enter.

JEDORE HARBOUR (Port Egmont of Des Barres.) The entrance is unsafe and intricate; a shoal of only 11 feet lies at its mouth; the channel within is narrow and winding, and there are extensive mud-flats, covered at high water, and uncovered with the ebb: hence a stranger can enter with safety only at low water, the channel being then clearly in sight, and the water sufficient for large ships. The best anchorage is abreast of the sand-beach, two miles within the entrance, in from 9 to 6 fathoms, on a bottom of stiff mud. Two and a half miles above the beach the harbour divides: one branch to the larboard, is navigable nearly to its extremity, and has several sunken rocks in it; while to the starboard is a large space with a clear bottom, and from 3 to 5 fathoms. On the eastern shore are Oyster Pond and Navy Pool, two deep inlets, but choaked at their entrance by a bed of rocks; the river terminates

with a rapid. In the offing, at the distance of two leagues off the land, the body of the flood sets in S.W. by S. at the rate of half a mile an hour. Without the entrance, on the eastern side, are two isles, called Rodger and Barren Islands, between and within which the passages are good, and afford shelter in case of necessity; from these the land runs nearly E.N.E. and forms a deep inlet, called Clam, or Clamb Bay.

The **BRIG ROCK** is a very dangerous rock of 3 feet, it lies S.E. $\frac{1}{4}$ E. from Jedore Head, and S.W. two miles from the isle called Long Island. The weed on the top of it may frequently be seen at the surface. The marks for this rock are, a house and barn in Clam Bay, just open of the east end of Long Island, bearing N. 5° E. and the house on Jedore Head open to the N.E. of Jedore Rock.

POLLUCK SHOAL. At about nine miles south from Jedore is a reef, called the Polluck Shoal; its area is about one acre, having a depth of 24 feet over it; and during a swell the sea breaks on it with great violence.

JEDORE LEDGES. Those advancing between the Brig Rock and Polluck Shoal, should be cautious in approaching any of the Jedore Ledges; they are said to extend from five to nine miles from the mouth of the harbour.

Between Jedore and Halifax, there are no harbours of any consideration for shipping, but there are numerous settlements. The best harbour is that called **THREE-FATHOMS HARBOUR**, which has occasionally received large vessels in distress. This harbour lies immediately to the east of an islet called Shut-in-Island; and, with the wind on-shore, is difficult and dangerous; so that it is to be attempted only in cases of real distress. The channel lies two-thirds over to the northward from Shut-in Island, and turns short round the starboard point to the westward. When you are within this harbour the passage will be found to be clear, between banks of soft mud; but it is only fit for schooners and sloops, although it has occasionally been visited by large vessels. The anchorage is tough blue clay. In beating to windward, ships may stand to within a mile and a half of the shore, the soundings being tolerably regular, from 20 to 12 and 8 fathoms.

In the remark book of H.M.S. *Carnation*, July, 1821, an account is given of a rocky shoal, which that vessel passed over, in 8 fathoms water, and upon which were taken the following bearings: Jedore Head N.N.W. $\frac{1}{2}$ W.; west end of Long Island N.E. by N.; and Jedore Outer Ledge, or Brig Rock, E. by S. This shoal may have less water upon it in other parts; but as these bearings do not agree with the charts, we apprehend there must be some error in its exact position. Mention is also made of a rock seen by H.M.S. *Leander*, June, 1787, bearing from Jedore Head S. 38° E. distant 6 miles; this has only 5 feet over it, and 22 fathoms close within and without it; this is supposed to be the Brig Rock, but if so the bearings are not correct. These two notices are inserted to show that some dangers exist hereabout, and will be sufficient to warn the mariner to search for, and cautiously avoid them.

SAILING DIRECTIONS

FOR THE

Island of Newfoundland,

AND

COAST OF LABRADOR.

NOTE.—THE BEARINGS AND COURSES ARE ALL BY COMPASS, AND THE SOUNDINGS ARE THOSE TAKEN AT LOW WATER. THE VARIATION AT ST. JOHN'S IS ABOUT 26° W.: IN BONAVISTA BAY AND NOTRE DAME 29° TO 30° : IN PLACENTIA BAY 31° ; AND AT CAPE RAY 22° TO 23° .

SECTION I.

EAST COAST OF NEWFOUNDLAND.

GENERAL REMARKS.

VESSELS bound to St. John's, Newfoundland, should endeavour to keep in about the parallel of about 46° N. and having reached the outer edge of the Great Bank, and having obtained soundings in the meridian of $48^{\circ} 30'$ or 49° W. should steer north-westward for Cape Spear, in latitude $47^{\circ} 30' 53''$ N. longitude $52^{\circ} 33' 27''$ W. Between the Cape and St. John's are three bays; the first, called Cape Bay, lies between the Cape and Black Head; the second, Deadman's Bay, between the Head and Small Point; and the third, Freshwater, between Small Point and Fort Amherst. Further particulars respecting St. John's, will be found in a subsequent page.

Vessels bound to the Gulf of St. Lawrence should also endeavour to strike soundings on the Great Bank of Newfoundland, in the latitude of 46° and between the longitude of 49° and 52° : a N.W. by W. course will carry them clear of St. Peter's Island, and directly to the North Cape of the Island of Breton, making due allowance for the strong current which commonly sets S. by W. and S.S.W. 3 and 4 miles an hour.

In general a strong current sets in from the eastward along the western coast of Newfoundland, which after passing Cape Pine, runs more towards St. Mary's and Placentia Bays: this current will be felt at least 20 leagues to the S.W. of Cape Pine, and becomes more rapid as you approach the coast, its velocity being much increased as the wind

may favour its direction, though at all times sufficiently strong to endanger the safety of a vessel approaching from the south or west in foggy weather, that may be ignorant of the circumstance. The danger arising from this current will be avoided by a constant use of the lead; do not approach Cape Race to the eastward in less than 35 fathoms, the ground being more of an inclined plane on the west than on the east coast, that depth will be found at a considerable distance, the ground being more broken, and the depth will increase so fast in your course from Cape St. Mary to avoid Cape Race, that you will find yourself when to the eastward of it in 50 fathoms, and will shortly after drop into 60 or 70 fathoms, where you may pursue whatever course you may think proper.

The winds being variable, there is little doubt but they produce many changes in the currents; shifts of wind to the southward of the island being so common that it often happens that, after blowing a gale from one point it suddenly shifts to the opposite, continuing to blow with the same violence. One vessel may thus be lying-to in a heavy gale, while another 30 leagues distant might be in a similar situation with the wind in quite an opposite direction, a circumstance that has been known to happen.

The ISLAND OF NEWFOUNDLAND is, for the most part, a hilly and rugged country; its general features are unequal, but for the most part high and woody, while the interior rises up in lofty grandeur, and gives birth to numerous lakes and rivers: the hills are covered with snow nearly five months in the year, and the shores are subject to heavy fogs, accompanied by snow and sleet, the surrounding sky being usually darkened and overcast. The whole circuit of the island is indented with inlets and bays, many of which are extensive, commodious, and well sheltered, where vessels ride in perfect security; into these bays and harbours numerous rivulets continually run, which, besides the fine purity of their water, afford abundance of trout and other fish. Most of the harbours have complete anchorages, with clear and good channels into them, so that they can be navigated at all times without the assistance of a pilot; they are frequently situated so near to one another, that in many places they form a succession of harbours, but are not at all inhabited. The principal towns belonging to the English are St. John, situated on the eastern side of the island, and Placentia on the southern side, both possessing excellent harbours: the interior of the country is but little explored, and so overgrown with pines, firs, and birch, that, except where the inhabitants have made roads, it is almost impassable. The eastern and southern parts of Newfoundland, from Cape St. John, in latitude $50^{\circ} 7' N.$ to Cape Ray, which latter may be considered to be the south western extremity of the island, properly belongs exclusively to England, while the western coast, from Cape Ray northward round Quirpon Island to Cape St. John, were ceded to France in 1713, and acknowledged and confirmed by treaty in 1814. The French, therefore, possess the right of fishing and drying their nets on the shores of Newfoundland within the above limits, and they also may fish in the Gulf of St. Lawrence, but not within the distance of 3 leagues from any of the coasts belonging to Great Britain. The small islands of St Pierre and Miquelon were also given up to the French, on condition that no fortification shall be erected there, nor more than 50 soldiers kept up in the establishment.

It was agreed in 1818, that the vessels belonging to the United

States should have, in common with the British subjects, the privilege of catching fish on the southern coast, between Cape Ray and the Ramea Islands, and on the western and northern coasts, from Cape Ray to the Quirpon Islands; also on the shores of the Magdalen Islands, and on the coasts, bays, harbours, and creeks of Labrador, from Mount Joli through the Straits of Belle Isle, and thence northward, indefinitely along the coast as heretofore, but without prejudice to the exclusive rights of the Hudson's Bay Company. And they also have the liberty to dry and cure fish in any of the unsettled bays, harbours, and creeks, of the southern parts of Newfoundland and Labrador, but so long only as they shall remain unsettled.

BANKS OF NEWFOUNDLAND. To the eastward, as well as to the southward of the Island of Newfoundland, are several extensive sand banks, abounding with fish of various kinds; in sounding the bottom is commonly covered with great quantities of shells, and frequented by shoals of small fish, most of which serve as food for the cod; and these thrive so amazingly, and are so inconceivably numerous, that although many hundreds of vessels have been annually supplied with them for more than two centuries, yet such a prodigious consumption has not apparently diminished their numbers. The fishery is not confined only to the banks, but extends, in equal luxuriance, to the shores and harbours of Newfoundland, Nova Scotia, and Breton Island. The fish commonly are most abundant where the bottom is sandy, and the depth about 30 fathoms; where the bottom is of mud they are observed to be less numerous. In winter they appear to retire to the deep water, but in February, March, and April, they come again on the banks, and fatten rapidly.

THE GREAT BANK OF NEWFOUNDLAND is to the eastward of the island, and extends from about the latitude of 42° North to 50° or upwards, but recent observations seem to prove that its southern extent does not exceed the parallel of $40^{\circ} 50'$ N.; its form, like those of the other banks, is irregular, and not easily ascertained or defined; but about the latitude of 45° , its breadth, including the Jaquet and Whale Banks, is nearly 4 degrees; to the northward and southward it narrows almost to a point, and seems insensibly to drop into fathomless water. The Jaquet and Whale Banks may be considered parts of the Great Bank, being only divided from it by channels of somewhat deeper water. The Jaquet lies to the eastward, and has 55 fathoms upon it; its edge is very steep; between it and the edge of the Great Bank are 112, 120, and 160 fathoms. On entering upon the Great Bank, soundings rise from 60 to 30, 37, 44, 45, and 60 fathoms; towards the Whale Banks, 55 and 60 fathoms; between the Great Bank, and the Whale Bank are 72, 75, and 80 fathoms; and upon the Whale Bank, 50, 45, 55, and 60 fathoms, from which you again drop into 100 and 200 fathoms, no ground. On the western side of the Great Bank, and to the southward of the Island of Newfoundland and Nova Scotia, a chain of banks extend almost 2 degrees from the land, these are called the Green Bank, Banquereau, Sable Island Bank, &c.; all these have soundings over them of various depths, from 20 to 70 fathoms, admirably situated, in dark weather, to warn the mariner of his approach towards the land.

The **OUTER False Bank**, or *Flemish Cap*, lies 2 degrees to the eastward of the edge of the Great Bank, in latitude $46^{\circ} 50'$, and longitude 45° ; its

length is supposed to be about 90 miles, and breadth 50 miles; on it are from 100 to 158 fathoms; between it and the eastern edge of the Great Bank is much deeper water, the bottom being very fine sand and ouze, which will hardly stick to the lead; as you enter upon the Great Bank you will have fine whitish sand, speckled black. Should you make the bank in this latitude, between 46° and 47° , you must be very careful to avoid being drifted upon Cape Race, or Virgin Rocks. These rocks were surveyed by Captain BISHOP, of H.M. brig Manly, and Mr. ROSE, Master, R.N. commanding the cutter Inspector, both of whom, after a second attempt in which they were successful, returned to St. John's in July, 1829. The banks on which the shoal is situated extends E. by N. and W. by S. $4\frac{1}{2}$ miles; its broadest part $2\frac{3}{4}$ miles; the soundings are regular from 28 to 30 fathoms, deepening suddenly on the outer edge to 39 and 42 fathoms. The rocks are in latitude $46^{\circ} 26' 33''$ N. longitude $50^{\circ} 56' 35''$ W. extending in an irregular chain S. W. by W. and N.E. by E. 800 yards, varying from 200 to 300 in breadth.

The least depth of water is on a white rock in $4\frac{1}{2}$ fathoms, with 5 to $6\frac{1}{2}$ fathoms all around it, the bottom distinctly visible; towards the extremities of the shoal are several detached rocks of from 7 to 9 fathoms, with deep water between, and a current setting over them W.S.W. 1 mile an hour, with a confused heavy swell. The Banks of Newfoundland are frequently enveloped in most horrid fogs, which, from the middle of Spring to December, have been known to last 8 and 10 days successively; at such times they are often so thick that you will not be able to see any object at 10 fathoms distance; a continual drizzling rain is dropping from your sails and rigging, a general calm prevails, and sometimes attended with a considerable swell of the sea, so that you are constantly in fear of running foul of some vessels, or being drifted by the currents upon some danger, which, from a total inability of discovering, you will have great difficulty to avoid. The currents which surround the island are frequently so violent and so irregular, sometimes driving towards the shore and sometimes towards the sea, that the greatest caution will always be found necessary, while the known current coming from the northern regions sweeps along the shores of Labrador, and, in the spring, detaches immense ice-bergs, which float to the southward, and become exceedingly dangerous, especially in foggy weather; some of these masses will frequently be grounded in 40 and 50 fathoms water, and others will be met with further out to seaward, at the distance of 125 or 130 leagues from the land; fortunately these formidable objects may generally be discovered, even in dark weather, by a white and bright appearance of the sky above them, and also by the roar of the waters breaking against them, they also may be apprehended by the intense coldness they diffuse to a great distance around them; they continue and are usually met with as late as June, July, and August. Your approach towards the banks may be known by the numerous sea fowls which will attend you, as roches, malimauks, and divers; these latter are seldom found more than 30 leagues off the banks, but malimauks and others are occasionally seen all across the Atlantic, but in the vicinity of the banks they become more numerous. The great fishery begins in May, and continues to the latter end of September.

CAPE RACE TO CAPE ST. FRANCIS.

CAPE RACE is the south-east point of Newfoundland, lying in latitude $46^{\circ} 40'$ N. and longitude $53^{\circ} 3'$ W.; it is table land of moderate height.

From Cape Race to Cape Ballard, the course is N. by E. distant 8 miles: nearly 1 mile to the southward of Cape Ballard, lies a high black head, called Chain Cove Head; between the points is a cove; and to the westward of Chain Cove Head, lies Chain Cove, before which lies a black rock above water.

NEW BANK. E.S.E. from Cape Race, and to the southward of Cape Ballard, lies a fishing bank, called New Bank, about 5 miles long, and nearly 2 miles broad; on it is from 17 to 25 fathoms water.

RENOWES. From Cape Ballard to Renowes Rocks, the course is N.N.E. $\frac{3}{4}$ E. distance $\frac{3}{4}$ of a league. These rocks are small, of a moderate height, and lie 1 mile from the main land, and are bold-to. The Harbour of Renowes is distant $2\frac{1}{2}$ miles; it is but a small place, and has not above 15 or 16 feet at low water: the harbour is indifferent, having several rocks in the entrance, and the south east winds heave in a very great sea; to sail into it you must keep the north shore on board.

FERMOUSE HARBOUR lies about $2\frac{3}{4}$ miles from Renowes: between these harbours lies Bear's Cove, off which lies a sunken rock, about a cable's length from the shore. Fermouse is an exceeding good harbour, there being no danger in sailing into it. The entrance is not more than a cable's length wide: just within the entrance, on the north shore, is a small cove, in which a fishery is carried on; but no safe place for anchoring. About one quarter of a mile further in, on the same side, lies another cove, called Admiral's Cove. In this cove the merchants' ships generally ride in 7 or 8 fathoms water, land-locked. About 1 mile further up the harbour is a cove, called Vice Admiral's Cove. On the south is the best anchorage for large ships, in 12 or 15 fathoms water, muddy ground: here you will be handy for wooding and watering. Further up, on the same side, lies a cove, called Sheep's Head Cove. Directly off this cove, near the middle of the passage, up the harbour, lies a shoal, on which is only 9 feet water; this is the only danger in this harbour.

Bald Head lies N. E. by E. nearly 1 mile from the Fermouse Harbour, and from Bald Head to Black Head, the course is N. by E. 1 mile.

AQUA FORT HARBOUR. From Black Head to the entrance into the the harbour of Aqua Fort, the course is N.W. 1 mile; in the entrance is a high rock above water. The passage into the harbour is to the northward of this rock, in which you have 15 fathoms water. This harbour lies in west about 3 miles; at about $2\frac{1}{2}$ miles from the entrance it is very narrow, where you have 4 fathoms water; but just within the narrows, on the north shore, is a small cove, in which you will have

7 fathoms water : this is a good place for vessels to heave down, the shore being steep. To sail up through the narrows, take care to give the stony beach on the north shore, without the narrows, a berth, it being a shoal along that beach, except at the point of the narrows, which is bold-to.

FERRYLAND HARBOUR. Ferryland Head lies E. $\frac{1}{2}$ S. distant 2 miles from Aqua Fort, and N.E. $\frac{1}{2}$ E. distant $3\frac{3}{4}$ miles from Fermouse. Ferryland Head is moderately high, having two high rocks above water, lying close off the head, called the Hare's Ears. This head is not easily distinguished, by reason of the main land within it being much higher. The entrance into Ferryland Harbour lies to the northward of Ferryland Head between it and Isle Bois, and is little more than half a cable's length wide ; but after you are within Isle Bois it is better than a quarter of a mile wide, and tolerable good anchorage in 8 or 10 fathoms water ; but the north-east winds heave in a very great sea over the low rocks that run from the Isle Bois to the main.

From Isle Bois to Goose Island, the course is N.E. by N. $\frac{1}{4}$ N. distant half a mile ; and from Goose Island, to Stone Island, the course is N. 5° W. distance half a mile.

CAPLIN BAY runs in N.W. by N. $2\frac{1}{2}$ miles from Goose Island ; it is tolerably good, having a safe passage into it on either side of Goose Island. To the northward of Goose Island, between it and Stone Islands, there is not the least danger, the island being bold-to. If you pass to the southward of Goose Island, between it and Isle Bois, be sure to keep the point of Ferryland Head open to the eastward of Isle Bois, in order to avoid a sunken rock, on which is only 2 fathoms water, and lies nearly midway between Goose Island and Cold East Point ; after you are within this rock, there is not the least danger in sailing up the bay. The best anchorage is abreast of a cove on the larboard hand, about half a mile within Scogin's Head, in 16 or 17 fathoms water.

From Ferryland Head to **CAPE BROYLE**, the course is N.N.E. $2\frac{3}{4}$ miles. This cape is high table land, and makes in a saddle, either from the northward or southward. From the north part of the cape, E.S.E. three quarters of a mile, lies a small rock, called Old Harry, on which is only 3 fathoms water ; but between it and the main is upwards of 20 fathoms water. About three-quarters of a mile to the N.E. of the north part of Cape Broyle lies a ledge of rocks, called Horse Rocks, on which you have from 7 to 14 fathoms water : in bad weather the sea breaks very high on these rocks. The mark for these rocks is a white house on Ferryland Downs open with Stone Islands, and the head of Cape Broyle Harbour open will carry you on them.

CAPE BROYLE HARBOUR. From the north part of Cape Broyle to the south part of Brigus Head, the course is N. by W. distance 2 miles. These points form the entrance into Cape Broyle Harbour, which runs $3\frac{3}{4}$ miles up. About $1\frac{1}{4}$ mile within the entrance on the north shore is a cove, called Admiral's Cove, in which you may anchor in about 12 fathoms water, good ground ; but here you will lay open to the south east. The best anchorage is above the Narrows, in about 7 fathoms water ; the only danger in sailing up the harbour is a ledge, called Saturday's Ledge, and lies about a cable and a half's length without the Narrows on the north shore : if you are coming in from the northward, keep the Saddle on Brigus Head open with the point of Admiral's Cove, it will carry you clear off this ledge. After you are

above the Narrows, you may anchor in about 7 fathoms water, good ground; here you will be very handy for wooding and watering.

BRIGUS by South is a small harbour, only fit for boats, and lies close to the northward of Brigus Head.

Cape Neddick lies $4\frac{1}{2}$ miles from Cape Broyle, and $7\frac{1}{4}$ miles from the Hare's Ears off Ferryland. This cape is table land, of a moderate height, and steep towards the sea. From Cape Neddick to Baline Head, the course is N.E. by E. distance $1\frac{1}{2}$ mile. Baline Cove is about one quarter of a mile to the northward of Baline Head; this is but a small cove, fit only for boats. From Cape Neddick to the outer point of Great Island, the course is E.N.E. $\frac{1}{2}$ N. distance $2\frac{1}{2}$ miles. This island is about half a mile in length, and of a moderate height.

From Baline Head to Spear Isle, the course is N.N.E. $\frac{1}{2}$ E. distance 1 mile. Nearly within this island a fishery is carried on, but no safe anchorage, the bottom being rocky. Toad's Cove is about a mile to the northward of Spear Isle, and is only fit for boats. About $1\frac{1}{2}$ mile from Spear Isle, lies the south point of Momable's Bay, called Tinker's Point; from this point to the north point of the said bay, being the south point of Witless Bay, the course is N.E. by E. distance $1\frac{3}{4}$ mile. Momable's Bay is an open bay, about 1 mile deep.

Green Island is a small round island, about three quarters of a mile from the south point of Witless Bay. From this point lies a ledge of rocks, about one-third of the distance over to Green Island.

The south point of Gull Island lies about three quarters of a mile to the northward of Green Island, and is about 1 mile long, and a quarter of a mile broad, and is pretty high land.

WITLESS BAY runs in about 2 miles from Gull Island: in it is a moderate depth of water, good ground, but open to the sea. About half way up, on the north shore, lies a ledge of rocks; part of these rocks show above water at about half tide.

BAY OF BULLS. One mile and a quarter to the northward of Gull Island, lies the south point of the entrance into the Bay of Bulls; from this point to the north point of the said bay, called Bull Head, the course is N.E. by E. distance $1\frac{1}{4}$ mile. The best anchorage in this bay for large vessels, is about half a mile from the head, in about 14 fathoms water; but small vessels may anchor higher up, and moor to the north shore, and will then lie land locked. The only dangers in this harbour are a small rock off Bread and Cheese Point, but is not above 20 yards off, and a rock, on which is 9 feet water, lying off Magotty Cove, about half a cable's length off shore.

From Bull's Head to the south point of Petty Harbour, the course is N.E. distance $8\frac{1}{4}$ miles; from this point runs a ledge of rocks for about a quarter of a mile.

PETTY HARBOUR. From the south point of Petty Harbour to the north point, the distance is $2\frac{1}{2}$ miles. Between those points lies Petty Harbour Bay, which runs in about 2 miles; at the bottom is a small cove, where a fishery is carried on.

CAPE SPEAR. From the north point of Petty Harbour to Cape Spear, the course is N.E. distance $2\frac{1}{4}$ miles. This point is rather low and ragged, and may be known by the land to the northward trending away to the N.W.

Since the 1st of September, 1836, a lighthouse on Cape Spear has exhibited a powerful revolving light, at 275 feet above the level of the

sea, which in clear weather may be seen at 8 leagues off. The light shows a brilliant flash at regulated intervals of one minute.

Upon Fort Amherst, on the south head at the entrance of St. John's Harbour, there is shown a brilliant fixed light, which may also from its elevation be seen at a considerable distance.

ST. JOHN'S HARBOUR. This is the capital of the island, being the seat of Government; and although its entrance is narrow, its harbour is excellent, and its situation readily known, both by the Blockhouse built on Signal Hill, at the north side, and Fort Amherst, on its south side, or point of entrance. The channel, from point to point is only 160 fathoms wide; but it gets wider just within the points than between them, decreasing again as you approach the Chain Rock, for, from the latter to the Pancake Rock, the distance is only 95 fathoms; these are rocks both being above water and steep-to: Chain is the northern rock, and Pancake Rock lies on the south side of the channel.

In approaching the harbour of St. John's with a large ship, care must be taken to avoid the Vestal Rock, which lies about 50 fathoms off the southern, or Fort Amherst Point; over this rock are 25 feet water: the marks for it are Fort William, or the Old Garrison, just open of the south head; and the outer Wash Ball Rock, open to the eastward of the Cuckold's Head: these latter rocks lie close to the northern point of the harbour, and are always above water, being steep-to, and therefore not dangerous. The course in is N.W by W. the shores continuing bold until you get near to the Pancake, then give the south side a small berth, continue the same course, or rather more inclined to the westward, keeping Fort Amherst Flagstaff open to the northward of Frederick's Battery Flagstaff; you will, by these means, avoid the Prosser, a rock on the larboard side, running off the end of another rock, formed like a saddle with 18 feet water in the hollow, and only 5 feet on its outside; yet it is steep-to, having not less than 5 fathoms close to it; so soon as you are within, and have passed the Prosser Rocks, you may steer up as you please, both shores being clear of dangers, and anchor in from 4 to 10 fathoms water, on a bottom of mud, and lying quite land locked.

The winds from the S.W. to the southward, as far as N.E. by E. blow in, all other directions of the wind either baffle or blow out of the Narrows; with the latter winds you must warp in, for the convenience of doing which rings are fixed in the rocks on each side: the anchorage within the Narrows has from 10 to 16 fathoms, and a little before you enter the Narrows there are 20 fathoms.

The tides rise 6, 7, and 8 feet, but very irregular, being much influenced by the winds; and the variation is about two points west.

A stranger to the coast should be careful not to mistake Kitty Vitty, a small place, fit only for boats, lying about 1 mile to the northward of St. John's, for St. John's itself; at a distance it has the appearance of a good harbour; he will therefore observe, that at Kitty Vitty's south side is a round hill, shaped like a haycock, standing upon Cuckold's Head; while St. John's Harbour may be distinguished by Fort Amherst, which appears white, and by the flagstaves on the hill, over the north point of entrance; these will sufficiently denote the right entrance.

About 1 mile from Cuckold's Point, is a small point or projection of the land; and 2 miles further is Sugar Loaf Point, tapering upward, and much resembling a sugar loaf. One league further is Red Head; between Sugar Loaf Point and which is Logy Bay.

TORBAY. One mile and a half from Red Head, is the south point of Torbay, which is somewhat lower than the others. From this point to Green Cove, the customary place where vessels anchor, the course is N.W. by W. about 2 miles, where you may ride in 14 and 12 fathoms, but it is much exposed to seaward. This bay is large, being full a league in extent; from off its northern point is a flat rock, where the sea breaks; a heavy swell sets from the eastward into the bay, so that it is not a good place to lie in.

From Flat Rock Point, which is low dark land, the coast runs northerly to Red Head, a distance of 2 miles; and from thence to Black Head, N. by E. 2 miles more; the latter bearing north, distant $6\frac{1}{2}$ miles from Torbay South Point.

CAPE ST. FRANCIS. From Black Head to Cape St. Francis, the course is N.N.W. distant 1 league. Cape St. Francis has a white appearance, and is itself low, but above it the land rises high. A little south of the cape is Shoe Cove, a place used in bad weather for splitting and salting their fish. Off the cove there is good fishing, and with northerly, westerly, and southerly winds, you will lie safe within the cove.

About $1\frac{1}{4}$ mile to the eastward of Cape St. Francis, in a triangular position, lie some sunken rocks, called the Brandys, on which the sea generally breaks: there is a channel between them and the cape, but too dangerous to be made use of, while the rocks add to the safety of Shoe Cove. Another small cove, to the northward of the cape, may be used with the wind off shore.

CONCEPTION BAY.

From Cape St. Francis, the southern point of Conception Bay, to Bacalieu Island, the northern boundary of the entrance, the course and distance is N.N.E. 18 miles; this bay is very extensive, running to the south-westward, and contains many smaller bays and inlets, of which we proceed to give a more minute description. Bacalieu Island is high land, and is $3\frac{1}{2}$ miles in length from north to south, about $1\frac{1}{2}$ broad, and lies about the latter distance from the main: nearly midway between its south point and Split Point lies a small rock, on which are 6 fathoms water, and on which the sea breaks very high in blowing weather, but the water is deep around it.

BELLE ISLE. Four leagues S.W. by W. from Cape St. Francis is Belle Isle, which is $5\frac{1}{2}$ miles in length, and about 2 miles wide; this island is lofty, its eastern side is near 3 miles off the main, and there is on this side a beach, to the southward of which is good anchorage in 30 fathoms, sandy ground: a league further, near the south part of the island, is also tolerable anchorage in from 15 to 30 fathoms. At the south end of the island is a small cove, called Lance Cove, where fishing vessels sometimes resort to, and find good shelter for 5 or 6 vessels. One mile from the south part of the island lies a rock, over which is $2\frac{1}{2}$ fathoms water. Two miles S. by W. from Lance Cove, lies a small

low island, called Little Belle Isle ; W.S.W. of which, distant $1\frac{1}{2}$ mile, is Kelly's Island, of middling height, and about three quarters of a mile in length.

From Cape St. Francis to Bay Verde Head, the course is N. by E. nearly 6 leagues. This is high and round, and is easily known by the island Bacalieu, and Split Point within the island on the main : these three heads show very bluff, and very like one another when seen from the southward.

BAY VERDE, where the ships lie, is about half a mile to the westward of the head ; the entrance is not above a cable's length across, and the ships lie in 5 fathoms water about half a cable's length from the head of the bay, with one anchor out a-stern, and the other cable fast on shore a-head ; there is room only for 7 or 8 ships to lie, even in this manner ; and it is a dangerous place with south-westerly winds, which blow right into it.

From Bay Verde Head to Flambro' Head is W.S.W. $\frac{1}{2}$ W. about $4\frac{1}{2}$ miles : this head is black and steep, but there is no place of shelter near it except with off-shore winds. About 2 leagues higher up the bay is a small cove, called Island Cove.

From the south point of Bacalieu Island to Northern Bay, is W.S.W. $5\frac{1}{4}$ leagues ; it lies entirely open to the S.E. winds, and there is no safe anchorage in it.

GREEN, or WESTERN BAY, lies S.W. $\frac{1}{2}$ W. $4\frac{1}{2}$ leagues from Bay Verde, and N.W. 13 miles from Cape St. Francis. In the entrance of this bay is very good anchorage in 15 or 16 fathoms water, taking care not to go too far into the bay, lest the wind should come to the eastward, as it lies entirely open to the sea.

From Green Bay Point to Broad Cove Head, the distance is about $3\frac{1}{2}$ miles : off Broad Cove and along shore about 1 mile to the northward, is anchorage in 10 to 15 fathoms water.

SALMON COVE HEAD is about 5 miles S.W. by W. from Broad Cove Head ; this is a remarkable high steep head, but the cove affords shelter for boats only.

CARBONIERE. From Salmon Cove to Carboniere, the course is W.S.W. 4 miles. The island lies 1 mile from shore : its south end is low. The harbour is about 1 mile wide, bold to the shore on both sides ; as is the island, excepting its S.W. end, where there are some rocks under water. On the main opposite Carboniere Island are two coves, namely, Clown's Cove, and Croker's Cove, off which are several rocks both above and under water ; therefore, in sailing or working in or out of Carboniere, give the rocks a small berth, and after you are up with Otterbury Point, you may stand close over on either shore till you come near the head of the harbour. You may anchor in what depth you please in from 5 to 10 fathoms, but the ground is indifferent, being in some parts rocky. The passage to the southward of Carboniere Island is not safe, being very narrow, by reason of some sunken rocks which extend both from the island and the point.

MOSQUITO COVE lies to the southward of Otterbury Point, between it and the entrance of Harbour Grace ; in it is good anchorage on clean ground.

HARBOUR GRACE. The entrance of Harbour Grace is 1 league to the southward of Carboniere Island. A rock called the Salvage, stands nearly in the middle of the channel ; and there is another called

Long Harry, near the North Shore, having only a boat passage between it and the main. Both are of great height above the water. Within the bay, a bar or ledge extends from the south side, more than half way over.

You may turn into Harbour Grace, all the bay over from side to side. The Salvage may be passed on either side, as most convenient; and having passed within this rock, you may turn from side to side, by the lead, till you draw toward the edge of the bank, then proceed by the North Shore.

You may know when you are near the bar, or ledge, by two white rocks on the land, by the water side, in a bank on the north side, which show whiter than any other part; these are about a mile below, or to the eastward of the beach, which is proper to be known: by keeping near the North Shore, you will find $3\frac{1}{2}$ fathoms on the bar, and presently after 4, 5, 6, and 7 fathoms; but if you stand over to the southward, till you have advanced within the bar, or ledge, you shall not have above 7, 8, or 9 feet of water: this sand trends S.E. from athwart the two white rocks abovementioned, and extends up to the South Shore. Having passed its outer extremity, you may turn from side to side till within the beach, on the north side, and ride land locked in 4, 5, or 6 fathoms, or higher up in 7, 8, 9, or 10 fathoms, as you please. Three islets, called Harbour Grace Islands, lie off the south point of the entrance of Harbour Grace, in an east and west direction. No vessel should attempt a passage between them and the main, as the ground is foul and shoal, and there are rocks about the islets.

BRYANT'S COVE, to the southward of Harbour Grace, is not a place for ships: it is, however, a good place for fish. A rock lies in the middle of the entrance, on each side of which are 4 or 5 fathoms water.

From Harbour Grace Islands to the entrance of **SPANIARD'S BAY**, the distance is about 2 leagues. This bay is about 1 mile wide, and 4 miles deep; there is anchorage near its head in 7 or 8 fathoms water, but it is open to S.E. winds.

BAY ROBERTS is separated from Spaniard's Bay by a narrow neck of land. About 1 mile from the entrance on the starboard side, is an island of a tolerable height, between which and the main vessels may anchor, but the ground is bad; and there are two sunken rocks within it, one lying near the inner side of the island, and the other above the island near the main. Two miles above the island on the same side is the north-west arm, in which is excellent anchorage in 5 or 6 fathoms water, on a muddy bottom; but be sure in sailing in to give the south point a good berth, in order to avoid some sunken rocks which lie off it: on the starboard shore it is shoal also, near half a cable's length off.

From Bay Roberts Point to Burnt Head, the distance is $2\frac{1}{2}$ miles. Between is the entrance of Port Grave Bay, which runs up from the former above 5 miles south-westward. About 1 mile above Bay Roberts Point is Blow-me-down Head, remarkable by being higher than the land near it; and about half a mile to the south-westward of it is Sheep Cove, where small ships may lie in 4 or 5 fathoms water, moored head and stern, with the S.W. anchor in 22 fathoms water, about a cable and a quarter's length from the ship.

PORT GRAVE. Port Grave is about three quarters of a mile to the westward of Sheep Cove; within the islands the water is shallow, fit only for boats; but about one-third of a mile without them is

anchorage in 20 to 25 fathoms water: but quite exposed to south-easterly winds.

CUPID'S COVE lies on the south side of Port Grave Bay, about $1\frac{1}{2}$ mile from Burnt Head; in it is good anchorage in 5 or 6 fathoms water; there is room for 2 or 3 ships to lie at their anchors, land-locked, and the north side is so bold that ships lie alongside the rocks, and take in their cargoes. The land on the north side of the entrance is remarkably high, and thence called Spectacle Head.

Port Grave Bay runs about 2 miles up above Spectacle Head, is about a mile wide, and the soundings are gradual on both sides, and to the head, where there are conveniences for ship-building.

BRIGUS. From Burnt Head to Brigus Head is S.S.W. 2 miles. Brigus runs in from this head W.S.W $1\frac{1}{2}$ mile; in it is anchorage in 10 or 15 fathoms water, but it is entirely open. At the head on the south side is an island, within which small vessels may anchor in 3 or 4 fathoms water, but must moor to the shores, where they will be secure from all winds.

COLLIER'S BAY lieth about $2\frac{1}{2}$ miles S.S.W. from Brigus: it runs in 2 leagues nearly; about $1\frac{1}{2}$ mile from the entrance lies a sunken rock near mid-channel, on either side of which is a safe passage up the bay: this rock shows at three-fourths ebb. Two and a half miles from the entrance, on the east side, is anchorage in about 10 fathoms water, before a cove; small vessels may haul into the cove, and lie in 3 or 4 fathoms water. About $1\frac{1}{2}$ mile higher up on the same side is another cove, but no anchorage in it, being shoal and full of sunken rocks. Near the head of the bay is very good anchorage in 9 or 10 fathoms water.

SALMON COVE lies about 1 league from Collier's Bay to the east. The entrance is about 1 mile wide, and runneth to the S.W. about $2\frac{1}{2}$ miles, then divideth into two arms, one running to the westward 1 mile nearly, and the other to the southward $1\frac{1}{2}$ mile; in either of these arms is very good anchorage, but the best is in the southern arm from 5 to 10 fathoms water; no danger in going into it. To sail into the N.W. arm, keep a rock above water off the point on the larboard hand, going in, well on board, in order to avoid a sunken rock that lieth nearly opposite, a small distance from the starboard shore; there is a passage on either side of this rock, but to the southward is by far the widest.

HARBOUR MAIN lieth about 1 mile from the east point of Salmon Cove; is about half a mile wide and $1\frac{1}{2}$ mile deep; near the head is anchorage in 7 to 10 fathoms water, but is entirely open.

HOLY ROOD is about $1\frac{1}{2}$ mile from Harbour Main, and runneth in about $3\frac{1}{2}$ miles. In a cove on the west side near the head is very good anchorage in 10 or 12 fathoms water, and sufficient room to moor.

Near the south part of Belle Island, and about 1 league from Grand Beach, lieth Lance Cove, off which, and between it and Little Belle Isle, is tolerable good anchorage, from 15 to 30 fathoms water, sandy bottom. About 1 mile from the south part of the island lieth a sunken rock, on which is about $2\frac{1}{2}$ fathoms water.

Two miles S. by E. from Lance Cove lies Little Belle Isle, which is low, and about half a mile in length. Kelly's Island lies about half a mile to the S.W. of Little Belle Isle, and about 2 miles from the point of Topsail Heads: this island is about three quarters of a mile in length, and of a moderate height. On the main within Belle Isle lieth **PORTUGAL COVE**, in which is no safe anchorage.

TRINITY BAY.

THIS extensive bay, between Bacalieu Island on the S.E. and Trinity Harbour on the N.W. is 7 leagues in breadth, and is about 20 leagues in depth; the south point of entrance westward of Bacalieu is called the **POINT OF GRATES**. The next point is Break-heart Point, between which there is a small bay where boats may lie with off-shore winds: there is a ledge of rocks, but they are above water. The course from Break-heart Point to Sherwick Point, going into Old Perlican, is S.W. by W. 5 or 6 miles. Scurvy Island lies some distance from shore, to the southward of Break-heart Point; between it and Sherwick, the coast falls in a pretty deep bay, winding S.S.E. three-quarters of a mile.

OLD PERLICAN. Sherwick Point, off which is a rock above water, from the northern point of Old Perlican; vessels cannot go between the island and point, although the passage appears good and open, because the ground is altogether foul and rocky; always, therefore, run in to the southward of the island, and when you have passed it, anchor in 4 or 5 fathoms; this cannot be considered a good harbour as the ground is bad for holding, and with the wind at N.W. you will be obliged to buoy your cables.

SILLE COVE. From Old Perlican to Sille Cove, the coast rounds to the westward, S.W. and S.S.W. about six leagues. Sille Cove is but an indifferent place for ships.

NEW PERLICAN. From Sille Cove to New Perlican, the distance is a league. This is a very good harbour, where you may lie land-locked in 5, 6, 7, 8, 9, or 10 fathoms. The shores are bold-to, and free from danger; the entrance is nearly 2 miles wide, being bounded by Smutty Nose Point on the east, and Gorlob Point on the west: but as you advance, the harbour becomes narrower, so that at the anchorage it will scarcely be half a mile broad.

Three miles from New Perlican is **HEART'S CONTENT**, a good harbour, fit for any ship, with excellent anchorage toward the north shore, in from 8 to 12 fathoms water. One league further is **HEART'S DESIRE**, fit for boats only; and $3\frac{1}{2}$ miles beyond that is **HEART'S DELIGHT**, another cove, adapted for small craft only.

WITLESS BAY. From Heart's Delight, about 3 miles, is Long Point, projecting considerably into the bay, and a league further is Witless Bay, by no means a place of safety, being too much exposed, and the bottom rocky; between Long Point and Witless Bay are two small islands, which you leave on your larboard side. One mile from Witless Bay is Green Harbour, where vessels may anchor in from 7 to 10 fathoms; three miles further is **Hope-all-a-head**; two miles beyond which is New Harbour, a place of shoal water, and only fit for boats.

DILDO HARBOUR. Two and a half miles from New Harbour is Dildo Harbour, within which is very good anchorage, in a cove, at the

northern side of the entrance, in from 10 to 20 fathoms water, good clean ground. Three miles from thence is Chapel Bay, the mouth of which is a mile broad, and the bay about 3 miles deep; here, behind a small Island about 2 miles in, is good anchorage, in from 8 to 12 fathoms.

COLLIER'S BAY is about 5 miles to the northward, very similar, and running nearly in the same direction to Chapel Bay; 7 miles further is the Point of Tickle Harbour Bay, which runs inward, in a southerly direction, full 8 miles; there is no danger in the way, and though little frequented the anchorage is safe.

THE BAY OF BULLS, running in a N.N. Westerly direction to within 2 miles of Chance River, in Placentia Bay; there is very good anchorage in various parts of this bay, in 12 and 10 fathoms water, particularly on the western side, in a cove, about $1\frac{1}{2}$ mile from the entrance, with from 10 to 15 fathoms, sandy ground; to the N.E. is Bull Island, and 5 miles further Copper Island: both these lie very near the shore.

DEER HARBOUR is an extensive place, and has good anchorage, but barred with many shoals; the first lies midway between Tickle Point and Deer Island, having 6 fathoms on its shallowest part, and therefore not dangerous; but one third of a mile further in, is a bank with only 2 and $2\frac{1}{2}$ fathoms water; bring the point of the N.E. cove open of Shallop Cove Point, and you will go clear to the westward in 7 fathoms water. There is also another shoal lying off the point on the outside of Shallop Cove, on which are $2\frac{1}{2}$ fathoms, this will be avoided by just opening the point of Deer Island with the first point on the main, within Deer Island; and after you have passed Harbour Island you may anchor on good ground, in from 10 to 26 fathoms. The entrance of Deer Harbour bears from the point of Bacalieu Island, W. $\frac{1}{2}$ S. distant about 13 leagues.

JONES'S HARBOUR is full $2\frac{1}{2}$ miles N.E. from the entrance to Deer Harbour, the mouth of which is not above a quarter of a mile wide, and the channel in is, in several parts, still less: it runs in $2\frac{1}{2}$ or 3 miles, and has good anchorage in from 5 to 24 fathoms water. To the southward is a high and steep island, called Jones Island; about 4 miles from which is Bald Head; and 2 miles further Ganny Cove, its entrance is confined, being not more than a quarter of a mile wide; there is nevertheless, good riding within it in 10, 12 and 15 fathoms; about a cable's length off the north shore, just at the entrance, lies a sunken rock, and about a mile S.S.E. from the south point of Long Island, is another rock, by some called White Island, just appearing above water; this rock bears S.W. from Random South Head.

RANDOM NORTH HEAD lies W. by N. distant $9\frac{1}{2}$ leagues from the north end of Bacalieu Island, and about $4\frac{1}{2}$ leagues N. by W. from New Perlican. Random Sound lies to the westward, and comprehends several arms and harbours; thus Random and Smith's Sounds unite and form Random Island, the channel being narrow, long, and circuitous; at the junction of the two sounds is a small island with a bar of only 2 fathoms water, the passage being not a mile broad. The Bonaventure Planters here collect furs.

About 3 leagues from Random North Head lies Hickman's Harbour, where you will find good anchorage in 15 fathoms. Random North Head bears from Random South Head N.E. $\frac{1}{2}$ E. distant 3 miles. When you are within the entrance of Random Sound there is a branch runs

in toward the south-west, about a mile within which is Fox Cove, fit for boats, and 2 miles further Little Heart's Ease, a similar cove running in a quarter of a mile, then dividing into 2 branches, the western one has 4 and 5 fathoms within it, but the eastern branch is shallow and adapted for boats only. There is also an anchorage 2 miles further, on the same side, in a cove with an island before it, with 8 fathoms, and not far from this another cove on the northern side, where a vessel may ride in 7 fathoms.

SMITH'S SOUND has generally deep water, and is in most places 1 mile wide, until you get near the Head. Shut-in Harbour is on the starboard side, it is nearly at the entrance, and has no safe anchorage, the ground being rocky; 3 miles further up is Pope's Harbour, this also is encumbered with rocks, a shoal lying near the middle of it, the direction of the channel is westward about $7\frac{1}{2}$ leagues. To the eastward of Random Island are Duck and Green Islands, both lying a considerable distance from the main; the latter is high and may be seen so far as Trinity Harbour, it bears from Bonaventure Head S.W. $\frac{1}{4}$ S. distant about 6 miles; and Bonaventure Head bears from the entrance of Smith's Sound E.N.E. $\frac{1}{2}$ E. distant 5 miles. To the north-westward of Green Island is Anthony Island and Ireland's Eye; the latter is $3\frac{1}{2}$ miles in length, and lies in a S.W. and N.E. direction, making the larboard side of the entrance to Smith's Sound. The northern point of Ireland's Eye bears from Bonaventure Head nearly S.W. distant $5\frac{1}{2}$ miles.

RYDER'S HARBOUR is a small place of anchorage formed by a little island near the main, and bearing from Green Island S.E. $\frac{1}{4}$ E. distant 4 miles, the passage to it is round the west end of the point, off which are some scattered rocks, both above and under water; within this harbour are 3 fathoms water, and about a quarter of a mile from Ryder's Island the N.W. arm branches off, running westward 1 mile, and being about a quarter of a mile wide; here are 7 fathoms and good anchorage. From Bonaventure Head to Port Bonaventure is 2 miles, but when you are a mile off, and to the southward of the head, the harbour to the Admiral's Stage will lie about N. by W.

PORT BONAVENTURE. The best entrance to Port Bonaventure is between two small Islands, but you may go on either side of them in 3 and 4 fathoms water; with a leading wind there will be little danger, and when you are within, and have passed these islands, anchor in 4 and 5 fathoms; southerly winds here send in a very heavy sea; there is, however, a secure place for boats within a point behind the Admiral's Stage, appearing like a great pond, where 100 boats may lie, even with bad weather, in safety.

From Bacalieu North Point to Bonaventure Head, the course and distance is N.W. $\frac{1}{4}$ W. $22\frac{1}{2}$ miles. Bonaventure Head is remarkably high and steep.

TRINITY HARBOUR. From Bonaventure Head to the entrance of Trinity Harbour, the course and distance is N.E. $\frac{1}{2}$ N. $4\frac{3}{4}$ miles, and from Bonaventure Head to the Horsechops 8 miles.

TRINITY HARBOUR is considered one of the best and largest harbours in all Newfoundland, having several arms and coves, where some hundred ships may ride land-locked. It is a place which you may safely turn in or out, being bold-to on each side, and having no danger but what is visible; except when going into the S.W. arm, where the

Admiral's Stage usually is, there is a shoal, called the Muscle Bank, which shoots off from the point within the small island on the larboard side going in, and extends over N.N.W. about a third of the breadth of that arm. Being within that bank, which will discover itself by the colour of the water, you may edge over close to the south shore, or keep your lead going to avoid the Muscle Bank, giving it a little distance.

You may anchor in from 14 to 10 fathoms and approach near to the stage on shore, so as to make a stage with topmasts to your stage on shore, to load or unload your ship. This will be found a most excellent harbour; for, after you are in the S.W. arm, you will perceive another branch running up to the N.W. which is continued by another to the S.W. but there is a bar or ledge, at the entrance of the S.W. arm.

The N.W. arm is also a large place, having good anchorage for 500 sail of ships. Besides the fore-mentioned arms, the main harbour turns up to the north. Ships, being within the harbour's mouth, may safely ride in a large cove on the starboard or east side, land-locked, on good ground: here the planters live. Over against that cove, on the larboard or west side, are two other coves: the southernmost of them is called the Vice Admiral's cove, very convenient for curing fish; and above, or to the northward of that, is a large cove, or arm, called Got's Cove, where there is room enough for 300 or 400 sail of ships to ride, all on clear ground; there neither winds nor sea nor tide can hurt you, and in this place ships may lie undiscovered until the weather becomes clear and open.

There are several other anchoring places in this harbour with good clean ground. The bottom every where is tough clay, with 4 and 5 fathoms water, within two boats' lengths of the shore; and 6, 7, 8, 9, 10, 12, and 14 fathoms, and in some places more, in the middle of the arms and channels. You may turn in or out readily, observing your tide, which rises about 4 feet, and sometimes more.

TRINITY BAY TO CAPE BONAVISTA.

ROBINHOOD'S BAY is formed on the southwest side by Sherwick Head: the entrance is a mile wide, and the bay extends northward nearly 2 miles; here vessels frequently ride and fish in from 7 to 17 fathoms water; at the further or upper end of this bay there are some spots of shallow water, but at its entrance, and between Sherwick and Fox Island Points, there is no danger whatever.

SALMON COVE and ENGLISH HARBOUR lie to the eastward of Robinhood's Bay, being only divided from it by a narrow neck of land, called Fox's Island. The former of these runs in northerly, and is considered a good fishing place; it is clear of dangers, and has a good depth of water, from 17 to 10 and 8 fathoms; the eastern shore is bold-to, and at the further end of the cove there is a small run of water, which extends about 2 miles to the northward.

ENGLISH HARBOUR is situated at the south-eastern entrance of Salmon Cove; it is a clean bay, where you may ride in 4 and 5 fathoms

water. From hence the coast rounds to the eastward to the Horsechops, a distance of more than 3 miles; it is all high land, steep-to and without danger. To the north-eastward of Horsechops is Green Bay, open and entirely exposed to the southward; at the eastern part of this bay is a small sandy beach with a rivulet of water; this place is little frequented, and is neither convenient for ships to fish or ride in. When you have passed this bay, there is no sheltering cove or place until you reach Ragged and Catalina Harbours.

RAGGED HARBOUR is so named from the rough and craggy appearance of the surrounding rocks, which render it unsafe for either boats or ships to enter; but for those who intend going there, we shall observe, they must go to the northward of the reef of rocks at its entrance, running on north, until the harbour comes quite open, then you may steer in between the Round Island near the main, and a large black rock, being the outermost of the ragged ones before mentioned; sail on until you are to the westward of them all, or until you get the south head of Catalina to appear between the westernmost rock and the main, then anchor. A river of good water is at the head of the harbour.

CATALINA HARBOUR is nearly 2 miles to the northward of Ragged Harbour. It is a good harbour for small vessels, and may be known by a singular green Island at the south point of its entrance; near half a mile to the north of this island, is the Brandy Rocks, a ledge over which the sea frequently breaks; you may go on either side of these rocks, giving the Little Island a berth, or with a leading wind between the island and the main, though this passage is exceeding narrow, in 4 and 5 fathoms. Just within the entrance of the Harbour is Charlton Rock or Shoal, lying nearly mid-channel, over which are only 8 feet water; you must avoid bringing the north point of Green Island on with Burnt Head, the south point of the harbour, for that will carry you right upon the rock; there is a passage between the island and the rock, and also between the rock and the north shore, only steering nearer the main about two-thirds over.

LITTLE CATALINA BAY lies inwards on the northern side; from Catalina Harbour to Little Catalina the course is about N.E. $1\frac{1}{2}$ mile; and thence to the north head of the bay E.N.E. a little easterly $4\frac{1}{2}$ miles; when within the harbour you may anchor close to the shore in 4 and 5 fathoms land-locked; or to the southward of the Little Green Island in $3\frac{1}{2}$ fathoms, or by running up 2 miles further obtain fresh water. In the S.W. arm or branch of the river, where there is anchorage in 5 fathoms, the harbour runs westerly. Sometimes the water in this harbour will suddenly rise 3 or 4 feet, then fall again, and in certain seasons it will often do so two or three times in 3 or 4 hours. It abounds with salmon, and the herb Alexander grows luxuriantly on the little island; near a small cove, at the N.W. is a sort of mineral, of a glittering nature, generally called Fire Stone; excellent willicks may be found on the rocks.

From the north head of Catalina to Flower's Point, the course is N.N.E. $\frac{1}{4}$ E. distant $2\frac{1}{2}$ miles; and 1 mile to the eastward of the point lie some sunken rocks; you may go between Flower's Point and these rocks, in 6 fathoms water, but it is more advisable to pass on the outside of them; this you will readily do by bringing Gull Island open of Spiller's Point, or by keeping the south head of Catalina open of the north head.

BIRD ISLANDS. From Flower's Point to the Bird Islands is 2 miles ; within Bird Islands is a small bay where ships can occasionally ride, in one branch which runs up toward the west, and in the other, amidst some rocks, which are above water. Bird Island's Bay extends so far as Cape Larjan.

From Flower's Point to Cape Larjan is $3\frac{2}{3}$ miles, it is rather a low rocky point, having also a large rock above water lying off it.

From Cape Larjan to Spiller's Point, is $1\frac{1}{2}$ mile ; between these points, the lead falls into very deep water. Spiller's Point is steep and bold-to, but not very high, with a rock above water near it ; over the point you may discern the high land of Port Bonavista a great way off at sea.

BONAVISTA TO CAPE FREELS.

From Spiller's Point to Cape Bonavista the course is N. $2\frac{1}{4}$ miles : there is an apparently deep bay between, which might be mistaken for the Harbour of Bonavista. The cape is in latitude $48^{\circ} 42' N.$; it appears at a distance of a blueish or sky colour ; it is a steep rocky point having 4 fathoms close to its base.

GULL ISLAND, OLD AND YOUNG HARRY, &c. About half a mile N.N.E. from the extremity of the Cape lies Gull Island, which, though small, may easily be recognized, by being of moderate height and elevated in the middle, making something like a round hat with broad green brims, and visible 4 or 5 leagues off, when the weather is clear. N.N.E. $\frac{1}{2}$ E. distant $3\frac{1}{2}$ miles from Gull Island, is the Old Harry Rock, having only 13 feet water over it ; from this a reef or bank extends to the N.E. nearly 3 miles, having several dangerous spots upon it, of only 18 feet and 3 or 4 fathoms ; the outer edge of this danger is called the Young Harry ; its northern extremity is 10 fathoms water, and a little further off 45 fathoms ; between the Young Harry and the middle ground of 18 feet, are 12, 20, and 50 fathoms ; to the northward of the middle ground are 60 and 40 fathoms ; to the eastward 19 and 20 fathoms ; to the southward, and between it and the Old Harry, 26 and 31 fathoms ; at the north part of the Old Harry is 11 fathoms ; to the westward 30 fathoms ; to the S.W. 9 fathoms ; and a little further S.W. 57 fathoms. Abundance of fish are caught by the boats which frequent this bank, but it is very dangerous for shipping. The sea commonly breaks over Old Harry, unless in fine weather and the water be very smooth, but the other part of the shoals shew themselves only in, or immediately after, heavy gales on the shore.

Vessels running along shore, to avoid these rocks, must be careful in keeping Cape Bonavista open with the westernmost extremity of a high range of land to the southward, called the Inner Ridge ; these dangers, together with the long ledge, called the Flowers, already noticed, render it very imprudent for a mariner to attempt making land hereabout in thick or boisterous weather ; indeed at any time, the Island of Bacalieu is the best and safest land-fall for the stranger that is bound to any part of Bonavista Bay.

GREEN ISLAND is an isle half a mile in length, lying nearly parallel with the western side of Cape Bonavista. The passage between admits small vessels only, being narrow, and some spots have shoal rocks. At $1\frac{1}{4}$ mile to the westward of Green Island is a small islet called Stone Island, with a reef on its eastern side, but the general depths between are from 8 to 16 fathoms.

RED COVE. At a mile to the southward of Green Island is a reef called the Red Rocks, lying off Red Cove, which is terminated by Western Head. In succession after this, between it and the port of Bonavista, are Red Point, Moses Point, and Swerry Head, the two last with their surrounding rocks, marking the north side of Bonavista Harbour.

PORT BONAVIDA. From Cape Bonavista to Port Bonavista the courses are south-westward, about 4 miles. If you come from the southward, and intend for Bonavista, you must leave Green Island on your larboard side. You may sail between Green Island and Stone Island with any ship without danger, the channel being safe and bold: or you may go to the westward of Stone Island, and run to the southward till you open the Harbour of Bonavista, and are past Moses Point, and so to the southward of the rocks called the Swerrys, which are high rocks, having no passage to the northward of them. Here you may anchor in from 11 to 5 fathoms, as you please, but you must always have a good anchor in the S.W. and another fast in the Swerrys, or in the N.W. for westerly winds blow directly into the road.

Small vessels may go between Green Island and the main, and so to Redhead; but the bay between the points (over against Green Island) and Redhead, is all foul ground. At a little distance, or about a cable's length from the shore is a sunken rock, but boats may go between the shore and it. The sea breaks on it. Being past Western or Redhead, the course to Moses Point is W.S.W.; between is a large bay or cove, called Bayley's Cove, where you may anchor on occasion, not advancing too far in, as all its shore is rocky and shoal.

Bonavista Harbour is an anchorage of little consideration, further than being an eligible situation for carrying on the fishery, being so very badly sheltered that, in N.W. gales, immediately following a continuance of heavy winds from seaward, the water breaks right athwart the harbour, and sometimes the whole of the fishing boats founder at their anchors, and not unfrequently many of their stages are destroyed; however, vessels during the summer months moor under Swerry Head, in 8 or 10 fathoms; but even there, as in every other part of the harbour, the ground is so rocky and uneven, that they are necessitated to buoy up their cables.

BONAVIDA BAY. This extensive Bay is limited by Cape Bonavista on the south, and Cape Freels on the north. The bearing and distance from one to the other is N. $\frac{3}{4}$ E. 41 miles. The position of Cape Bonavista is, latitude $48^{\circ} 42'$, longitude $59^{\circ} 59'$; that of Cape Freels, latitude $49^{\circ} 20'$, longitude $53^{\circ} 24\frac{1}{2}'$. The whole coast between is tortuous or much indented, rocky, difficult, and dangerous. On the south, the land is high and mountainous, and the coast steep and iron-bound; on the north side it is low and marshy, and from the shore the water is shoal to a considerable distance, abounds with small islands, and is encompassed with dangers on every side.

The harbours in Bonavista Bay are numerous, and safe when once gained; but they are, in general, so deeply enbayed, the land is so

diversified, and the passages so intricate, that their navigation is seldom attempted, unless by those who, from long experience, have a perfect knowledge of the coast; yet, should it become necessary, from stress of weather or other circumstances, for a stranger to seek shelter, the places recommended for this purpose are, Barrow and Great Chance Harbours, in the S.W. part of the Bay; or New Harbour and Cat Cove on the N.W.

BLACKHEAD BAY. Black Head is $2\frac{1}{4}$ miles S. by W. from the Harbour of Bonavista, and Southern Head is 8 miles N.W. by W. $\frac{1}{4}$ W. from Black Head. The latter are the two extremities of Blackhead Bay, which is 2 leagues in depth. On the S.W. side of this bay, at nearly $1\frac{1}{2}$ league to the southward of Southern Head is the fishing establishment on King's Cove; but this is even a less desirable place of shelter than Bonavista, lying directly open to the seaward, and having a foul bottom.

KEELS. From Southern Head to Western Head the distance is 4 miles N.W. by W. $\frac{1}{4}$ W. The coast between forms five coves, on the second of which, Keels, is a fishing village; but neither this nor any of the other coves are fit places for vessels of burthen.

From Western Head the land bends W.S.W. $\frac{1}{2}$ S. and leads to numerous coves, bays, and arms of the sea, most of which have deep water, and places of anchorage. We shall here enumerate the principal of these, with their respective situations, but, as many of them are too deeply embayed for general navigation, we shall not extend our directions to a minute or particular description of them all, but confine ourselves to such only as are situated in prominent parts of the Bay, and are mostly fitted for general use, and commonly frequented.

PLATE COVE is situated on the coast about $7\frac{1}{2}$ miles distant from Western Head; its entrance between Arrow Point and Plate Cove Head is three quarters of a mile wide, from whence it bends in more than a mile to the southward; at its eastern extremity is a run of fresh water, but the bottom is foul and rocky, it is therefore not much frequented.

INDIAN ARM lies about S.W. by W. from Plate Cove Head, distant 3 miles; it is a narrow inlet running in nearly S.W. about 2 miles, and terminates in a rivulet of fresh water.

SOUTHWARD BAY is separated from Indian Arm only by a narrow neck of land; this is an extensive branch of the sea, its entrance between Red Head and Kate's Harbour Head, is a full mile wide, with 30, 50, 80, and 90 fathoms water, mid-channel; from hence it bends to the south-westward $7\frac{1}{2}$ miles, becoming narrower as you advance, but with deep water and no danger. On the western side there is an opening called Hayes Cove, it lies about 2 miles from Kate Harbour Head.

BACON-BONE ROCK. Vessels intending to seek either of these places, must beware of the Bacon-bone Rock, a danger of only 18 feet water over it; this lies W. $\frac{1}{2}$ N. distant 1 mile from Western Head, and directly in the fair way of the navigation. To avoid this danger, do not shut in Southern Head until Little Denier comes on with the outer Shag Island.

KATE HARBOUR lies to the westward of Plate Cove; its entrance is three-quarters of a mile wide, and the harbour runs in about $1\frac{1}{4}$ mile; the depth of water is 36, 29, and 27 fathoms mid-channel, decreasing as you advance to the further end; there is a rock under water off its entrance with 7, 8, and 9 fathoms round it; this lies nearer to Kate's Head,

but there is a passage between them, and also a still wider channel on the western side of the rock.

SWEET BAY is another extensive inlet, lying to the westward of Kate Harbour; its entrance is between Cutler's Head and Chace Point, and leads also to Maidenhair Cove, and Little and Great Chance Harbours. Sweet Bay is the easternmost inlet; which having entered, and passed Cutler's Head, which is rocky and steep-to, you will see Turfpook Island, it is small and narrow: about half a mile to the S.W. of this is Woody Island, and between them a rock under water; there is a passage on either side of these, and when you get beyond Woody Island, the bay becomes about three-quarters of a mile wide, with 60 fathoms water midway; advancing still further you will observe several islands in your passage; there is also a rock under water on your starboard side, three-quarters of a mile beyond Woody Island; it lies abreast of a little island which is mid-channel; further on is Wolf Island, between which and the main there is no passage; off this lies Gooseberry Island, between which and Wolf Island there is 30 fathoms water, but the channel is narrow, and that on the eastern side of Gooseberry Island is much wider; Sweet Bay here divides into two branches, that to the eastward is called the S.W. arm, and has directly before its entrance Hunt's Island, the channel to the eastward of which has 10, 12, and 14 fathoms water, and that to the westward 7 and 9 fathoms, you will then see on your starboard side a small island, you may pass it on either side, and having so done, will drop into 24, 22, and 20 fathoms water; the head of the arm is foul and rocky. The N.W. arm is divided from the S.W. arm a little below Hunt's Island, and at the further end of Wolf's Island is nearly a mile wide, from whence it runs south-westerly $3\frac{1}{4}$ miles, with good depth of water, and clear of dangers; at the bottom is a sandy beach and a small rivulet.

GREAT CHANCE HARBOUR. The entrance of Great Chance Harbour, which is an excellent anchorage, lies 10 miles W. $\frac{3}{4}$ S. from Western Head. The passage to it is clear with the exception of the Bacon-bone, already mentioned. In sailing for this place the safest way is, not to shut in Southern Head until the isle called Little Denier, bearing N. $\frac{1}{4}$ W. comes on with the outer Shag Island. Thus the Bacon-bone will be avoided, and you may steer for the harbour S.W. by W. and West, without having any danger to encounter until you approach the entrance: but here, in the southern part, lies a sunken rock, with only 6 feet of water. Within this rock, and in a line with it, are two islets, called the Mustard-bowls; in order to avoid the rock, be careful not to shut in the western Mustard-bowl with the eastern, but, having passed the latter, you may stand boldly in, approaching the shore on either side as you please, and you may anchor any where above the narrows in from 11 to 5 fathoms, perfectly land-locked and good holding-ground. Wood and water may easily be procured here.

At 2 miles E. by N. from Chance Point, (the outer point of Chance Harbour) is a spot of ground with 7 fathoms, over which the sea breaks in very heavy gales from seaward, but it is not dangerous in fine weather.

CHANDLER'S REACH is the channel leading to Goose Bay and Clode Sound; the course through which is W. $\frac{1}{2}$ S. which from the N.W. point of Deer Island will take you to Connecting Point; this is the point of the peninsula that divides the former from the latter. Goose Bay runs

in south-westerly, about $7\frac{1}{2}$ miles, and by keeping in mid-channel you will meet with no danger, but have 47, 40, and 36 fathoms water, until, having passed Lubber's Hole, the depth decreases to 12, 13, 10, and 8 fathoms, when you will see a small island, situated to the westward of Goose Head; behind and to the westward of this, you may anchor in from 4 to 7 fathoms, or further to the southward in $5\frac{1}{2}$ fathoms; in most of these inlets you will lie perfectly safe, and entirely land-locked: fresh water and wood are plentiful, and easily obtained.

CLODE SOUND is a fine branch of the sea, running in from Chandler's Reach full 20 miles; it has many places of very good anchorage, and without any danger: vessels may find perfect safety on the northern shore, at Brown's Cove, or further in at Long Cove, or Platter Cove; or on the southern shore, at Bunyan's and Love Coves; or, passing the Platter Rocks, and steering westward, at Freshwater Cove; the mid-channel has all the way deep water, and there are no rocks except near the shores.

LION'S DEN is an opening lying at the N.W. end of Chandler's Reach; to enter which you must sail to the northward of the Deer and Cluster Islands, and pass the narrows, which is about one-third of a mile wide, and has 24 fathoms water in it; having passed the entrance about 1 mile, there is a sunken rock, round which are 4, 5, and 6 fathoms; you may then perceive the inlet to branch off into two divisions, that to the N.W. is very narrow and has a rocky islet at its entrance; but that which runs to the S.W. is broader, and has 11, 14, and 10 fathoms water in it; it runs in from the sunken rock about $1\frac{3}{4}$ mile, and at its further end becomes shoal, narrow, and rocky.

The **LONG ISLANDS** are four in number, having narrow channels between them, some of which are encumbered with rock, and dangerous; the eastern island is the largest and broadest, the next to it is the longest, the two western ones are smaller and narrower, they form the northern boundary of the passage from Western Head to Chandler's Reach; and also to the southern boundary to Swale Tickle and Newman's Sound. Off the north-eastern point of the largest Long Island, lies a sunken rock; it is close to the land, and therefore may easily be avoided; this point bears from Western Head nearly W. by N. distant 6 miles.

NEWMAN'S SOUND. This is a large arm of the sea, running in W. by N. having at its entrance Swale Island, which is nearly $4\frac{1}{2}$ miles long, and not 1 broad in the widest part; this divides the entrance into two channels; the southern passage is called the Swale Tickle, and the northern one goes by the general name of Newman's Sound. To sail from abreast of the Western Head into the Swale Tickle, you should steer W.N.W. $\frac{1}{2}$ W. To sail from abreast of the Bonavista Gull Island, steer W.N.W. $\frac{3}{4}$ W. 29 miles, and it will carry you a little to the southward of Little Swale Island, and in the fair way of the passage; but in advancing through this channel there are several obstructions, and the passages from thence into Newman's Sound are so narrow that it will always be advisable to go to the northward of the Great Swale Island. To do this, having rounded the Gull Island, steer W.N.W. $\frac{1}{2}$ W. 27 or 28 miles, you will then have the sound open, and can proceed accordingly; it is full $1\frac{1}{4}$ mile wide, and extends nearly in a N. by W. direction from the N.E. point of Swale Island 11 miles, having several places of good anchorage. Those on the southern shore are South Broad Cove, Minchin's Cove, and Standford Cove.

SOUTH BROAD COVE is situated $2\frac{1}{2}$ miles beyond the western point of Swale Island, and is a place of great safety: the passage in is to the south-westward, and you will ride well, sheltered in 10 fathoms, free from any danger: there is a small island at the entrance, which you will leave on your larboard side.

MINCHIN'S COVE. There is a long narrow point of land running out to the northward, which you will round, and turning southerly, the cove will appear open; here you will lie in 5 fathoms, opposite a sandy beach. To the westward is Mount Standford, off the point of which lies a small island, reaching half-way over the passage, making the channel in this part very narrow; the best course through, is to the eastward of this island, in 9 fathoms; here an opening appears to the eastward, called Buckley's Cove, fit for small vessels; the coast now winding to the westward, forms a broad bay, with 20, 26, and 27 fathoms water in it, free from any danger, and shallowing on each side towards the shores. At the south-western part of this is Standford Cove, having a sandy beach, the approach towards which shallows gradually.

BARROW HARBOUR. Little Denier Island lies off the entrance of Barrow Harbour, which lies south-westward of it, is safe and convenient: it is formed by three islands, Richard's, Goodwin's, and Keat's; the entrance is about 500 yards wide, and not very difficult of access: the harbour is a mile long; the lower part is rocky, and not well sheltered; but the upper part is completely land-locked, and has good holding ground. The course to this place from Bonavista Gull Island is N.W. by W. $\frac{3}{4}$ W. 22 miles.

On approaching Little Denier, you must be careful to avoid the Outer Rock, lying three-quarters of a mile E. $\frac{3}{4}$ N. from that island. It has only 4 feet of water on it; but as the sea constantly breaks, it is easily guarded against. Between Little Denier, and Richard's Island, there is also a range of rocks, called the Brandishes, at distances from each other, and extending nearly half way over towards Little Denier, with from 14 to 17 feet upon them; between are channels of 7 and 8 fathoms. These make the northern channel preferable for strangers without a pilot. To run clear of the Brandishes, you must keep Wedge Point, (the projection within the harbour,) a little open to the southward of Smoky Ridge, (a range of high land at the top of the harbour,) until you bring Broom Head N. by E. $\frac{3}{4}$ E. on with the middle Shag Island; the passage is then without obstruction till you near Wedge Point, off which, at 70 yards, lies a sunken rock, with 8 feet of water; you may then sail up abreast Pudner's Cove, until you are entirely shut in from the sea, and anchor in from 10 to 18 fathoms. There is a small fishing establishment here; good water in Pudner's Cove, and abundance of fire-wood. The land about Barrow Harbour is higher than the neighbouring coast, and may be easily recognized by its projection,

SANDY COVE, on the north side of Newman's Sound, about 4 miles beyond Barrow Harbour, has good anchorage, it will be readily known, having the only sandy beach on this side of the sound; there is no danger in entering it, and it is perfectly safe. Soundings from 10 to 20 fathoms. Between this place and Barrow Harbour lies the half-way rock above water, but if you keep outside there is no danger, it being steep-to in 4 fathoms.

GREAT and LITTLE HAPPY ADVENTURE, at a mile westward from

Sandy Cove, are two snug little coves on the same side of the bay; but, from the narrowness of their entrances, they are adapted only for the resort of small vessels; between these places lies a sunken rock about 80 yards from the shore, with only 4 feet of water upon it.

NORTH BROAD COVE lies also on the northern side of Newman's Sound, 2 miles beyond Happy Adventure, and is a convenient well-sheltered anchorage; its entrance may be known by a high round island lying on the west side of it. On sailing in you must keep the island on board, until you make a tickle or inlet, between it and the western shore, in order to avoid a sunken rock at the eastern side: after which keep as close as possible to the eastern shore, as a dangerous rock lies nearly in mid-channel; being inside of which you may anchor in from 10 to 25 fathoms, muddy bottom. Wood and water may be procured here.

DAMNABLE HARBOUR. The little island called Ship Island, lies in latitude $48^{\circ} 45\frac{1}{2}'$, longitude $53^{\circ} 34'$, and at 8 leagues N.W. $\frac{1}{2}$ W. from Cape Bonavista, and Damnable Harbour lies W. $\frac{1}{2}$ S. 6 miles from Ship Island. The island may be known by a remarkable bald point like a sugar loaf. The harbour is well adapted for small vessels, but its very narrow entrance disqualifies it for ships of burthen: there is a rock off the southern part of the entrance, and another off the northern side of the island, which lies in the middle of the harbour; there is good anchorage all round the island, in 4 to 5 fathoms, sandy bottom: water may be easily procured, but very little wood.

MORRIS COVE is a safe anchorage, situated on the north side of the island bearing that name, which lies to the northward of Damnable: in sailing for it keep Ship Island well on board; as you will thus avoid the reef called the Ship Rocks, which lies to the northward: having got inside Ship Island, avoid shutting in Lackington Rock with Varket Island, (known by its forming two remarkable hummocks,) as there are several clusters of rocks between Ship and the Horsechop Islands, on the south side: steer for the Varket until you get abreast of Lackington Rock, then keep Lackington Rock on the northern extremity of Ship Island until the Varket bears north, to clear two sunken rocks off the N.E. end of Morris Island: you may then sail directly for the cove, which you can enter without fearing obstruction, and anchor in any part of it, in 25 to 5 fathoms, but the western side of the cove is preferable. Wood plentiful, water scarce in the summer season.

GOOSEBERRY ISLES, &c. The Gooseberry Islands are a cluster of islets, near the middle of Bonavista Bay. The Offer or Outer Gooseberry is in latitude $48^{\circ} 49\frac{1}{4}'$, longitude $53^{\circ} 27'$. From Cape Bonavista, to sail clear of the Eastern Rock, which lies at $1\frac{1}{2}$ mile to the E.S.E. of the Offer Gooseberry Island, the course is N. by W. $\frac{3}{4}$ W. and from thence to Copper Island, (at the mouth of Greenspond Tickle) N. $\frac{3}{4}$ E.; here it is possible to obtain pilots for this and the adjacent anchorages, which are Northwest-Arm, New Harbour, and Cat Cove: there is also good holding ground between Greenspond Island and the main: but the water is so deep that a vessel is liable to drift on shore in the act of weighing, nor is there sufficient room to veer to a lengthened cable in heavy gales from the S.W. to which quarter it is much exposed. The course to Barrow Harbour from the eastern Gooseberry Rock is S.W. $\frac{1}{4}$ W. 18 miles: you thus avoid Malone's Ledge, a shoal lying S. $\frac{3}{4}$ E. 1 mile from the rock, (above water) which bears the same name: it has never less

than four fathoms, so that in fine weather no danger need be apprehended.

BAY OF FAIR AND FALSE may contain several good anchorages, but it is so filled with small islands and rocks, that any description that could be given would be of no use to the mariner. A cluster of large islands extends off the frontage of this bay, full 20 miles, or so far as Offer Gooseberry Island; between these are passages innumerable, with deep water; there is also a wide channel, running from Fair and False Bay, and Morris Island, to the northward; this leads to Bloody Bay, which then turns westward, and is divided into various branches, forming the N.W. arm, the middle arm, and the N.E. arm; this latter being a peculiar and extensive channel, running in one direction, southward, almost to Newman's Sound, and in another, almost to Damnable Harbott; all these are navigable, and afford places of good anchorage, and plenty of both wood and water.

There is also an open strait from Bloody Bay to the eastward, through Bloody and Cottel's Reaches, and out to the northward of Offer Gooseberry Island. Other channels branch off to the northward from Bloody and Cottel's Reaches, and between the Lakeman's Islands, running into Pit's Sound, Locker's, and Content Reaches, and thence to Freshwater Bay: within these and on the northern shore, are Hare, Locker's, Trinity, Indian, and many other lesser bays, coves, and inlets, abounding with good anchorages, and calculated to afford shelter for shipping of all descriptions, in cases of necessity; these are, at present, but little known, and frequented only by the constant traders; we shall, therefore, proceed to those which are the usual places of resort, and are better situated for the purpose of fishing.

SHIPS COMING IN FROM THE EASTWARD, to round Cape Freels, have to avoid the Charge Rock, which lies S.E. $\frac{3}{4}$ S. $2\frac{1}{2}$ miles from Cape Freels' Gull Island; the rock has only 6 feet of water upon it, and is circumscribed by a large spot of rough fishing ground, having from 8 to 30 fathoms. From the Gull Island you may run immediately southward for the Stinking Islands, taking care not to open Cape Freels to the eastward of the Gull; this will carry you inside the danger; keeping a good look for the Mid-rocks, which are just above water, and lie 2 miles to the N.E. by E. $\frac{1}{4}$ E. off the Stinking Islands; but a vessel not bound up the Bay, is enjoined to keep well outside; for should the weather become suddenly thick and foggy (which is not unfrequent with an easterly wind) she runs a great risk of getting bewildered among the innumerable rocks for which this part of the coast is remarkable, and from which neither chart nor compass can direct the stranger. Three quarters of a mile N.W. from Gull Island, is a rock with 3 fathoms of water upon it.

In the winter months, when the north-easterly gales are very heavy and continuous, the sea breaks exceedingly high over several spots of the Stinking Banks, which lie E.N.E. $\frac{1}{4}$ E. from the Stinking Islands: in two places there is as little as 7 fathoms: in such weather, although a vessel would not strike, she would be in very great danger of foundering in the tremendous sea, which would be apt to break over her; but, in fine weather, no danger from them is to be apprehended.

Having rounded the Stinking Islands, and wishing to sail into New Harbour or Cat Cove, steer directly for the Offer Gooseberry Island, S.W. by W. $\frac{1}{4}$ W. until you bring Pouch and Flower's Islands to touch each other: you will be then 2 miles outside the Three Rocks, which lie

at $1\frac{1}{2}$ mile to the southward of Flower's Islands. The outer of the Three Rocks has on it 3 fathoms of water, the middle 14 feet, and the inner only 11 feet. Now alter the course to $W. \frac{1}{4} S.$ keeping the white face of Chalky Hills, in Locker's Reach, a little on the starboard bow, which will carry you clear of Copper Island dangers, lying without Shoe Cove Point: should the roughness of the weather prevent your getting a pilot on board thereabout, continue on this course until you bring Shoe Cove Point (which may be distinguished from its bearing a semblance to white marble) to bear $N.W. \frac{1}{2} W.$: then shape your course for Indian Bay $W.N.W.$

NEW HARBOUR is 2 miles to the westward of Shoe Cove Point. With easterly winds it is quite inaccessible, from its narrow entrance; in which case you must continue onward for Cat Cove, lying 4 miles farther up the Bay on the same side. The Cove is formed by Cat Island, and may be easily recognized, it being the only part in the vicinity that is covered with live woods, the surrounding forests having been destroyed by conflagration; on sailing in keep the island open on your starboard bow. Off the upper part of Cat Island lie two high green rocks, which you must round, the passage formed by them being too shoal to pass between: you may then run till you get some distance inside the upper point of the island, and anchor in from 5 to 13 fathoms, with the hawse open to $N.W.$ the winds from that quarter being in general most heavy and squally. In working in, you may stand close to either shore, except off the point of the island, as there is a sunken rock within 100 yards of it, with not more than 10 feet of water.

NORTHWEST ARM is the best anchorage near Cape Freels; but its access is not without difficulty, from the multiplicity of Islands that lie in the neighbourhood, and which are almost undistinguishable from their great semblance of each other. The greatest danger you have to encounter, in making this place from the southward, is the Northern Rock, which lies $N.E. 1\frac{3}{4}$ mile from Copper Island, (known by its height and without wood); it has never less than 22 feet of water upon it; so that, in fine weather, vessels which generally frequent this coast, may pass over it in perfect safety; but, in hard gales, the sea breaks over it incredibly high: to avoid it, be careful not to open Fool's Island, at the entrance of $N.W.$ Arm (which is somewhat higher and more prominent than the rest, and which is covered with trees, except the crown), to the westward of the Western Pond Rock, until you bring Butterfly Island to touch the inner point of Flower's Island, or until Puffin and Copper Islands touch each other; then, leaving the Pond Rocks on the starboard hand, steer in for Fool's Island; which island it is advisable to keep well on board, as there is a sunken rock lying exactly in mid-channel, between it and Partridge Island Rocks, with 18 feet upon it; to clear which, it is impossible to give a descriptive mark. The course then into the Arm is $N.W. \frac{1}{4} W.$ and as soon as you get inside Odd Island, you may anchor in muddy ground with from 7 to 9 fathoms, Fool's Island Hill bearing $S.E.$ to $S.E.$ by $S.$ During the dry summer months, vessels are compelled to send to Loo Cove for water, nor is wood to be procured on this part of the coast within the distance of 12 miles.

GREENSPOND TICKLE is a small harbour on the eastern side of Greenspond Island, formed by several smaller ones which lie off it and is of very little importance, not being capable of receiving vessels whose

draught of water exceeds 14 feet ; its dangers are in the Northern, the Cookroom, Puffin, and Harbour Rocks, but it is impossible to get in with a foul wind, or with a fair one without a pilot. Ships sometimes anchor between the island and the main ; but the place is contracted, and the water is very deep, add to which it is much exposed to S.W. winds, so that it cannot be recommended as a place of safety : to sail into it, you must pass to the westward of Copper Island, in doing which you must cautiously avoid the Midsummer Rock, which lies one mile off south-westward from that island, and has only 6 feet water on it : when you shut in Silver Hair Island with Shoe Cove Point, you are inside the danger.

CAPE FREELS TO CAPE ST. JOHN.

CAPE FREELS is formed of three points, the South Bill, the North Bill, and the Middle, or Cape Freels ; there are many shoals and rocky dangers about them all, therefore a wide berth should be given them at all times. Over these points is some high land, commonly called the Cape Ridge, which is visible at a considerable distance.

N.N.W. $\frac{1}{2}$ W. from Cape Freels, distant $6\frac{1}{2}$ miles, is the Outer Cat Island ; it is connected to the main by a sandy reef, which is impassable for shipping, and forms the southern point of Deadman's Bay ; a little before you come to the Outer Cat, you will see a remarkable hill called the Windmill Hill, and near it the Little Cat Island. In sailing to or from Cape Freels the shore should have a good berth, although there are soundings all the way, and they decrease gradually towards the shore. Deadman's Bay is formed by the Outer Cat Island to the southward, and Deadman's Point to the northward ; the soundings within are regular, and the bay without rocks, unless close to the shore, but it is totally unsheltered and open to all easterly winds.

PENGUIN ISLANDS. Having passed Deadman's Point, you will approach the Penguin Islands ; these are 3 in number, and bear from Cape Freels N.N.W. $\frac{1}{4}$ W. distant 14 and 15 miles ; between them the passage is clear, with from $5\frac{1}{2}$ to 7 fathoms water, but vessels should not go within them and the shore, for there are several rocky reefs which render it particularly dangerous.

FUNK ISLAND lies N. 54° E. from Cape Freels, distant 27 miles ; it is little more than a sterile rock, and cannot be seen further than at the distance of 10 or 12 miles ; but it will always be distinguished by the great number of birds which continually hover over it. About 200 yards north of Funk Island is a large rock above water, and N.W. by W. 180 yards from this are still larger rocks ; they are all barren, and only the resort of sea birds, that inhabit and breed there ; between these rocks are 18, 37, and 42 fathoms water, with a clear passage, but between the eastern rock and Funk Island there is a dangerous sunken rock, of only 10 feet water, over which the sea generally breaks ; near this sunken rock are 14 and 16 fathoms, and between it and Funk Island 30, 25, 56, 38, 24, and 17 fathoms ; off the western point of Funk Island are some rocks, and at its eastern part a sort of creek with 5 fathoms in it.

BRENTON ROCK. Between Funk Isle and the Wadham Isles a dangerous rock was discovered on the 28th September, 1836, during a gale and a very heavy sea, by Captain Evan Percy, in the brig St. John. On the autumnal circuit, with the Hon. Judge Brenton, heavy breakers were distinctly seen upon a rock bearing W. $\frac{1}{4}$ S. a little southerly, about 7 miles from the Funk Islets. The bearing was taken in a fine clear evening, and it was the opinion of all on board that the rock, though not appearing above water, would take up any vessel. The position is about latitude $49^{\circ} 41'$, longitude $53^{\circ} 15' W.$ (*Nautical Mag. March, 1837.*)

DUREL'S LEDGE is a dangerous reef, and said to lie about 7 leagues N.W. by N. from Funk Island: the sea breaks over it continually; and nearly N.W. by W. distant 3 leagues from Durel's Ledge, is another danger named Cromwell's Ledge, it is supposed to bear E.S.E. $\frac{3}{4}$ E. distant 10 or 11 miles from Little Fogo Islands.

RAGGED HARBOUR. This harbour lies to the north-westward of the Penguins, distant $6\frac{1}{2}$ miles; the main land hereabout is low and sandy, and the passage from the eastward rocky and dangerous; it should therefore not be attempted by a stranger, or without a pilot. To the north-westward is Ladle Cove Island, and 7 miles beyond that is Rocky Bay; Rocky Bay lies in about latitude $49^{\circ} 28' N.$ and longitude $54^{\circ} 6' W.$ At its entrance, which is wide, lie 3 islands, Noggin Island, Green Island, and further south is White Island; you may pass between each of these in 7 fathoms; between Rocky Point and Green Island in 7, 8, 13, or 10 fathoms; and between Green and White Islands in 13 and 14 fathoms; between Noggin Island and the western point of the Bay, there are $3\frac{1}{2}$, 7, 12, 9, and 4 fathoms; the bottom of these bays, for there are 3 openings, is rocky, and vessels cannot go far into them.

THE WADHAM ISLANDS. These consist of 8 or 10 scattered islands, lying to the north-westward of Cape Freels; they are separated from each other by channels more than 1 and 2 miles wide; the largest called Peckford's Island, which is almost a mile long, lies in the direction of north and south, and bears from Cape Freels nearly N. by W. distant 20 miles; from its southern part towards the land about Ragged Harbour, there are a number of rocky islets and reefs, with channels between them, rendering the navigation of this part extremely hazardous. N.N.W. $\frac{1}{2}$ N. $1\frac{1}{2}$ mile from Peckford's Island is White Island, but a passage between them should not be attempted, for there are several small rocks lying off the north and north-western part of Peckford's Island, some of which stretch out almost as far as White Island. N.W. by W. from Peckford's Island, about $4\frac{1}{4}$ miles, is Copper Island; Green Island lies W.N.W. $\frac{1}{4}$ N. $2\frac{1}{2}$ miles from Peckford's Island, and about a similar distance S.S.E. $\frac{1}{2}$ E. from Copper Island; there are also some small rocks lying off the N.W. end of Green Island, which, being visible, can always be avoided with ease.

THE S.W. ROCK is above water, bearing from Peckford's Island S.S.E. $\frac{1}{4}$ E. distant $3\frac{1}{4}$ miles; near it are 13, 17, and 21 fathoms; about N.N.E. distant 2 miles from the S.W. Rock is a small flat island; and a little more to the eastward is Offer Island; this is the most easterly of all the Wadham Islands. There is yet a rock to describe, which lies E.S.E. $\frac{1}{4}$ E. from Offer Island, distant about $1\frac{1}{2}$ mile; this is dangerous, and must have a berth in passing either north or southward of it.

FOGO ISLANDS. These islands lie to the north-westward of the Wadham Islands; great Fogo is 4 leagues long and 9 miles broad; off its south-western point lie the Indian Islands, and N.E. by N. $3\frac{1}{2}$ miles from the body of Great Fogo, are the Little Fogo Islands; numerous other rocks and small islands are scattered about.

SHOAL BAY or Fogo Harbour lies on the north side of the island, it is considered good for the fisheries but its entrance is dangerous and difficult; there is also a strong current running south-eastward, especially with a westerly wind; to guard as much as possible against this current, you should hug Fogo close on board, until you open the entrance, which is narrow; having found this, run directly in, keeping right in the middle, and you will carry 8, 6, and 4 fathoms throughout; this is called the West Tickle; when you are through, if intending to anchor in the western bight, you must steer south-eastward until you bring the point between the height N.W. by W. to avoid the Harbour Rock, which seldom appears except at low water, spring tides; then haul up to the westward, and anchor in from 6 to 5 fathoms, good ground and well sheltered.

Vessels from the eastward, and bound to Fogo Harbour, should avoid the Dean's, a sunken rock lying between Joë Batt's Point and the harbour; steer W.N.W. until Brimstone Hill, a remarkable round mountain, appears in the centre of the harbour; then steer for the East Tickle, which may be known by the lantern on the top of Sim's Island, making the west side of the Tickle. Give a good berth to the point on the starboard side, and run right up the harbour, keeping near the south side, and you will carry from 5 to 3 fathoms through; immediately you get round the point, steer S.W. to avoid the Harbour Rock, and follow the directions given above for anchoring. The middle Tickle appears the widest, but it is fit only for boats; the other two must be adopted as best suits the wind.

LITTLE FOGO ISLANDS are nearly surrounded by rocks, both above and under water, making this part of the coast exceedingly dangerous; to the eastward of Little Fogo is a small rock just above water, called the North-Eastern Rock, and somewhat in this direction, distant 10 or 11 miles, is said to lie Cromwell's Ledge, whose exact position is not well determined, although it is considered to be extremely dangerous. Northward of Little Fogo are the Turr Rocks, and from hence in the direction of the western side of Great Fogo Island, are the Storehouse Rocks, the Seals Nests, Gappy and Stone Islands, the Jigger and Black Rocks, and various other dangers, all having deep water round them, and tending to increase the difficulty of the navigation.

THE ISLAND OF TOULINGUET lies to the westward of Fogo, and has several small Islands about it; here is situated what is called Toulinguet Bay; and to the south-westward of Toulinguet Island, is the Harbour of Herring Neck; this is said to be a spacious fine harbour, and fit for any vessels.

Toulinguet Bay is but an indifferent place for shipping, lying directly open to the N.E. winds, which throw in a heavy sea: about 4 miles N. by E. $\frac{1}{2}$ N. from the entrance of this bay there is a bank, on which, with heavy gales of wind, it is asserted the sea breaks with violence, while between it and the shore there are from 50 to 80 fathoms water. Wire Cape Cove, which is situated on the western side of the westernmost Toulinguet Island that makes Toulinguet Bay, is only fit for fishing craft.

CAPE ST. JOHN TO BELLE ISLE.

CAPE ST. JOHN is a high rugged point of land, lying N.W. by N. 12 or 13 leagues from Toulouquet Bay: it may readily be known by the small high round island to the south-eastward, distant from the northern pitch of the cape about $2\frac{1}{2}$ or 3 miles; this is called the Gull Island, and is the third of that name on this side of Newfoundland. Cape St. John is the point where, by treaty, the French fisheries begin; their boundary continues thence northward and round the western coast, so far as Cape Ray.

There are various deep bays and inlets between the Fogo Islands and Cape St. John, but their particulars are very little known, although there can be little doubt the Great Bay, and River Exploits, and the Bay of Notre Dame, afford many places of good anchorage, and of easy access, which, when fully explored, may become hereafter frequented, better understood, and prove highly beneficial.

LAKIE is about 5 miles to the westward of Cape St. John; to sail into which there is no danger whatever, and you may anchor any where in from 3 to 8 fathoms; but it is exposed to all winds and seas from the northward.

GREAT ROUND HARBOUR is a good and convenient place for vessels engaged in the fishing trade; there is no danger in sailing in or out of it, both shores being bold-to; the anchorage lies within the two inner points, where vessels may ride in 4 or 5 fathoms water, secure from the weather and entirely land-locked; but Little Round Harbour, which lies round a point to the north-eastward about $1\frac{1}{2}$ mile distant, is merely a cove and totally unfit for shipping.

PAQUET HARBOUR lies about 5 miles N.W. by N. from Great Round Harbour; its entrance, according to Captain Edgell, R.N. lies in latitude $50^{\circ} 8' N.$ and longitude $55^{\circ} 53' W.$ and bears from the channel between the Horse Islands, nearly S.W. by S.; it may be known by its Southern Head, which is a high and rocky mountain; the Northern Head is somewhat lower, and there are 3 rocky islets lying directly off its point; both points are bold-to, but a little to the southward of the 3 rocky islets, is a small shoal with $2\frac{1}{2}$, 3, and 4 fathoms upon it; the channel between it and these three rocks has 7, 8, and 9 fathoms, and the water across the entrance is from 8 and 9, to 19 and 29 fathoms; a similar depth continues more than a quarter of a mile in, where the harbour divides into two channels, the one running northward, the other west and south-west.

The northern arm is about one quarter of a mile long, and has 20, 18, and 19 fathoms at its entrance, becoming shallower as you advance; vessels running in here should keep the starboard shore on board, for about two-thirds up the channel, on the larboard side, there is a rocky shoal, a small part of which occasionally appears above water; on the

other part of this shoal are from 3 feet to 4 fathoms; having passed this shoal, steer up mid-channel and anchor in 5, 7, or 8 fathoms; the northern part near the land becomes shallow, and a rivulet here falls into the bay, which is said to issue from some extensive lakes about 2 miles inland. The south-western channel is somewhat narrower than the northern one, but is quite free from danger; the shores on both sides are steep-to, and bold, and you will have 12, 10, 9, 8 and 7 fathoms for half a mile in; it then shallows to the head of the bay, where there is a sandy beach and a river running southward. This is a snug and secure place for vessels to run into whenever occasion may require. To the northward of the Northern Point is a mountain called Signal Hill, commonly having a signal-post upon it, and serving to point out its situation. Pine Bay and Verte Bay lie to the westward, but although the anchorage is good, they are but little frequented.

THE HORSE ISLANDS. These are situated nearly midway between Partridge Point and Cape St. John, bearing from the latter N. by W. and N.N.W. distant about 5 leagues; these are two islands, and form a circuit of nearly 2 leagues, appearing moderately high; there are three rocks above water lying to the northward of the easternmost; and on the east side of the same island there are some sunken rocks which stretch out in some places near a mile from the shore; at the S.E. part of this island there is also a little cove, fit only for boats: there is probably a safe channel between these islands, but it is seldom attempted; the eastern island is the largest.

FLEUR DE LYS HARBOUR lies to the northward of Pine and Verte Bays, and is situated about $1\frac{1}{2}$ mile to the southward of the northern extremity of Partridge Point, and about 3 leagues W. by N. from the south-west end of the Little Horse Island: the entrance will hardly be perceptible, unless you are near the land, but at a distance it may be distinguished by a mountain over it, which appears something like a fleur de lys, from whence it takes its name. There is no danger in sailing into this harbour, excepting from a small rock of only 6 feet water, which lies about 2 cables' length from Harbour Island, on the south side; to avoid this rock you should keep the northern shore on board, and when you get beyond Harbour Island, you can anchor where you please in $4\frac{1}{2}$ or 5 fathoms, well sheltered from all winds.

WHITE BAY.

This is a large and extensive arm of the sea, being at its entrance from Cape Partridge to Cat Head, full 4 leagues wide, and running in a south-westerly direction, about 14 leagues, to its head; where it is contracted to a river's mouth $1\frac{1}{2}$ mile wide. In this bay or gulf are several islands, coves, and inlets, affording both anchorage and shelter; the first is Lobster Harbour, which is a small round harbour, with a shallow narrow entrance, having at low water, in some places, not above 8 or 9 feet water; but when you are once entered, you will have 12 and 13 fathoms all over the harbour. Small vessels, therefore, sail in, commonly, at the flood tides.

SOUTHWARD ARM lies about 8 miles from **Lobster Harbour**, and further up the bay; here a ship may anchor with great safety, in 17 fathoms water, about 3 miles within the heads; but there is also good anchorage in any part below this, and before you are advanced so far up, in 20 and 25 fathoms; a little above the inner point, on the northern side, is a muscle bank, which stretches quite across the arm, and nearly dries at low water; and when you have passed this you will have 11 and 12 fathoms water, and the channel continues deep until you approach the **River's Head**. This is the first great inlet on this side of the gulf, and may, therefore, be readily recognized.

MIDDLE ARM lies about $1\frac{1}{4}$ mile S.W. from the **Southward Arm**; at its entrance is a rocky island, which is joined to the shore by a shoal, over which are 1, 2, and in some places, 3 fathoms water. This inlet runs in to the southward, about 3 or 4 miles. To enter it, you will do well in keeping the larboard shore on board: it is fitted only for small vessels. Two leagues W. by S. from **Middle Arm**, is **Hawling Point**; and between them lie the **Pigeon Islands**, about which the ground is good for fishing.

WESTWARD ARM lies E.S.E. $\frac{1}{2}$ S. of **Hawling Point**, and runs up nearly 4 miles; here large vessels may anchor in 18 fathoms water; there is a cove on each side of its entrance; that to the north-eastward is named **Bear Cove**, where smaller vessels may moor securely, and ride safe from all winds, in about 12 fathoms water; the other is called **Wild Cove**, a very indifferent anchorage, open to the north-westerly winds, and the bottom rocky and foul.

PURWICK COVE. About 5 leagues down from the **River's Head**, and near the S.E. side of the Bay, lies **Granby's** or **Mid Bay Island**, without either cove or place of shelter; on the south-eastern part of this island is a shoal running off the length of 2 cables, with not more than 9 feet water over it; and nearly abreast of this island, on the S.E. side of **White Bay**, is **Purwick Cove**, where shipping may find safe anchorage, and lie with good convenience for the fisheries.

Having passed to the southward of **Granby's Island**, the bay narrows and runs up about 5 leagues towards **Gold Cove**; where the river branches out into several streams; and is commonly called the **River's Head**.

SOP'S ARM. On returning up the western side of **White Bay**, you will perceive **Sop's Island**, about 3 miles in length, and 11 miles in circuit; near its southern end is **Goat's Island**; these form a long passage, or arm, called **Sop's Arm**; at the northern part of which a vessel may safely anchor, just inside the north side of **Sop's Island**; this will be the best side of the channel or passage, into the arm; but there is anchorage in deep water between **Sop's Island** and the main, before you reach so far up as **Goat's Island**; there is also a small cove at the north end of the island, called **Sop's Cove**; and two other coves opposite the main, called **Hart's Coves**, in all which the fisheries are carried on, although ships generally anchor in the upper part of the arm, and withinside of **Goat's Island**.

JACKSON'S ARM lies about 4 or 5 miles to the northward of **Sop's Island**, to enter which you will pass a ragged point, low and round: the water here is deep, except in a small cove on the starboard side, where a vessel should moor head and stern: this place affords the largest timber in **White's Bay**. **Frenchman's** or **French Cove**, is about

a league to the northward of Jackson's Arm, and offers good and safe anchorage.

Four miles to the north-eastward of Frenchman's Cove, is Coney Arm Head, the most remarkable land on the western side of White Bay, and bears W.N.W. $\frac{3}{4}$ W. distant 6 leagues from Cape Partridge; the land here projects out $1\frac{1}{2}$ mile, forming a deep bight, called Great Coney Arm. In this place there is no good shelter for shipping; but in Little Coney Arm, which lies to the westward of the head, is convenient anchorage for small vessels, although its entrance is too shallow for large ships; here fishing craft frequently rendezvous.

About 3 miles to the north-eastward of Coney Arm Head, lies the Great Cat Arm, and 5 miles further is Little Cat Arm; this latter inlet runs up to the westward full 2 miles; off its northern point are some rocks above water, to avoid which, keep nearer to the southern shore; you will find the water deep, and no good shelter, unless you approach the head or further end of the arm, where you will lie secure and land-locked.

LITTLE HARBOUR DEEP, OR LA VACHE. This place is much exposed to south-easterly winds, and by no means a good harbour; off its northern point are some rocks, which are always above water; they lie half a mile from the shore, and afford good fishing about their environs; the water is not very deep in any part of this inlet, and when you get up half way from the entrance to the head, or further end, it becomes quite shoal.

GRANDFATHER'S COVE OR L'ANCE L'UNION, is an inlet about 2 miles deep, lying $1\frac{1}{2}$ mile from Little Harbour Deep; this is also open to the southerly winds; and may be known, when near the shore, by the northern point appearing like an island, and bearing N.N.W. $\frac{1}{2}$ N. from Cape Partridge; it is but an indifferent place for shipping, and seldom frequented.

ORANGE BAY, OR GREAT HARBOUR DEEP. This may be known from any other inlet, by the land at its entrance being much lower than any other land on the north side of White's Bay, and by its bearing north, distant 5 leagues from Cape Partridge; it forms a large harbour, and when you get about 3 miles within its entrance, divides into three branches; in the northern arm the water is too deep for vessels to anchor, until they have run up near the head; but the middle arm has a good bottom, and safe anchorage in 6 and 7 fathoms water. A little within the entrance of Orange Bay, there is a cove on each side frequented by the fishing vessels; but these are very dangerous for a ship to lie in, for although they moor head and stern, yet should a gale come on from the eastward, there is little safety to be depended upon.

FOUCHÉE is little frequented, and there is no anchorage until you approach its further end, where you will find a cove on the northern side; this cove is 2 or 3 miles above the entrance, and very small vessels may anchor there in 18 fathoms, mooring head and stern. The land on both sides is extremely high and steep to the shore; there is also another arm running in above 2 miles further than the cove, but it is so narrow, and has such a depth of water, that it is almost useless to shipping.

HOOPING HARBOUR. About 8 miles to the north-eastward of Fouchée, and a little to the south-westward of Canada Head, lies the entrance to Hooping Harbour, or Sans Fond: it has two arms or bays, the one running up northward, the other westerly; like many of the adjacent inlets, there is deep water all the way until you get near to the head of

the northern branch, there the bottom is a kind of loose sand, open to the southerly winds, and by no means a safe place to lie in; but in the western arm, a vessel may anchor in a moderate depth with safety.

CANADA BAY. **CANADA HEAD** lies about 3 miles to the south-westward of Canada Point, or Bide's Head; it is elevated land, and very easily to be distinguished either from the northward or southward, but when you are directly to the eastward of it, it becomes hidden by the high land up the country, commonly called the clouds. The Bay is of considerable size and extent; from Canada Head, its southern entrance, it runs N.N. Easterly full 5 leagues; here vessels caught in easterly gales may seek shelter, and anchor in safety. In entering, when you get above the two rocky islets which lie near Bide's Head, and called the Cross Islands, you will see a low white point, and another low black one a little beyond it; off this latter, distant 2 cables' length, lies a sunken rock; keep therefore towards the middle of the Bay, and you will find no danger, except a rock above water, which lies about a mile below the point of the narrows; this you will endeavour to leave on your larboard hand, keeping mid-channel, and you will have 18 fathoms through the narrowest part. Soon after you have passed the narrows, the bay widens, and is above a mile across, and you may then anchor in from 18 to 20 fathoms, good holding ground, and secure from all winds; but this bay is not much frequented, and only occasionally resorted to in case of necessity.

ENGLÉ'E HARBOUR is situated on the north side of Canada Bay; to sail into this place you must pass a low point, appearing white, and forming the northern point of entrance to Canada Bay; then keep near the shore, until you get abreast of the next point, which makes the harbour; haul round it to the S.E. taking care not to come too near the point, for it shoals a full cable's length off; having so far advanced you can anchor in from 15 to 7 fathoms, good holding ground; but this is well up the cove, which is too small to lie in, unless you moor head and stern. In Bide's Arm, which runs up N.N.E. from Englée, almost 2 leagues, there is no good anchorage, the water being too deep; but within the south end of Englée Island is a good harbour for shallows, although from thence to where the ships lie there is no channel, even for boats, unless at high water, or beyond half tide.

CONCH HARBOUR bears nearly E.N.E. $\frac{1}{2}$ E. distant 7 or 8 miles from the entrance of Canada Bay; it lies very open to the winds from the south, but has good anchorage well up to the head, in 11 fathoms water, good holding ground. S. by W. from Conch, distant 2 leagues, is Hilliards Harbour, called by the French Botitot; this is a bad place for shipping, but very convenient for the fishing craft.

CAROUGE HARBOUR. This lies E.N.E. from the harbour of Conch, and bears N.W. by W. from the south end of the island of Groais, distant 3 leagues: its northern point is called Cape Rouge; the passage in is narrow, but when you are within it becomes wide, and is divided into two branches, one running to the N.E. the other S.W.; directly in the middle of the S.W. branch is a shoal, on which there is only 7 and 8 feet water, you may sail on either side of this, and anchor in from 20 to 8 fathoms, good holding ground: there is also fair anchorage in the N.E. branch, but it is not considered to be so good as the former.

BELLE ISLE. This island lies off the N.E. coast of Newfoundland, from which it is separated 9 or 10 miles. It is 8 miles in length and

3 broad; there is a little harbour at its south part, where fishing craft occasionally resort, but not calculated for shipping: other coves may be found about the shores of the island, where shallows sometimes take shelter. Off its south-eastern side lies Green Island, a small rocky islet, and to the southward a bank of soundings extends with 12, 20, 25, and 30 fathoms; there are some rocks, both above and under water, at the south point of Belle Isle, but these lie close in to the land.

GROAIS ISLAND. This lies to the north-eastward of Belle Isle, and is about 8 miles in length, and $2\frac{1}{2}$ miles broad; its northern point lying in latitude 51° . Off this end, and also off the N.W. part of the island, are several rocks above water; otherwise this island is bold all round, and between it and the main are from 20 to 70 fathoms water; there are also two islets mid-way; the southern one is commonly called Red Island, they are both steep-to, and without any known danger.

CROQUE HARBOUR bears N.W. from Groais, distant 3 leagues; the entrance is half a mile wide, and somewhat difficult to discover. When the north point of Belle Isle is clear of the southern part of Groais, you will be a little to the southward of Croque, and this mark will not fail pointing out to those unacquainted with this navigation, the fair way to its entrance; especially as the head-land forming the southern shore is bare of trees, and has a round appearance, with some rocks which are always visible, and lie about 40 yards to the S.E. of it. The shores of the harbour are bold-to, and even a frigate may easily work into it; the anchorage is excellent, being good holding ground, of dark slate coloured mud. Having opened the harbour's mouth, steer in N.W. by N. proceed mid-channel, and when you have advanced up about a mile, you will see the river divide into two branches, anchor hereabout. Water and wood can be obtained from either side of the northern branch; or, by running up your boat to the further end of the other arm, you may furnish yourself with both these articles. The land here is covered with the dwarf pine, which is indigenous to the country; the soil appears to have been composed from rotten and decayed leaves; it is wet and spongy, and the trees do not attain any great dimensions, the largest being not more than a foot and a half in diameter, and the wood, when full grown, not good. There is a little cove at the southern entrance, called Irish Bay, in which are 13, 10, 8, and 5 fathoms; and two rocks above water at the head of the bay, near which is a little rivulet of fresh water.

North-eastward of the Island of Croque lie Negro and St. Julien's Islands, near which are the Harbours of Great and Little St. Julien, and also that of Grandway: these are all adjacent to the Island of St. Julien, and bear to the north-westward of the northern part of the Island of Groais. The S.W. end of the Island of St. Julien is but little separated from the main, and cannot be distinguished to be an island, until you arrive very near it; there is at this end no passage, except for boats; therefore, to sail into either of these harbours, you may keep close to the north-east end of the island; and in passing that, the harbours will open to your view.

GREAT ST. JULIEN is the easternmost harbour, to which there is no danger until you get within the entrance; then you will find the star-board shore to be shoal, nearly one-third over; but when you have passed the first stages, you may anchor in from 8 to 4 fathoms water.

To sail into Little St. Julien you will first steer for Great St. Julien's

Harbour, in order to clear a sunken rock, which lies directly before the harbour's mouth; and having arrived opposite the entrance of Grandsway, steer into the harbour and anchor in 5 or 4 fathoms water. It will be requisite for all ships which go into either of these harbours to moor both head and stern; but Grandsway is not a harbour for shipping, although it is extremely convenient for fishing craft.

HARE BAY is supposed to afford many places of excellent anchorages, and good fishing conveniences; the shore clear of dangers unless close to the land, with the exception of the Braha Shoal, lying about $4\frac{1}{2}$ miles from the land, opposite to a bay of the same name; it is small, and, in bad weather, the sea breaks violently over it.

ST. LUNAIRE. At the southern point of the entrance of St. Lunaire lie two islands, between which there is but a narrow boat passage: the only channel for ships is to the northward of them: it is almost half a mile wide, and both shores bold-to; having entered between the points of the bay, you will perceive some small rocky islets a-head of you, there is a passage on either side of these, but none between, for they are connected by a rocky reef of shallow water: you will, therefore, steer to the northward of them all; and on the northern shore you will see Amelia Harbour, where, within Red Island, you may anchor in 15 fathoms, or further in, and nearer the head of the bay, in less water; the starboard side of this bay is rocky, and it is sheltered from the westward by some high islands, but toward the top of the bay is a sandy beach, where some small brooks empty themselves.

To the northward of High Island is a sandy cove, having some little islets within it; but the depth is shallow, and there is a knowl of 3 fathoms, lying before its entrance. To the westward is an opening, called N.W. Bay, the land on both sides being high, and the passage into it clear of danger; but its further end becomes suddenly very shallow; there is also another narrow entrance to the N.W. Bay, behind a high island, which forms its southern boundary; but this is rocky, and fit only for boats. Between this high island and the two islands at the entrance of Lunaire Bay, is a wide space with very good anchorage, in 15, 18, or 20 fathoms water; here vessels may lie secure from southeasterly gales; but in going to it you must avoid a rock of only 10 feet water: this rock lies to the westward of Plate Island about a quarter of a mile, and exactly the same distance from the eastern point of the high island which forms the southern boundary to N.W. Bay. There is also an opening to the southward, called S.W. Bay; it has not been explored, but its entrance appears to be clear of danger, and has a depth of 9, 8, and 7 fathoms; the shores on each side are rocky.

GRIGUET BAY is formed by Stormy Cape to the northward, and White Cape to the southward, having several good coves or harbours for shipping engaged in the fisheries. In this bay lies Camel's Island, rising up in the middle like the hump of a camel, and scarcely to be distinguished from the main land in sailing along. Behind this Island is situated the S.W. Harbour; a narrow channel, running in nearly 2 miles, with from 4 to 10 fathoms water in it; there is a shoal at its entrance; but this place is not sufficiently known for us to attempt giving directions for its navigation. The NORTH HARBOUR runs in within Stormy Cape; and has, at its entrance, a rock above water, which is bold-to all round, and vessels may sail on either side of it, and anchor in 6 fathoms water.

In the passage which leads to the N.W. and S.W. Harbours, there is an island which contracts the channel, rendering the passages narrow; the best and safest entrance is to the northward of this island, giving the outer point of the N.W. Harbour a little berth, and so soon as you get within the island you will open both Harbours; that which runs in north-westward is the larger of the two, and is 2 miles deep; you should sail up on its western side, having 14, 16, and 18 fathoms, until you get inside the point, a little within which is a bank of 7 or 8 fathoms, but when you have passed over this, you will again drop into 16 and 17 fathoms; and as you approach the head of the Bay, you will lessen your water to 7, 6, and 5 fathoms, every where good anchorage, and well sheltered from all winds. The two islands of Griguet lie outside of Camel's Island, and, together form between them several small but snug harbours for fishing vessels.

WHITE ISLANDS. The White Islands lie to the north-eastward of Stormy Cape from which they are distant 1 league, and about $2\frac{1}{2}$ miles from the shore opposite; they are small, of moderate height, and have several rocks inside both above and under water, but these are not considered to be dangerous, as they are easily discoverable even in fine weather, and the passage between them and the main is very safe.

QUIRPON ISLAND. This lies off the north-eastern part of Newfoundland, and forms the S.E. point of entrance to the Strait of Belle Isle: it is large, high, and barren, and Cape Degrat is visible, in clear weather, full 12 leagues to seaward.

There is a narrow channel which runs in to the southward of Quirpon, and divides it from the main; here lies Little Quirpon Harbour, to enter which there is no danger but what you will easily perceive; vessels commonly moor head and stern, and lie there perfectly secure.

DEGRAT and PIGEON COVES lie on the eastern side of Quirpon Island, and to the northward of Cape Degrat; at their entrance are several small rocky islets and rocks above water, affording behind them very fair security for shipping, in 4 fathoms water, and good conveniences for fishing.

BAULD CAPE, which is the northern extremity of Quirpon Island, lies in latitude $51^{\circ} 39' 45''$ N. and in longitude $55^{\circ} 27' 50''$ W.; it is rocky and steep-to, and may be approached very near with great safety; having rounded this cape you will perceive a rocky point to the southward leading to the **HARBOUR of QUIRPON**, which lies on the N.W. side of the island, and its entrance is between it and Grave's Island; in your approach towards it from the northward you may borrow as close as you please to Bauld Head, there being no invisible danger until you arrive at the entrance to the harbour, where there are some shoals which must be left on your larboard side: to do this keep Black Head, on Quirpon Island, open of all the other land, until Raven Point comes over Noddy Point, then haul in for the harbour, going not nearer than the distance of half a cable's length from the point of Grave's Island; the anchorage within the island is every where good, with room and depth enough for any ships, and the ground holds well.

The best place to ride in will be towards the upper end of Grave's Island, abreast of Green Island, in 9 fathoms water; the passage to the Inner Harbour, on either side of Green Island, is very good for ships of moderate water, through which you will have 3 fathoms, and above Green Island you have excellent riding in 7 fathoms. There is also a

passage to this harbour through Little Quirpon Harbour, but it is too narrow and intricate for any one to attempt, unless they are perfectly acquainted with the navigation. In and about Quirpon are conveniences for a great number of vessels employed in the fisheries, and good fishing throughout; the land every where is high and wears a barren appearance.

NODDY HARBOUR lies a little to the westward of Quirpon Harbour, and runs in between Noddy Point and Cape Raven; there is no danger in entering, and you will pass to the starboard of the little island that lies about a mile within the entrance, and anchor above it in 5 fathoms water; or you may, with a small vessel, run further up into the bason, and anchor in $2\frac{1}{2}$ or 3 fathoms; here is a stage within the island, and on the eastern side of the harbour, with convenient room for many vessels.

THE GULL ROCK lies W.N.W. from Bauld Cape in the Island of Quirpon, distant $2\frac{1}{2}$ miles; and N.N.E. $\frac{3}{4}$ E. nearly 3 miles from Cape Raven; it is always above water. **MARIA'S LEDGE** lies nearly S.W. from the Gull Rock, distant 2 miles, and N. by E. $1\frac{1}{2}$ mile from Cape Raven, being distant about a mile from Maria's Head.

In standing in from the northward you need not fear any danger from the Gull or Maria's Rocks, for both are above water, the passage between them is half a league wide, and very safe; it will however be prudent to pass nearer the Gull Rock, because of the N.W. Ledge, which never appears but in bad weather; this N.W. Ledge bears west a little south, distant $1\frac{3}{4}$ of a mile from the Gull Rock, and you should not attempt the passage between it and the main, on account of other rocks that are said to lie about, and places of shallow water.

GREAT SACRED ISLAND lies about N.W. by W. $\frac{1}{4}$ W. from Bauld Cape, distant $5\frac{1}{2}$ miles, and S.E. by E. $\frac{1}{2}$ E. from Cape Norman nearly 13 miles. *Little Sacred Island* is 1 mile to the southward of the great island; the passage between them is safe, and you may sail round both, for they are high and bold; within them, on the main, and to the W.S. Westward, is Sacred Bay, tolerable large, with numerous rocky islets within it: the shores of this place abound with wood, and, therefore, it is much resorted to for the use of fisheries at Quirpon and Griguet, &c.

HA-HA BAY. Cape Onion forms the north point of Sacred Bay, being high and steep; near it is a remarkable rock, called the Mewstone, and much resembling that in Plymouth Sound. There is a little cove to the southward of this rock, where a vessel may occasionally resort to with safety. From Cape Onion to Burnt Cape the course is W. $\frac{3}{4}$ N. about 6 miles, it has a white appearance, and rises from the seaward to a considerable height. On the eastern side of Burnt Cape is Ha-ha Bay, which runs in southerly about 2 miles, it lies open to northerly winds, but when you are within the cape you will find anchorage in 6 or 7 fathoms, or you can go further up and ride well sheltered in 3 or $2\frac{1}{2}$ fathoms. This is a convenient place for the fisheries and has plenty of wood.

PISTOLET BAY. This bay lies between Burnt Cape and the Norman Ledges, which bear from each other N.W. by N. and S.E. by S. distant 8 miles; the bay is extensive, and reaches several miles each way, having good anchoring ground in most parts, particularly on the western side, a little above the islands, in about 5 fathoms water; the shore is tolerably well furnished with wood, and contributes to supply those places which are destitute of that article.

COOK'S HARBOUR lies in the N.W. part of Pistolet Bay, and within

the islands, about 2 miles above Norman Ledge Point. These ledges are about 1 mile to the eastward of the north point: to clear these dangers as you enter, be sure to keep Burnt Cape well open of the outer rocks, that lie off the islands at the western entrance to Pistolet Harbour, and if going in, so soon as you consider yourself to be to the southward of these ledges, steer in for the harbour, leaving the islands and rocks on your larboard side; keep the southern shore on board, for fear of a ledge of rocks that juts out from a little rocky island on the other side; and so soon as you get within the island, haul over for the northern shore, and anchor in 4 or 5 fathoms water.

BELLE ISLE. This island, which lies at the entrance of the strait to which it communicates its name, should be called the Northern Belle Isle, to distinguish it from those we have already described, lying to the southward; it is about 8 miles long and 3 broad, or 7 leagues in circumference, being distant from Bauld Head in Quirpon Island about 14 miles, and from the coast of Labrador 12 miles; it is moderately high, and wears an uniform sterile appearance. On its north-western shore, there is a small harbour called Lark Cove or Harbour, lying within an island almost close to the land, and fit only for small craft; and at the eastern side of the island is another cove called Batteaux Creek, frequented occasionally by shallops. About 2 miles to the north-eastward of this island lies a ledge of rocks, part of which appear above water, and over these the sea breaks very high; this is called the N.E. Ledge, you will have 15 and 20 fathoms close to it, and 55 between it and the north part of the island. The soundings about this Belle Isle are very irregular; near the island you will seldom find less than 20 fathoms, except on a small bank, said to lie to the northward, distant 4 miles from its north-eastern part, whereon is only 5 fathoms. The northern part of this island is said to lie in about the latitude of $51^{\circ} 57' N$.

CAPE NORMAN is the northernmost point of Newfoundland, being of a moderate even height, and very barren appearance, which continues far inland; it is about a league to the north-westward of the ledges: from Cape Norman the shores of Newfoundland turn south-westerly, and will be described hereafter.

SECTION II.

SOUTH COAST OF NEWFOUNDLAND.

PLACENTIA BAY.

THE entrance into Placentia Bay is formed by Cape Chapeau Rouge on the west side, and Cape St. Mary on the east side; they bear E.S.E. and N.N.W. from each other, distant about $16\frac{1}{2}$ leagues.

CAPE CHAPEAU ROUGE, or the Mountain of the Red Hat, is the highest and most remarkable land on that part of the coast; it appears above the rest somewhat like the crown of a hat, and, in clear weather, may be seen 11 or 12 leagues.

GREAT AND LITTLE ST. LAURENCE. These harbours lie close to the eastward of Cape Chapeau Rouge. To sail into the former, which is the westernmost, you should be careful with westerly, and particularly with S.W. winds, not to come too near the Hat Mountain, in order to avoid the flurries and eddy winds under the high land. There is no danger but what lies very near the shore, and the course in is first N.N.W. till you open the upper part of the harbour, then N. $\frac{1}{2}$ W. to the head of it. The best place for great ships to anchor is before a cove on the east side of the harbour, a little above Blue Beach point, which is the first point on the west side; where you may lie in 12 or 13 fathoms water on good ground, only two points open. There is also anchorage any where between this point and the point of Low Beach on the same side near the head of the harbour, observing, that the ground near the west shore is not so good as the ground on the other side. Fishing vessels lie at the head of the harbour above the beach, sheltered from all winds.

LITTLE ST. LAURENCE is about a mile to the eastward of Great St. Laurence. To sail into it you should keep the west shore on board, in order to avoid a sunken rock which lies a little without the point of the Peninsula, which stretches off from the east side of the harbour. The best anchorage is in 3 or 4 fathoms water, on a fine sandy bottom, above the Peninsula, which shelters you from all winds; there is also anchorage without the Peninsula in 12 or 14 fathoms, on good ground, but entirely open to the S.S.E. winds. In these harbours are good fishing conveniences, and plenty of wood and water.

GARDEN BANK, on which there are from 7 to 17 fathoms water, lies about two-thirds of a mile off the entrance of Little St. Laurence. Blue-Beach Point on with the east point of Great St. Laurence, is a mark for it.

SAUKER HEAD is a high hill in shape of a sugar loaf, off which lie some sunken rocks, about a cable's length from the shore; it lies $3\frac{1}{2}$ miles E. $\frac{1}{2}$ N. from Cape Chapeau Rouge; and from Sauker Head to Small Point, which is the lowest land hereabout, the course is E. $\frac{1}{2}$ N. and the distance 2 miles. From Small Point to Corbin Head, which is very high bluff land, the course is N.E. and the distance $2\frac{1}{4}$ miles.

CORBIN HARBOUR, which is tolerable good for small vessels, lies 1 mile to the northward of Corbin Head. The best anchorage is in the north arm, at about half a mile within the entrance, opposite a cove on the starboard side. Vessels bound for this harbour must be careful to avoid a small shoal with only 2 fathoms water on it, which lies near a quarter of a mile to the eastward of the south point of the entrance into the harbour. There is another rock, called Old Harry, which lies east about a quarter of a mile from the north point of the entrance of the harbour, on which the sea almost always breaks, not having depth sufficient at low water for a boat to go over it.

CORBIN ISLAND lies 2 miles from Corbin Head, and 1 mile further on the same course lies Little Burin Island; the former island has very much the appearance of Chapeau Rouge, when coming in with the land in hazy weather. These Islands are both high, and are little more than a cable's length from the main; but there is a depth of from 7 to 14 fathoms, and ships which may fall in here in a fog may occasionally sail within them, as there is no danger but what can be seen. From Corbin Head to Cat Island, the course is E.N.E. $3\frac{1}{4}$ miles; this is a high round island, which lies near the south end of Great Burin Island.

GREAT BURIN ISLAND lies nearly north and south, it is nearly 3 miles in length, and high land; near its north end is another high island, about three-quarters of a mile in length, called Parly's Island; within these islands on the main lie the harbours of Great and Little Burin.

BURIN BAY lies 1 mile N.N.E. of Little Burin Island: in this bay are two islands, one of which is low and barren, and called Poor Island, the other is high and woody, and lies before the mouth of Burin Inlet, which runs up to the northward $5\frac{1}{2}$ miles. Vessels may pass on either side of this island up the inlet; a little within the entrance on the east side, at about one-third of a cable's length from the shore, is a rock covered at three-quarter flood, to avoid which, edge over toward the west shore as soon as you are within the woody island.

There is another rock near the middle, about $1\frac{1}{4}$ mile from the entrance, to the westward of which is very good anchorage, in from 7 to 15 fathoms water; above which 2 miles, there are from 15 to 22 fathoms, and thence to the head from 10 to 5 fathoms.

Shalloway Island lies N.N.W. $\frac{1}{2}$ W. nearly a mile from Cat Island, and N.E. by E. $1\frac{1}{4}$ mile from Little Burin Island.

The south-west entrance into Great Burin Harbour is formed by Shalloway Island and the Neck Point, and is full a quarter of a mile wide. The course in from Burin Bay is about E. $\frac{1}{2}$ N. and by giving Poor Island on the larboard side a berth, you will avoid all danger. When you are past the points which form the entrance, the course up the harbour, which is nearly one-third of a mile wide, is N.N.E. $1\frac{1}{2}$ mile, up to Ship Cove, where it is full half a mile wide every way, and in which is the best anchorage. Vessels may also anchor in safety between Shalloway Island and Great Burin Island, pointed out by an anchor in the chart, in from 12 to 18 fathoms water.

There are only two dangers within Great Burin Harbour, which do not appear above water; the first is a sunken rock on the eastern shore, about half way up the harbour, and at about half a cable's length directly off a remarkable hole in the cliff on that shore, called the Oven; there is also directly opposite, on the western shore, a remarkable gully in the land, from the top to the bottom. By keeping Little Burin Island shut in with Neck Point, you will go clear to the westward of it. The other rock has only $2\frac{1}{2}$ fathoms on it, and lies a large cable's length to the southward of Harbour Point, which is low and green, and is joined to Great Burin Island by a long narrow sandy neck.

THE HARBOUR OF LITTLE BURIN lies half a mile to the northward of Ship Cove, and is an excellent harbour, having from 8 to 10 fathoms water, good bottom. The passage into it is narrow, but safe, lying between two islands, there being no danger but within 30 or 40 yards of the small low island, which you leave on your starboard hand going in.

The Eastern Passage into Burin Harbours is not very safe to sail in through without a commanding gale, and that between the N.N.E. and S.E. In coming from the southward, steer such course as will carry you a mile to the eastward of Iron Island, in order to avoid the White Horse Bank, on which the sea breaks in blowing weather, but on which there is water sufficient for any ship, and when the north point of Pardy's Island comes open to the northward of Iron Island, you may steer right in for it, leaving Iron Island on your larboard side, and you will avoid all danger. It is necessary to observe, that with the aforementioned winds there is commonly a great swell setting toward the shore on the starboard side going in: therefore, in case of little winds, (which often happens when you are past Iron Island,) endeavour to borrow on Pardy's Island, except the wind be from the N.E.

IRON ISLAND is a small high island, lying N.E. $\frac{1}{2}$ E. one league from the S.E. point of Great Burin Island, and E.S.E. $1\frac{1}{2}$ mile from the north part of Pardy's Island. Vessels bound for the harbours of Burin may pass on either side of Iron Island, the only danger passing to the northward is the Brandy's, which almost always break; they lie near a quarter of a mile to southward of a low rock above water, close under the land of Mortier West-head; if the wind should take you a head after you are within Iron Island, take care to keep Mortier West-head open to the westward of Iron Island, in order to avoid Gregory's Rock, on which is only 2 fathoms water. The marks to carry you on this rock, is to bring the Flag-staff on St. George's Island, in the centre of the passage, between Great Burin and Pardy's Islands, and Mortier West-head on with the west side of Iron Island; this rock almost always breaks; vessels may pass with safety between this rock and Iron Island, taking care to give Iron Island a berth of one cable's length.

GALLOPING ANDREW. On the main within Pardy's Island, are two remarkable white marks in the rocks; the northernmost of these marks brought on with the north part of Pardy's Island and Mortier West-head, open to the eastward of Iron Island, bearing N.E. $\frac{1}{2}$ N. will lead on the Galloping Andrew, a shoal on which is 5 fathoms water.

THE WHITE HORSE, a shoal on which is 8 fathoms water, lies S.S.W. 1 mile from Iron Island. The northernmost of the before-mentioned white marks just open of the south end of Iron Island will lead on it. Dodding Rock lies about a quarter of a mile from the easternmost part of Great Burin Island.

MORTIER BANK lies S.E. by E. 2 leagues from Iron Island, and S.W. $\frac{1}{4}$ W. 5 leagues from Cape Judas, the shoal part of this bank is about 1 league over. On it there is not more than 4 fathoms; in bad weather the sea breaks very high on it.

LITTLE MORTIER BAY. About a mile westward from Mortier West-head is Little Mortier Bay. On the west side, near the entrance, lies a small round island, called Mortier Island. Close to the first point, beyond this island on the same side, is another small island, and about a cable's length and a half from this island, in a line for Mortier Island, is a sunken rock, on which the sea breaks in bad weather. At the bottom of the bay, on the east side, lies Fox Cove, in which is very good anchorage in 9 fathoms water, abreast of a cove on the starboard side. The harbour of Little Mortier lies on the west side, is a tolerable good harbour for small vessels, but they must moor to the shore: in the entrance you have 7 fathoms water, but only 2 in the harbour; off the starboard point going in, is a rock which is covered at high water.

Croncy Island lies about $1\frac{3}{4}$ mile north-eastward of Mortier East Point; it is a high round island, and lies close to the shore.

MORTIER BAY. Two miles and a half from Croncy Island is the entrance into Mortier Bay, and on the west side of the entrance is a small harbour, called Boboy, in which there is only 9 feet water at low water. The course into Mortier Bay is N.N.E. for about 2 miles, and is three-quarters of a mile wide, in which you have from 50 to 70 fathoms water, the land on each side being high; it then runs to the westward about 2 miles, and is near 2 miles wide. In the S.W. corner of the bay is a river, which runs to the S.W. about $5\frac{1}{2}$ miles. On the east side, at about 3 miles from the entrance, is an exceeding good harbour, called Spanish Room, in which you may anchor in from 4 to 6 fathoms water, good bottom, and lie secure from all winds. There is not the least danger in sailing into this harbour, giving the low rocks above water at the entrance on the larboard hand a berth of one cable's length.

ROCK HARBOUR lies 2 miles to the E.N.E. of the entrance into Mortier Bay; it is fit only for boats, by reason of the infinite number of rocks in it, both above and under water.

JOHN THE BAY. From Mortier East Point to John the Bay Point, the course is N.E. $\frac{1}{4}$ E. distant 8 miles; between John the Bay Point and Rock Harbour, lie two sunken rocks, half a mile from the shore. Two miles to the N.N.W. of John the Bay Point lies John the Bay, in which is tolerable good anchorage in about 8 fathoms water, with sandy bottom.

THE SADDLE BACK is a small island lying E.N.E. 8 leagues from Corbin Head, E. by N. 16 miles from Mortier West Point, and E.S.E. $\frac{3}{4}$ E. 3 leagues from John the Bay Point: between it and the main are a great number of rocks and Islands, which render this part of the coast very dangerous: there is a chain of rocks lying $1\frac{1}{2}$ mile to the N.E. by E. of the Saddle-back.

CAPE JUDAS is an island about 2 miles and a third in length, and $1\frac{1}{2}$ mile in breadth; it lies $1\frac{1}{2}$ mile to the N. of the Saddle-back; on the south end of it is a remarkable round hill, which is called the cape. Between this island and the main are a cluster of islands and low rocks, with a great number of sunken rocks about them, called the Flat Islands, the innermost of which lies about 1 mile from the main.

AUDIERNE ISLAND lies half a mile to the northward of Cape

Judas, on the west side of which is a tolerable good harbour; vessels bound for this harbour may pass between Cape Judas and Audierne Island, and between Crow and Patrick's Island, which are two small islands lying off the S.W. point of Audierne Island. About one cable's length from Audierne Island, to the southward of the harbour, is a sunken rock; the mark for avoiding it in coming from the southward is, not to haul in for the harbour till you open a remarkable green point on the south side of the harbour; the best anchorage is on the north shore, just within a small Island. There is a spit of rocks stretches off the Green Point on the south shore, which are covered at high water.

Off the east point of Audierne Island is a small island, called Ford's Island; on the west side of which is a sunken rock, about one cable's length from the island, and another on the east side, both of which almost always break.

BROAD COVE lies on the main W.N.W. $5\frac{1}{2}$ miles from Ford's Island; in this cove is exceeding good anchorage, in 8 or 9 fathoms water.

CROSS ISLAND lies $2\frac{1}{4}$ miles to the N.N.W. of Ford's Island, is about $2\frac{1}{4}$ miles in length, and 1 mile in breadth, is high woody land; between this island and the main are several other islands. Bane Harbour lies on the main within these islands, is an exceeding good harbour for small vessels; the passage into it is very narrow, and hath in it 2 fathoms water, but when in, there is sufficient room to moor in 3 fathoms, good bottom.

BOAT HARBOUR lies about 1 mile to the northward of Cross Island, and runs up N.E. 1 league, with deep water to about half a mile of the head; close round the eastern point of Boat Harbour lies Bay de Leau, which runs in N.E. $\frac{1}{2}$ E. better than a league.

LONG ISLAND is $3\frac{3}{4}$ miles long, and half a mile broad; is high land, making in several peaks; the south point of it lies N.E. by E. 2 leagues from the Saddle-back, and S.E. by E. 3 miles from Ford's Island.

N.N.W. 2 miles from the south point of Long Island, and E. by N. $1\frac{1}{2}$ mile from Ford's Island, lies a small Green Island, which has a shoal all round, near one cable's length.

GREAT GALLOWS HARBOUR. From Green Island N.N.W. 2 miles and a half, and about 3 miles from Ford's Island, lies Great Gallows Harbour Island, which is a high land. Vessels may pass on either side of this island into Great Gallows Harbour, which lies 1 mile to the N.E. of the island; in this harbour is exceeding good anchorage in 7 fathoms water, on the starboard side, just within a low stony point, taking care to give the point a small berth, in order to avoid a rock which is covered at high water.

LITTLE GALLOWS HARBOUR lies close round to the eastward of Great Gallows Harbour, and is only fit for small vessels, which must lay moored to the shore, above a rock which is above water, on the larboard hand. Little Gallows Harbour Island lies before the mouth of the harbour.

CAPE ROGER HARBOUR lies close to the westward of Cape Roger, which is a high round barren head, lying N. $\frac{3}{4}$ E. $3\frac{1}{2}$ miles from the south point of Long Island. There are several low rocks and islands lying off the east point of the entrance; in the harbour, $\frac{1}{4}$ mile within the entrance on the west side, lies a small island, to the northward of which between it and the main is very good anchorage in 7 or 8 fathoms water; or you may run further up, and anchor in 6 or 7 fathoms.

One mile and a quarter to the eastward of Cape Roger Harbour lies Nonsuch; there are several islands lying in the mouth of it, and no safe anchorage till you get within all of them.

PETIT FORT is a very good harbour, having in it from 14 to 7 fathoms water, good bottom; the entrance into it is better than a quarter of a mile wide, and lieth N.E. 5 miles from the south point of Long Island, and N. by E. $2\frac{1}{2}$ miles from the north point of Long Island. There is not the least danger in sailing into this harbour; the best anchorage is on the starboard side. The S.E. winds heave in a great swell on the west shore when they blow hard.

PARADISE SOUND. One mile to the eastward of Petit Fort lies the entrance into Paradise Sound, which runs up N.E. by E. $4\frac{1}{2}$ leagues, and is about 1 mile broad; in it is very deep water, and no safe anchorage till you get near the head of it. Just within the entrance on the east side is a cove, in which are several rocks above water, and 10 fathoms water, but not safe to anchor in, the bottom being rocky.

From Corbin Head to Marticot Island, the course is E.N.E. $\frac{1}{4}$ E. $11\frac{1}{2}$ leagues nearly; this course will carry you just without the Saddleback. Between Marticot and the main is Fox Island; there is a safe passage for vessels between these islands, with not less than 9 fathoms water, but no passage between Fox Island and the main. On the main within Marticot Island lie the harbours of Great and Little Paradise. The harbour of Great Paradise is only fit for boats. The harbour of Little Paradise lies 1 mile to the northward of the east point of Marticot Island; the only safe anchorage is in a cove at the head on the larboard side; here they lie moored to the shore, and are entirely land-locked.

LA PERCHE. One mile to the north-eastward of Little Paradise lieth La Perche, in which is no safe anchorage, the ground being bad, and lies entirely exposed to the south-east winds.

BLACK ROCK. East 2 miles from Marticot Island, is a rock above water, called the Black Rock; and a quarter of a mile within this rock lieth a sunken rock. N.N.E. $2\frac{3}{4}$ miles from Black Rock lies Presque: in it is very deep water, but no safe passage into it by reason of a number of rocks, both above and under water, lying before the entrance.

MERASHEEN ISLAND. E.S.E. $3\frac{1}{2}$ miles from Presque, and E. by N. 6 leagues from the Saddle-back, lies the west point of Merasheen Island; this island is high, and runs to the N.E. by E. better than 6 leagues, and is very narrow; the broadest part not being more than 2 miles. At the south part of the island, near the west end, is a very good harbour, but small, in which is from 6 to 10 fathoms water. To sail into it, keep the starboard shore on board, in order to avoid a sunken rock that lies one cable's length off a ragged rocky point on the larboard hand going in.

INDIAN HARBOUR lies on the east side of Merasheen Island, at about 10 miles from the south point: this harbour is formed by a small island, on either side of which is a safe passage into it: the only anchorage is to the westward of the island, between it and the main, and here the ground is uncertain.

The Little Isle of Valen lies N. by E. 2 miles from the west point of Merasheen Island; it is high and round, and lies within about half a mile of the main. One-third of a mile from the Little Isle of Valen lies the Great Isle of Valen, on the S.E. part of which is a small harbour.

CLATISE HARBOUR. On the main within the Great Isle of Valen lies Clatise Harbour; the entrance into it is about half a mile wide; in it is 40 or 50 fathoms water. The best anchorage is in the west cove, which is 1 mile long, but not a quarter of a mile broad; in it is from 17 to 20 fathoms water, good bottom. Grammer's Rocks are low rocks, above water, and lie $1\frac{1}{2}$ mile from the north end of the Great Isle of Valen.

LITTLE SANDY HARBOUR. This is a tolerable good harbour; in it you have 6 and 7 fathoms water, good bottom; in the mouth of which is a low rock above water. Vessels bound for the harbour must pass to the northward of this rock. This harbour may be known by the island called Bell Island, which lies S.E. $\frac{1}{2}$ E. $1\frac{1}{2}$ mile from the mouth of it, and N.E. by N. 13 miles from the west point of Merasheen Island; off the south point of the island is a remarkable rock, resembling a bell with the bottom upwards.

GREAT SANDY HARBOUR lies 1 mile to the northward of Little Sandy Harbour; the passage into it is narrow, but in it you have 6 or 7 fathoms water: there are two arms in this harbour; one running to the S.W. which almost dries at low water, the other running to the N.E. in which is a tolerable good anchorage. There are several low rocks and islands lying before this harbour.

BARREN ISLAND is about $3\frac{1}{2}$ miles long, and 1 mile broad; is high land, and lieth better than 1 league from the north part of Merasheen Island, and about half a mile from the main. On the east side of this island, near the south end, is a cove, in which is tolerable good anchorage in from 10 to 16 fathoms water. Along the west side of this island, between it and the main, is very good anchorage. On the main, opposite the north end of Barren Island, lies La Plant, a harbour only fit for boats.

From Barren Island, are a string of islands quite to Piper's Hole, which lies 3 leagues from the north part of Barren Island. These islands are about half a mile from the main, having from 17 to 7 fathoms water, good anchorage all the way to Piper's Hole.

CAPE ST. MARY is the east point of the entrance into Placentia Bay; it is a pretty high bluff point, appearing somewhat like Cape St. Vincent, on the coast of Portugal; a little to the northward of the cape is a small cove, where fishing shallows shelter from the easterly and southerly winds. The land from Cape St. Mary to Placentia is pretty high and even; but over Placentia and to the northward of it, the land is very high and uneven, with many peaked hills. S.E. $\frac{1}{2}$ E. $7\frac{1}{2}$ miles from the cape lie St Mary's Keys, which are two rocks just above water, and on which the sea almost always breaks.

BULL and Cow Rocks are a cluster of rocks above water, lying S.E. by S. 2 leagues from Cape St. Mary, about $1\frac{1}{2}$ mile from the main, and W.N.W. $2\frac{1}{2}$ miles from Point Lance, which is a low ragged point, and is the west point of the entrance into St. Mary's Bay: at about one-third of the distance from the main to the Bull and Cow Rocks is a sunken rock, which shows above water at half ebb. From Cape St. Mary to Point Breme, the course is N. by E. $\frac{1}{4}$ E. $7\frac{1}{2}$ miles.

VIRGIN ROCKS. From Point Breme to the Virgin Rocks, the course is N.E. $\frac{1}{4}$ E. distance $11\frac{1}{2}$ miles: these rocks show above water, and lie about 1 mile from the main. A little to the southward of these rocks there are some whitish cliffs in the land, by which that part of the coast may be known, on falling in with it, in thick weather.

PLACENTIA ROAD. From the Virgin Rocks to Point Verd, the course is N.E. by E. $\frac{1}{2}$ E. distance $5\frac{3}{4}$ miles: this is a low green point, and is the south point of the entrance into the Road of Placentia. To sail into the road coming from the southward, keep 1 league from the shore, in order to avoid the Gibraltar Rock, which lies W.S.W. from Point Verd, about $2\frac{1}{4}$ miles, with 8 feet water on it. Near the bottom of Placentia Road, on the north shore, at the top of a hill, stands a castle, which is distinguishable far out at sea. So soon as the castle comes open to the northward of Point Verd, you may haul in for the castle, taking care to give Point Verd a berth of near 2 cables' length; and by keeping your lead going, you may borrow on the flat, which lies on the south shore, into the depth of 4 fathoms; the soundings throughout are gradual. The best anchorage in the road is under the castle hill, in about 6 fathoms water. The entrance into the harbour is very narrow; in it you have $3\frac{1}{2}$ fathoms water; after you are within the narrows, it is about one-third of a mile broad, and about $1\frac{1}{2}$ mile long: here you may anchor in perfect safety, in 6 or 7 fathoms water.

RED ISLAND. From Mortier-head to Red Island, the course is E. by N. $\frac{1}{4}$ E. $12\frac{1}{2}$ leagues. Red Island is high barren land, about $4\frac{1}{2}$ miles long, and $2\frac{1}{2}$ miles broad; the south point lies N.N.W. 11 miles from Placentia Road. On the east side, near the north end, is a small harbour, which is only fit for shallows.

POINT LATINA lies about 5 miles to the northward of Placentia Road; between these places the land is low, and even near the sea, but just within it high and ragged; there are several sunken rocks lying along the shore about half a mile off. Point Roche lies better than 1 mile to the eastward of Point Latina. There is a shoal stretches off Point Roche better than a quarter of a mile.

DIRECTIONS

FOR THE

ROAD AND HARBOUR OF PLACENTIA,

BY MR. F. OWEN.

The Road and Harbour of Great Placentia are on the east side of the Bay of Placentia. The southern entrance of this road is Point Verde, which bears from Cape St. Mary N.E. distance 25 miles; from the Outer Virgin rock N.E. by E. $\frac{1}{3}$ E. and from the south side of Red Island S.S.E. distance 14 miles.

Point Verde is a low level point, with a pebble beach on the east side, nearly half a mile long, with several fishing-stages just within the point. At the end of this beach is a high rocky cliff, that extends to the S.E. corner of the bay, where it again terminates in a pebble beach. This

beach runs E.N.E. 1 mile, to the old fort or south entrance of the harbour: on the inside of this beach stands the town of Placentia, which faces the S.E. arm of the harbour. A little to the southward of the town is a high hill, with a remarkable cliff on the middle of the beach.

The outer point on the north side is level, with a clay cliff on the outer part. It bears from Point Verde N.E. by N. nearly, distant 1 mile and a half: from this point the land forms a small bay, with a stony beach round it, to the corner of the cliff under Signal Hill, which is the first hill on the north side of the road from this point. The cliff continues to Freshwater Bay, which is formed in a small valley between Signal Hill on the west, and Castle Hill on the east, with a pebble beach round it. A small rivulet runs down this valley, where ships can water. On the east side of this bay is Castle Hill, with an old fortification on its top; within this hill is a narrow beach, which forms the north entrance into the harbour. At low water, the entrance of the harbour is not more than 60 fathoms across, and the tide into it runs more than four knots an hour.

The only dangers near Placentia are, the Virgin Rocks and Gibraltar Rocks, on the south, and Moll Rock on the north. The outer Virgin Rock bears from Point Verde S.W. by W. $\frac{1}{4}$ W. distant $5\frac{1}{2}$ miles, and from Point Breme N.E. $\frac{1}{4}$ E. distant 12 miles. These rocks are all above water, with 10 and 12 fathoms round them. The Gibraltar Rock bears from Point Verde, west, rather southerly, distant $2\frac{1}{2}$ miles, and is near 2 miles from the shore.

The Moll Rock bears from Point Verde N. by E. $\frac{1}{2}$ E. distant 2 miles, and from Moll Point nearly S.W. three-quarters of a mile. There are only 12 feet of water on this rock, with 10 fathoms around it.

The land from Cape St. Mary to Placentia is of moderate height, and nearly even; but to the northward of it, the land is high and uneven, with several peaked hills.

When bound to Placentia, after you have passed Cape St. Mary, the course from Point Breme to the Outer Virgin Rock is N.E. $\frac{1}{4}$ E. distant 12 miles; and thence to Point Verde N.E. by E. $\frac{1}{4}$ E. $5\frac{1}{2}$ or 6 miles. Before you get the length of the Virgins, if the weather be clear, you will see Point Verde, a long point under the high land of Signal Hill and Castle Hill. The latter is remarkable by its having an old fortification on its summit, which may be seen a great way off at sea.

When you have gotten the length of the Virgin Rocks, you must steer to the northward, till you bring the old fort on Castle Hill on, or open to the northward of, Point Verde. It bears from Point Verde E. $\frac{1}{2}$ N. This mark will bring you to the northward of Gibraltar Rock; you may then steer for the road, taking care not to come nearer Point Verde than two cables' length; as a flat runs off to the northward, with only 12 and 15 feet of water on it. The soundings of the road are regular; from 6 to 3 fathoms, sandy bottom; but the deepest water is on the north side, as there are 5 and 6 fathoms close to the rocks. On the south side the water is shoal, as there are not more than 12 feet, at 100 fathoms from the shore. The best anchorage for ships of a large draught of water is abreast of Fresh-water Bay, at about one quarter of the distance from the north shore; where you will have 5 or $5\frac{1}{2}$ fathoms, with sandy bottom. Point Verde will then bear W. $\frac{3}{4}$ N. and the outer point of Signal Hill N.W. $\frac{1}{4}$ N. The whole bay has a sandy bottom, and good holding-ground.

The tide rises 7 or 8 feet; it is felt but little in the Road, but runs 4 or 5 knots in and out of the harbour. Here it flows on the full and change days of the moon at 9h. 15m. in the morning. The variation of the compass in the road, by observation on the 22d of August, 1800, was $22^{\circ} 40'$ W. It is now about 24° .

MAGNETIC BEARINGS AND DISTANCES

*Of Places on the East Side of Placentia Bay, as taken
in 1800.*

		<i>Miles.</i>
From Cape St. Mary to Point Breme	N. 14° E. or N. by E. $\frac{1}{4}$ E.	8
	the south side of Red Island N. 22 E. or N.N.E.	34
From Point Breme to the Virgin Rocks	N. 48 E. or N.E. $\frac{1}{4}$ E.	12
	the south side of Red Island N. 14 E. or N. by E. $\frac{1}{4}$ E.	28
From the Virgin Rocks to Point Verde	N. 61 E. or N.E. by E. $\frac{1}{2}$ E.	$5\frac{1}{2}$
	Point Latina N. 46 E. or N.E.	12
	the south side of Red Island N. 1 E. or North	46
From Point Verde to Point Latina	N. 29 E. or N.N.E. $\frac{1}{4}$ E.	6
	the south side of Red Island N. 21 W. or N.N.W.	14
From Point Latina to the south side of Red Island	N. 43 W. or N.W. $\frac{1}{2}$ N.	11

LITTLE PLACENTIA HARBOUR.

S.S.E. $\frac{1}{2}$ S. $1\frac{1}{4}$ mile from Point Roche is the entrance into Little Placentia, which runs up W. $\frac{1}{2}$ S. about $1\frac{1}{2}$ mile, and is near half a mile broad; there is exceeding good anchorage in this harbour, in a cove on the north shore; this cove may be known by the west point being woody, and the land to the eastward being barren; off the east point of the cove lies a shoal for near one-third of the distance over to the south side of the harbour; in this cove is 7 and 8 fathoms water.

From Point Latina to SHIP HARBOUR, the course is E. distance $5\frac{1}{2}$ miles; this harbour runs up north $2\frac{3}{4}$ miles, and is about a quarter of a mile broad; the best anchorage is in a cove on the west side, in about 10 fathoms water, at about 1 mile from the entrance.

FOX ISLAND is small and round: it lies N.E. $\frac{1}{2}$ N. 3 miles from Point Latina, and N.W. by W. 1 league from Ship Harbour Point, which is a low stony point, lying about $1\frac{1}{2}$ mile to the westward of Ship Harbour; between Fox Island and this point are a range of rocks, which in bad weather break almost quite across. N.N.W. $1\frac{1}{2}$ mile from Fox Island, is a steep rock above water, called Fishing Rock; north $1\frac{1}{2}$ mile from Fishing Rock lies a sunken rock, called Rowland's Rock, which almost always breaks.

THE RAM ISLANDS. These are a cluster of high islands, lying about 3 miles to the N.E. $\frac{1}{2}$ E. of Fox Island. E. 3 miles from the south point of Ram Islands is the entrance into LONG HARBOUR;

there is not the least danger in sailing into it: the best anchorage is on the north side, to the eastward of Harbour Island, between it and the main; here you will lie secure from all winds in 7 or 8 fathoms water.

Little Harbour is north about 5 leagues from Ram Islands; there are several low islands and rocks along shore between these places, which I had not an opportunity of examining; but was well informed there is not the least shelter for vessels, nor scarcely for boats, along that coast. Little Harbour is small, with 7 fathoms water; the ground is bad, and lies entirely exposed to the S.W. wind, which heaves in a very great sea.

LONG ISLAND. From Point Latina to the south point of Long Island, the course is N. $\frac{1}{2}$ E. $13\frac{1}{2}$ miles; this island is near 3 leagues long, in high land, the south point being remarkable high steep rocks. On the east side of the island, about $2\frac{1}{2}$ miles from the south point, lies **HARBOUR BUFFET**, which is tolerably good; the entrance to it is narrow, but has 13 fathoms water in it. There are two arms in this harbour, one running to the westward, the other to the northward: the best anchorage is in the north arm, in about 15 fathoms water. This harbour may be known by the islands that lie in the mouth, and to the southward of it, and by Harbour Buffet Island, that lies E. $\frac{1}{2}$ S. 1 mile from the entrance. To sail into it you must pass to the northward of the islands in the mouth.

MUSCLE HARBOUR. About $3\frac{1}{2}$ miles from the south point of Long Island, on the west side, lieth Muscle Harbour. Vessels bound for this harbour may pass between Long Island and Barren Island, which is a high barren island about 1 mile and a third long, and about one-third of a mile from Long Island. The entrance into the harbour lies opposite the north end of Barren Island, and is between a low green point on your starboard hand, and a small island on your larboard hand; this harbour is $1\frac{1}{2}$ mile long, and half a mile broad, and in it is from 10 to 22 fathoms water, rocky bottom.

LITTLE SOUTH HARBOUR lies 1 mile to the westward of Little Harbour: before the mouth of it are several rocky islands. In sailing into the harbour, you must leave all the islands on your starboard hand except one, on either side of which is a safe passage of 15 fathoms water; on the east shore, within the islands, is a sunken rock, about one cable's length from the shore, which generally breaks; nearly opposite, on the west shore, are some rocks, about half a cable's length from the shore, that show at one-third ebb. This harbour is about $1\frac{1}{2}$ mile long, and near half a mile wide, with 7 fathoms water, good bottom.

GREAT SOUTH HARBOUR lies about 1 mile to the northward of Little South Harbour; there is no danger in sailing into it; near the head is very good anchorage in 6 or 7 fathoms water. One mile to the westward of Great South Harbour is Isle au Bordeaux, a high round island near the main.

COME BY CHANCE. The entrance into Come by Chance lies N.N.E. 4 miles from Isle au Bordeaux, and runs up N.E. by E. 3 miles; in it is from 20 to 3 fathoms water, sandy bottom: it is entirely exposed to the S.W. wind, which heaves in a very great swell.

NORTH HARBOUR is N.N.W. $2\frac{1}{2}$ miles from Come by Chance, and S.E. by S. $2\frac{1}{2}$ miles from Piper's Hole: about 2 miles from the entrance is good anchorage in 7 fathoms water, and no danger sailing into it.

CAPE ST. MARY TO CAPE RACE.

From CAPE ST. MARY to POINT LANCE the bearing and distance are S.E. 8 miles; the latter is a low ragged point, though the interior country is considerably elevated. From Point Lance the coast trends E.N.E. $\frac{1}{2}$ N. to North Harbour, between which are one or two coves, but no place fit for shipping.

NORTH HARBOUR is about a mile wide at the entrance, and runs to the northward 3 miles; in it is very good anchorage, in about 6 or 7 fathoms water, about 2 miles within the entrance, where it is not above half a mile wide; or you may run further up, taking care to keep the starboard shore close on board, and anchor within the point of the narrows. In entering North Harbour, always keep mid-channel, for the eastern land is somewhat shallow.

COLINET BAY. This bay lies E.N.E. distant 4 miles from North Harbour, and affords good anchorage in from 5 to 12 fathoms water; it runs in N.E. by N. about 2 miles, where the point of an island on the starboard side narrows the passage; it then widens again towards the top, where there is a sandy shallow beach.

GREAT SALMON RIVER. The north point of Little Colinet Island, lies S.W. $\frac{1}{2}$ W. $5\frac{1}{2}$ miles from Colinet Bay, and E.N.E. $\frac{1}{2}$ E. 2 leagues from the former is the entrance into Great Salmon River; it is about three-quarters of a mile wide, and runs from the E.N.E. 7 or 8 miles. There is very good anchorage in it; but the best is about $2\frac{1}{4}$ miles from the entrance, on the north side, in a sandy cove, in 5 or 6 fathoms.

COLINET ISLANDS. Little Colinet Island is above 1 mile long and half a mile broad; it is surrounded by deep water, and is distant $1\frac{1}{2}$ mile north-eastward from Great Colinet: the latter is a league in length; on either side of it is a safe channel; taking care to give Shoal Bay Point, which lies a mile distant from the east end of Great Colinet, a berth of a quarter of a mile, to avoid some rocks which lie off that point. On the north side of the island is a stony beach, off which lies a bank for about a quarter of a mile, on which is from 7 to 18 fathoms, rocky bottom.

ST. MARY'S HARBOUR. Two leagues below these islands lies St. Mary's Harbour, the entrance to which is above a mile wide, formed by Double Road Point on the south side, and Ellis Point on the north: within these points the channel divides into two branches, one to the S.E. the other to the E.N.E. When you are within Ellis Point haul in to the southward, and anchor abreast of the stages and houses, upon a flat, in 4 or 5 fathoms, where you will lie land-locked. This flat runs off about half a mile from the shore, and without it is from 15 to 40 fathoms over to the other side; but the best anchorage is about 2 miles above the town, where it is above half a mile wide, opposite Brown's Pond,

which may be seen over the low beach on the starboard hand; here you will lie land-locked in 12 fathoms water, and excellent ground all the way up to the head of the bay. The E.N.E. arm lies open to the sea, and is not frequented.

The course and distance from Double Road Point to Point la Haye are W.S.W. $1\frac{1}{2}$ mile, the land between is low and barren: the latter point is low, from which a ledge of rocks extends a quarter of a mile into the sea, and a mile along the shore, on which the sea breaks in bad weather: vessels must be careful to avoid this, the only danger in the bay.

MAL BAY lies to the westward of the north-east point of St. Mary's Harbour; it is about a mile wide, and about 2 miles deep, but there is no good anchorage, a heavy swell generally setting into it.

Cape English lies W.S.W. 3 leagues from Point la Haye: the cape is high table land, terminating in a low rocky point, forming a bay about a mile deep to the southward of it; at the bottom of which is a low stony beach, within which is Holyrood Pond, running to the E.N.E. about 6 leagues; this being within the cape gives it the appearance of an island. False Cape bears S.W. $\frac{1}{4}$ S. 1 mile from Cape English and Gull Island, which is small and close to the land, is distant about 6 miles S. by W. $\frac{1}{4}$ W. from the same headland.

ST. SHOTS. From Gull Island to the western side of St. Shots, the bearing and distance are S. $\frac{1}{4}$ W. 4 miles; this bears from the eastern side N. by W. $\frac{3}{4}$ W. 2 miles. St. Shots Bay is about a mile deep, but entirely open to the sea and very dangerous. The eastern head of St. Shots may be considered the east point of ST. MARY'S BAY, while Point Lance forms the west end, these bear from each other N.W. $\frac{1}{4}$ N. and S.E. $\frac{1}{2}$ S. distant $7\frac{1}{2}$ leagues; the bay runs up $9\frac{1}{2}$ leagues; the land on each side being moderately high.

One mile S.E. $\frac{3}{4}$ E. from the eastern head and reef of St. Shots is Black Head, and from Black Head to CAPE FREELS the land trends 1 mile E.S.E. W. $1\frac{1}{2}$ mile further is Cape Pine, which is moderately high and barren.

TREPASSEY HARBOUR. Nearly 5 miles S.W. by W. from Cape Pine is the entrance of Trepassey Harbour; it is about three-quarters of a mile wide, and runs nearly of the same breadth for $2\frac{1}{2}$ miles; it then narrows to one quarter of a mile, when it again increases to three-quarters where the ships ride. The dangers in sailing into this harbour are, a small rock on the east shore, about a mile within the Powle Head, and about one-third of a cable's length from the shore; and on the west shore, in the harbour, off a stony beach, a shoal, which runs along shore up the harbour to a low green point. Baker's Point on with a low rocky point on the entrance of the harbour, will carry you clear of this shoal. When you are nearly up with the low green point you may steer more to the westward, and anchor either in the N.W. or N.E. arm in 5 or 6 fathoms.

MUTTON BAY. The Powles is the east point of the entrance into Trepassey Harbour; from the Powles to Cape Mutton is E.S.E. $\frac{3}{4}$ E. 1 mile. Between lies MUTTON BAY, which is about 2 miles deep, with 12 to 3 fathoms, rocky bottom. The N.W. part of the bay is separated from Trepassey Harbour by a low, narrow, stony beach, over which the vessels may be seen.

From Cape Pine to Mistaken Point, the course and distance are

E.S.E. $\frac{1}{4}$ E. $13\frac{1}{2}$ miles: from this, French Mistaken Point bears S.E. by E. 2 miles. From Mistaken Point the land trends E. 1 league and then E. by N. $1\frac{1}{2}$ mile to Cape Race, which we have already stated to be the south-east extremity of Newfoundland, being table land moderately. We shall now resume our directions from the west point of Placentia Bay to Cape Ray, and thence continue along the west side of the island to the Straits of Belle Isle.

CAPE CHAPEAU ROUGE TO CAPE RAY.

FERRYLAND HEAD lies W.S.W. 1 mile from Cape Chapeau Rouge; it is a high rocky island, just separated from the main.

THE BAY OF LAUN lies W.N.W. 5 miles from Ferryland Head, in the bottom of which are two small inlets, called Great and Little Laun: the latter, which is the easternmost, lies open to the S.W. winds, and therefore is no place for anchorage. Great Laun lies in about N.E. by N. 2 miles; it is near half a mile wide, and has from 14 to 3 fathoms water: in sailing in, be careful to avoid a sunken rock, which lies about a quarter of a mile off the east point. The best anchorage is on the east side, about half a mile from the head, in 6 and 5 fathoms, tolerably good bottom, and open only to South and S. by W. winds, which cause a great swell.

LAUN ISLANDS lie off the west point of Laun Bay, not far from the shore; the westernmost and outermost of which lies W.N.W. westerly, 14 miles from Ferryland Head. Nearly a quarter of a mile to the southward of this island is a rock, whereon the sea breaks in very bad weather; there are other sunken rocks about these islands, but not dangerous, being very near the shore.

TAYLOR'S BAY lies open to the sea, about 4 miles to the westward of Laun Islands. Off the east point are some rocks, near a quarter of a mile from the shore.

POINT AUX GAUL is a low, narrow point of land, which stretches out a little to the westward of Taylor's Bay: a rock lies off it above water, half a mile from the shore, called Gaul Shag Rock, which bears from Ferryland Head W.N.W. $\frac{3}{4}$ W. $6\frac{1}{2}$ leagues: there are 14 fathoms close to the off-side of it, but some rocks on its inside. From Point Aux Gaul Shag Rock to the Lamelin Islands, the bearing and distance are N.W. by W. 1 league; between is the Bay of Lamelin, which is unfit for shipping, being shallow, and having several islands and rocks about it, the river at the bottom of the bay abounds with salmon. Near the south point of the westernmost Lamelin Island is a rock high above water, called Lamelin Shag Rock.

From Lamelin Shag-Rock to Point May, the distance is 9 miles; between lie the Lamelin Ledges, which are very dangerous, some of them being 3 miles from the land. To avoid them, in the day-time, you should not bring the Lamelin Islands to the southward of E.S.E. until Point May bears N.E. by N. from you; you may then steer northward between Point May and Green Island with safety. By night approach

no nearer than in 30 fathoms water. Mariners, who navigate this part of the coast, will do well by observing the appearance of the land, for all that part of Chapeau Rouge and Laun, is very high and hilly close to the sea; from Laun Islands to Lamelin, it is only moderately high; and from Lamelin to Point May, the land, near the shore, is low, with beaches of sand, while inland it becomes mountainous.

ST. PIERRE, OR ST. PETER'S ISLAND. The Island of St. Pierre lies 12 leagues W. by N. from Cape Chapeau Rouge; it is about 4 leagues in circumference, and pretty high, with a craggy, broken, uneven surface. On coming from the westward, Point Cronier, which is the S.E. point of the island, makes in a round hummock, like a small island, separated from St. Pierre. The port is on the eastern side of the island, at only a mile to the north-westward of Point Cronier, the easternmost point; and it is bounded on the east by Dog Island, eastward of which are several inlets and rocks. The passage in, between Dog Island and St. Pierre, is very narrow, and bordered with rocks, but in mid-channel are 6, 4, $3\frac{1}{2}$, 5 and 6 fathoms.

Upon Canon Point, on the north side of the entrance to the inner harbour, in latitude $46^{\circ} 46' 52''$, longitude $56^{\circ} 8' 44''$, is a modern lighthouse, with fixed harbour light, about a quarter of a mile eastward of the town, which is kept up from the 1st May to the 15th November. With the lighthouse bearing W. by N. or W. $\frac{1}{2}$ N. about two cables' length, there is anchorage in $5\frac{1}{2}$ and 6 fathoms. The harbour is small, and has from 20 to 12 feet water; but there is a bar across the entrance, with only 6 feet at low water, and 12 or 14 at high water. The road lies on the N.W. side of Dog Island, and will admit ships of any burthen in 8, 10, or 12 fathoms water. The best anchorage is on the north side; but in general it is rocky, and exposed to the N.E. winds. Be cautious, in going in or out, of some sunken rocks, which lie about a mile E.S.E. from Boar Island, which is the easternmost of the three islands above mentioned: this is the only danger about St. Peter's, but what lies very near the shore. This harbour has lately been improved by the erection of a lighthouse.

THE ISLAND OF COLOMBIER, OR COLOMBO, lies very near to the N.E. point of St. Pierre, it is rather high; between them is a passage third of a mile wide, with 12 fathoms water. On the north side of the island is a rock, called Little Colombier; and about one quarter of a mile E.N.E. from it is a sunken rock, with 2 fathoms on it.

GREEN ISLAND is about three quarters of a mile in circuit, and low: it lies E.N.E. about 5 miles from St. Pierre, and nearly in the middle of the channel between it and Point May, in Newfoundland; on its south side are several rocks above and under water, extending $1\frac{1}{4}$ mile to the W.S.W.

LANGLEY, OR LITTLE MIQUELON. Langley Island lies to the N.W. of St. Pierre, with a passage of about $2\frac{1}{2}$ miles wide between, free from danger. It is about 8 leagues in circuit, of a moderate and equal height, excepting at the north end, which is a low point with sand-hills; off which, on both sides, it is flat a little way; but every other part of the island is bold-to. There is anchorage on the N.E. side of the island, near Seal Cove, in 5 or 6 fathoms, a little to the southward of the sand-hills, on a fine sandy bottom.

MIQUELON. From the north point of Langley to the south point of Miquelon the distance is scarcely one mile. Miquelon is 4 leagues

in length from north to south, and is about 5 miles in breadth at the widest part: the middle of the island is high land, called the high lands of Dunne; but down by the shore it is low, excepting Cape Miquelon, which is a lofty promontory at the northern extremity of the island. On the S.E. side of the island is the little Harbour of Dunne; it is a bar harbour admitting fishing shallows at half flood, but no way calculated for shipping.

MIQUELON ROCKS stretch off from the eastern point of the island, under the high land, $1\frac{1}{4}$ mile to the eastward: some are above and some under water: the outermost are above water, and there are 12 fathoms water close to them, with 18 and 20 a mile off. N.E. $\frac{1}{2}$ E. about $4\frac{1}{2}$ miles from these rocks, lies Miquelon Bank, on which are 6 fathoms water.

MIQUELON ROAD, which is large and spacious, lies towards the north end, and on the east side of the island, between Cape Miquelon and Chapeau, which is a very remarkable round mountain near the shore, off which are some sunken rocks, at the distance of about a quarter of a mile; but every where else it is clear of danger. The best anchorage is in 6 or 7 fathoms, near the bottom of the road, on fine sandy bottom; but there you lie exposed to easterly winds.

THE SEAL ROCKS, two in number, are above water, and lie about $1\frac{1}{2}$ league off from the north-west side of Miquelon; the passage between them and the island is very safe, and there are 14 or 15 fathoms water within a cable's length all round them.

ST. PIERRE, LANGLEY, and MIQUELON, were ceded to France by England, on condition that no forts should be built on either; that no more than fifty men of regular troops should be kept there; and that they should have no military stores, or cannon, capable of making a defence. During the late hostilities, these isles were annexed to the Government of Newfoundland, having been taken possession of by the British forces in May, 1793; but they have been restored to France, on the original conditions, by the treaty of 1814.

Point May has a rocky islet at its point, and from thence the land turns N.N.E. towards Dantzic Cove and Point, and thence E.N.E. towards Fortune Head.

FORTUNE BAY. From Point May to Pass Island, the bearing and distance are N. $\frac{1}{2}$ E. 12 leagues; between them is the entrance to Fortune Bay, which is about 22 or 23 leagues deep; and in which are numerous bays, harbours, and islands.

THE ISLAND OF BRUNET lies nearly in the middle of the entrance into Fortune Bay; it is above 5 miles in length, 2 in breadth, and of moderate height; the eastern part appears, in some points of view, like islands; on its N.E. side is a bay, wherein there is tolerable anchorage for ships, in 14 or 16 fathoms water, sheltered from southerly and westerly winds. In the bottom of the bay, at about a quarter of a mile from the shore, are some rocks, which must be avoided. Opposite to this bay, on the south-west side of the island, is a small cove, with 6 fathoms water. The islands lying off the west end of Brunet, to the southward, are called the Little Brunets, which, with Brunet, may be approached within a quarter of a mile all round.

THE PLATE ISLANDS are three rocky islets, of a moderate height, the nearest of which lies W.S.W. 1 league from the west end of Great Brunet. The southernmost is about 2 miles further off, and bears from

Cape Miquelon E. $\frac{1}{2}$ S. $3\frac{3}{4}$ leagues; and in a direct line between Point May and Pass Island, 17 miles from the former, and 19 miles from the latter. E.S.E. a quarter of a mile from the Great Plate, (which is the northernmost) is a sunken rock, whereon the sea breaks, and this is the only danger about them. There are several strong and irregular settings of the tides or currents about the Plate and Brunet Islands, which seem to have no dependency on the moon and the course of the tides on the coast.

SAGONA ISLAND, which lies N.E. 2 leagues from the east end of Brunet, is about a mile across each way, of a moderate height, and bold-to all round; on its western side there is a small creek admitting fishing shallows: in the middle of the entrance to this is a sunken rock, which occasions it to be difficult of access, except in very fine weather; a sand bank surrounds this island, running westerly full 7 miles, upon which are 14, 17, and 20 fathoms water.

POINT MAY is the southern extremity of Fortune Bay, and the S.W. extremity of this part of Newfoundland; it may be known by a great black rock, nearly joining to the pitch of the point, and something higher than the land, which makes it look like a black hummock on the point. At about a quarter of a mile directly off from this black rock are three sunken rocks, on which the sea always breaks.

N. by E. $1\frac{3}{4}$ mile from Point May, is Little Dantzic Cove; and 2 miles further is Great Dantzic Cove. From Dantzic Point (which is the north point of the coves) to Fortune Head, the bearing and distance are E.N.E. $2\frac{1}{4}$ leagues; and thence to the town of Fortune, $1\frac{1}{2}$ mile S.E. by E. This is a fishing village, and the road where the ships lie has from 6 to 10 fathoms water, quite exposed to nearly half the compass. It lies S. by W. from the east end of Brunet. To the N.N. Westward of Dantzic Point, is the long narrow Bank of Jerseyman's, with 24 and 25 fathoms over it, extending from abreast of the point in the direction of the Plate Islands.

THE CAPE OF GRAND BANK is high, and lies 1 league E.N.E. from Fortune. To the eastward of this cape is Ship Cove, where there is good anchorage for shipping in 8 or 10 fathoms water, sheltered from south, west, and north-westerly winds. Grand Bank lies S.E. half a league from the cape, and is a fishing village, where there is no security for shipping, and the entrance is barred.

From the cape of the Grand Bank to the Point Enragée, the course is E.N.E. $\frac{1}{4}$ E. distance 8 leagues; the coast between forms a circular bay, in which the shore generally is low, with several sandy beaches, behind which are bar-harbours, fit only for boats, of which the principal is Great Garnish, lying $4\frac{1}{2}$ leagues from the Cape of Grand Bank; it may be known by several rocks above water lying before it at 2 miles distance from the shore, the outermost of these is steep-to; but between them and the shore are several dangerous sunken rocks. To the eastward, and within these rocks, is Frenchman's Cove, where small vessels sometimes run in and anchor in 4 or 5 fathoms water, tolerably well sheltered from the sea winds. The shore is bold all the way from Point May to Cape of Grand Bank, there being 10 or 12 fathoms within 2 cables' length, and 30 or 40, at a mile off: between the latter and Great Garnish the water is not so deep, and ships may anchor any where in 8 or 10 fathoms water sheltered only from the land-winds.

From Point Enragée to the head of the bay, the course is first

E.N.E. $\frac{1}{4}$ E. 3 leagues to Grand Jervey; then E. $\frac{3}{4}$ N. $7\frac{1}{2}$ leagues to the head of the bay: the land in general along the south side is high, bold-to, and of uneven appearance, with hills and vallies of various extent, the latter mostly covered with wood, and having many fresh water rivulets.

Seven leagues to the eastward of Point Enragée is the Bay L'Argent, where there is anchorage in 30 or 40 fathoms water, sheltered from all winds.

HARBOUR MILLE. The entrance of Harbour Millé lies to the eastward of the east point of L'Argent. Before this harbour, and the Bay L'Argent, is a remarkable rock, which, at a distance, appears like a shallop under sail. Harbour Millé branches into two arms, one lying to the S.E. the other to the east; at the upper part of both are good anchorages. Between this harbour and Point Enragée are several bar-harbours, or small bays, with sandy beaches; but the water all along the coast is very deep: you may safely anchor any where, but it must be very near the shore.

Cape Millé lies N.E. $\frac{1}{2}$ E. one league from the Shallop Rock above mentioned, and near 3 leagues from the head of Fortune Bay; it is a high reddish barren rocky point. The width of Fortune Bay at Cape Millé does not much exceed half a league; but, immediately below it, it becomes twice as wide, by which the Cape may readily be known; and above this Cape the land on both sides is high, with steep craggy cliffs. The head of the bay is terminated by a low beach, behind which is a large pond, or bar-harbour, fit only for boats.

GRAND LE PIERRE is a good harbour, situated on the north side of the bay, half a league from the head. The entrance cannot be seen until you are abreast of it; there is no danger in going in, and you may anchor in any depth from 8 to 4 fathoms, sheltered from all winds. **ENGLISH HARBOUR** lies a little to the westward of Grand Pierre; and to the westward of English Harbour is the Little Bay de L'Eau, both of which are small, and only fit for boats.

NEW HARBOUR is situated opposite to Cape Millé, and to the westward of the Bay de L'Eau; it is a small inlet, and has good anchorage on the west side, in from 8 to 5 fathoms, sheltered from S.W. winds.

The **HARBOUR FEMME** lies half a league to the westward of New Harbour, it is narrow, and has in it 20 and 23 fathoms; before its entrance is an islet, near to which are some rocks above water; 1 league to the westward of Harbour Femme is Brewer's hole, fit only for boats; before this cove is also a small island near the shore, and some rocks above water.

HARBOUR LA CONTE is situated 1 mile to the westward of Brewer's Hole; before this are some islands, the outer one is called the Petticoat Island, the inner Smock Island, there are also two smaller ones between these, and a sunken rock or two; the best passage in is on the west side of the outer island, and between the two large ones; so soon as you begin to open the harbour, keep the inner island close on board, to avoid some sunken rocks that lie near a small island, which you will discover between the N.E. point of the outer island, and the opposite point on the main: there is also another rock which appears at low water, and lies higher up on the side of the main; and when you get beyond these dangers, you may keep in the middle of the channel, and will soon open a fine spacious harbour, wherein you may anchor in any depth, from

6 to 16 fathoms water, on a bottom of sand and mud, shut in from all winds.

LONG HARBOUR lies 4 miles to the westward of Harbour La Conte, and N.E. by E. distant 5 leagues from Point Enragée. It may be known by Gull Island, which lies at its mouth, and a small rock which lies half a mile without the island, and has the appearance of a small boat; there is a passage into this harbour on each side of this island, the western one is the broader of the two; nearly in the middle of this channel, a little outside of the island, is a ledge of rocks whereon is two fathoms water; and a little within the island, on the eastern side, are others 2 cables' lengths from the shore, they lie off two sandy coves, and are visible at low water. Long Harbour runs 5 leagues up into the country, but the only anchoring place is in Morgan's Cove, on the N.W. side of the harbour, about 2 miles within Gull Island, in 15 fathoms water, unless you run above the Narrows.

To the westward of Long Harbour is Hare Harbour, fit for small vessels only. Two miles to the northward of Hare Harbour is Mal Bay, having very deep water, extending north-easterly about 5 miles, and having no anchorage except at its furthest end; to the westward of Mal Bay, near the shore, lie the Rencontre Islands, the westernmost of which is the largest, and has a communication with the main at low water. In and about this island is shelter for small vessels and boats.

BELLE HARBOUR lies 4 miles N.W. by N. from the westernmost Rencontre Island; the passage into it is on the western side of the island, and so soon as you have passed the islands you will open a small cove, on the east side, where small vessels can anchor, but large vessels must run up to the head of the harbour and anchor in 20 fathoms, where there is most room; it is but an indifferent harbour. About $1\frac{3}{4}$ of a mile westward of Belle Harbour is Lally Cove, behind an island, fit for small vessels only; the west point of this Cove is high and bluff, and is called Lally Head; to the northward of this head is Lally Back Cove, where ships may anchor in 14 or 16 fathoms water.

Two miles to the northward of Lally Cove Head, is East Bay and North Bay, in both of these there is deep water, but no anchorage near the shore; at the head of North Bay is the largest river in Fortune Bay, and appears to be a good place for the salmon fishery, from which circumstance it is named Salmon River.

The Bay of Cinq Isles lies to the southward of the North Bay, and opposite to Lally Cove Head; there is tolerable good anchorage for large ships on the S.W. side of the islands, in the bottom of the bay. The north arm is a very snug place for small vessels, and salmon may be caught at its head. A little to the southward of the Bay of Cinq Isles is Corben Bay, where there is good anchorage for any ships in 22 or 24 fathoms water.

About 2 miles south-eastward from Lally Cove Head, are two islands about a mile distant from each other; the north-easternmost is called Belle Island, and the other Dog Island; they are bold to all round. Between Dog Island and Lord and Lady Island, which lies off the south point of Corben Bay, something nearer to the latter is a sunken rock, with deep water all round it; and about a quarter of a mile to the northward of Lord and Lady Island, is a rock which appears at low water.

BANDE DE L'ARIER BAY lies on the west point of Belle Bay, and N. $\frac{1}{2}$ W. 3 leagues from Point Enragée; it may be known by a very high mountain over the bay, which rises almost perpendicular from the sea, called Iron Head. Chapel Island, which forms the east side of the bay, is high land also; the harbour lies on the west side of the bay just within the point formed by a narrow low beach, and is a snug place: between the harbour and Iron Head there is tolerably good anchorage in 18 or 20 fathoms.

Bande de L'Arier Bank has 7 fathoms water on it, and lies with the beach of Bande de L'Arier Harbour just open of the west point of the bay, and Boxy Point on with the north end of St. Jaques Island. Two miles to the westward of Bande de L'Arier is the harbour of St. Jaques, which may be readily known by the island before it being high at each end, and low in the middle. The passage into the harbour is on the west side of the island, free from danger, as is the harbour, where you may anchor in from 17 to 4 fathoms.

About $1\frac{1}{2}$ mile to the westward of St. Jaques, is the harbour of Blue Pinion; and a little to the westward of that is English Cove. Boxy Point lies W. $\frac{3}{4}$ S. 6 miles from St. Jaques Island, and E.N.E. $\frac{1}{2}$ E. $12\frac{1}{2}$ miles from the east end of Brunet Island; it is of a moderate height, and the most advanced to the southward of any land on the coast. Boxy Harbour lies N.E. 3 miles from Boxy Point, in which there is anchorage in 4 or 5 fathoms water, fine sandy ground; to sail in, bring Boxy Point open of a little black head just within the point called Friars Head, in this direction you will keep the middle of the channel, and between the shoals which lie off each point of the harbour where the stages are.

W.N.W. 1 mile from Boxy Point is the Island of St. John, and N.N.W. half a league from St. John's Island is St. John's Head, high, steep, and craggy. Between St. John's Head and Boxy Point is St. John's Bay, quite exposed; in the bottom of this is St. John's Harbour, fit for boats only. On the north side of St. John's Head are two rocky islets, called the Gull and Shag; at the west end of which there are several sunken rocks.

GREAT BAY DE L'EAU is about $1\frac{1}{2}$ league to the northward of St. John's Head. In this bay there is good anchorage in various depths, sheltered from all winds. The passage in is on the east side of the island, which lies in its entrance; for only very small vessels can enter to the westward.

To the westward of Bay de L'EAU, about 3 miles north from St. John's Head, is Little Bay Barrys way, on the west side of which there is good anchorage for large ships in 7, 8, or 10 fathoms; and both wood and water to be obtained with ease.

HARBOUR BRITON lies to the westward of Little Barrys way, and N.N.E. $\frac{1}{2}$ E. $1\frac{1}{2}$ league from the Island of Sagona. The heads which form the entrance are high, and lie from each other S.E. and N.W., distant about 2 miles. Near the east head is a rock above water. The only danger in going in is a ledge of rocks, which stretch 2 cables' length from the south point of the S.W. arm, which is more than a mile within the west head. The only place for ships of war to anchor in is above this ledge, before the entrance of the S.W. arm, in 16 or 18 fathoms, mooring nearly east and west; the bottom is very good, and plenty of wood and water is to be obtained here. Opposite to the S.W.

arm is the N.E. arm, or Jerseyman's Harbour, which is capable of holding a great number of ships, secure from all winds, in 6, 7, and 8 fathoms water: it has a bar at the entrance, on which there are 3 fathoms. The mark to sail over the bar, is the point of Thompson's Beach, which is the south point at the entrance into the S.W. arm, open of Jerseyman's Head, which is high and bluff, on the north side of the entrance into Jerseyman's harbour; so soon as you open the harbour, haul up to the northward and anchor.

From the West end of Harbour Briton to Connaigre Head, the bearing and distances are West $5\frac{1}{2}$ miles; between are Gull Island and Deadman's Bay, off which there is a bank stretching from the shore between 2 and 3 miles, whereon the depths vary from 34 to 4 fathoms. The sea, during storms, will sometimes break for a considerable way out from Gull Island.

CONNAIGRE BAY. From Connaigre Head, which is high and craggy, to Basseterre Point, the bearing and distance are N.W. $\frac{3}{4}$ W. 7 miles; between is Connaigre Bay, which extends about 4 leagues inland. In the mouth of the bay lie the Connaigre Rocks, above water, which may be approached very near, there being no danger but what shows itself: the channel between them and Connaigre Head is the safest, as a ledge of rocks extends a mile from the north shore, which renders the other channel rather dangerous.

CONNAIGRE HARBOUR is near 5 miles above the head, within a point on the south side of the bay; it is very small, and the depth of water is 7 fathoms; the passage in is on the S.E. side of the island, which lies before it. Abreast of this harbour, nearly in the middle of the bay, are two islands; and on the south side of the westernmost, are some rocks above water.

DAWSON'S COVE is on the N.W. side of the bay, and bears N.N.E. about 4 miles from Connaigre Head, and W.N.W. 2 miles from the west end of the westernmost (and the greatest) island; the anchorage is in 6 or 5 fathoms, quite exposed to southerly winds. Basseterre Point, which forms the west point of Connaigre Bay, is of moderate height, clear of wood, and from thence to Pass Island bold-to; Pass Island lies nearly W. by N. distant 3 miles from Basseterre Point.

PASS ISLAND, which is the north-western extremity of Fortune Bay, is a full mile in length and narrow, it bears from the N. point of Miquelon N.E. by N. 7 leagues, and from Point May N. $\frac{1}{2}$ E. 12 leagues. It lies near the shore and is rather lofty; on its south-western side there are several rocks above water, which extend a full mile from the island, and to the N.W. is a sunken rock about a quarter of a mile from the island; there is a passage between this island and the main, about the length of two cables' wide, it frequently is traversed by small vessels, that sometimes anchor there on a fine sandy bottom in 6 fathoms water. The cod-fishery about this part is generally considered good and productive.

The general appearance of the land on the northern side of Fortune Bay is hilly, rising directly from the sea, with craggy, barren hills, extending 4 or 5 leagues inland, having many rivulets and ponds, while that on the southern side of Fortune Bay has a very different appearance, having less of these rugged hills, and being better clothed with wood of a short brushy kind, giving to the country an air of greenness and fertility. In the night time, or in dark foggy weather, mariners should not place

much dependance on the soundings in Fortune Bay, for therein they might be greatly and fatally deceived, inasmuch as, in many places, the water near the shores, and in its creeks and harbours, is often deeper than in the middle of the bay itself.

HERMITAGE BAY. This extensive bay is bounded on the S.W. by Pass Island, and to the northward by the islands that form the Bay of Bonne and Great Jervis Harbour, the width being more than 2 leagues; and by the southern shores of Long Island, where it begins to narrow. In sailing along the southern coast from Pass Island you will discover the Fox Islands, which are distant from Pass Island 10 or 11 miles; these islands are situated opposite to the entrance to Hermitage Cove, about three quarters of a mile from the land, and are said to have good fishing about them; off the Northern Fox Island are several rocks above water, and a sunken rock lies also off the south side of this island. To enter Hermitage Cove, you should keep between the islands and the shore, borrowing somewhat towards the main land, where you will find 30, 32, and 37 fathoms water; here you will see the cove open, and may turn in south, having deep water and without the least danger; the anchorage is good, with every convenience for fishing, and plenty of both wood and water. From hence Hermitage Bay runs in nearly west for 12 miles, with very deep water, until you get near the head, where it gradually lessens to 25 and 22 fathoms, and further in to 9 fathoms; there is a small islet or two on the southern side, but no danger whatever.

LONG ISLAND, which separates the Bay of Despair from Hermitage Bay, is of a square form, about 8 miles long and nearly 8 leagues in circuit. The eastern passage is very good, but narrow, and is between the east end of Long Island and the main, called the Passage of Long Island. The west entrance into the Bay of Despair from Hermitage Bay, is by the west end of Long Island. About half a mile from its S.W. point are two rocks above water, with deep water all round them. There are four harbours on the south side of Long Island, the easternmost of which is called Galtaus; this is but small, and lies near the south-east point of the island: the best channel into the harbour is on the west side of several rocky islands, which lie at the entrance, wherein are 4 fathoms, but in the harbour there are from 15 to 24 fathoms.

The next is Picarre, which lies N. by E. half a league from the easternmost Fox Island; in going in here keep near the west point, in order to avoid some sunken rocks off the other: the anchorage is in the first cove on the east side, in 9 or 10 fathoms, sheltered from all winds.

Round Harbour is the next, it is about two miles to the westward of Picarre, and fit only for small vessels, the channel in being so narrow.

Long Island Harbour is the fourth, and lies about $2\frac{1}{2}$ miles from the west end of Long Island. This harbour has two arms, one running in to the north, the other to the eastward; they are both very narrow, and have from 40 to 7 fathoms water; the eastern arm is the deepest, and affords the best anchorage. The passage in is on either side of an island which lies off the entrance, and has several rocks above water about it.

BAY OF DESPAIR. The entrance of the Bay of Despair lies between the west end of Long Island and Great Jervis Island (which lies in the mouth of the harbour of that name); the distance between is $1\frac{1}{4}$

mile, and midway no bottom is found with a line of 280 fathoms. The Bay of Despair forms two capacious arms, one extending full 8 leagues to the north-eastward, the other about 13 miles northward: in the N.E. arm are several arms and islands, and tolerably good anchorage in several places: in the north-arm there is very deep water, and no anchorage excepting in the small bays and coves which lie on each side of it; but in an arm of this bay which runs easterly, there is a fine salmon fishery, and wood in plenty. In the N.E. arm also there are good salmon fisheries at Little River and Conne River; all the country about this part is mountainous and barren, but about the head of the bay it becomes level, and has abundance of wood, such as fir, pine, birch, witch hazel, spruce, &c.

GREAT JERVIS HARBOUR is situated at the west entrance into the Bay of Despair; it is a safe harbour, with good anchorage in every part of it, in from 16 to 20 fathoms, secure from all winds, and plenty of wood and water. The passage in is on either side of the Great Jervis Island; but the southernmost channel is the safest, there being no danger in it but the shore itself. In the northern channel are several sunken rocks. To sail in you should bring the north point between the two rocks above water, on the starboard side, and then steer directly in; this will carry you clear of some sunken rocks which lie on the west point of the island; these rocks appear at low water: the entrance to this harbour may be known by the east end of Great Jervis Island, which is a high, steep, craggy point, called Great Jervis Head, and is the northern point of the south entrance to the harbour.

BONNE BAY lies about a league to the westward of Great Jervis Head, and nearly N. by E. distant 7 miles from Pass Island; it has several islands at its entrance, the westernmost of which is the largest and highest. The best passage in is to the eastward of the largest island, between it and the two easternmost islands. The bay runs in north 4 miles, and there is no danger but what shews itself; you may go on either side of Drake Island, which is small, and nearly in the middle of the bay; between which, and 2 small islands on the west side of the bay, within Great Island, there is anchorage in 20 or 30 fathoms; but the best place for large ships is near the head of the bay, in 12 or 14 fathoms, clear ground, and convenient for wood and water. On the N.W. side of Great Island, within the two small islands, is very good anchorage in from 16 to 24 fathoms, secure from all winds; the entrance to this from the bay is to the northward of the two small islands. In sailing in or out of the bay, approach not too near the south point of Great Island, as there are some sunken rocks lying at one quarter of a mile from shore. A little to the westward of Bonne Bay is Muskita Cove, a small inlet of from 30 to 47 fathoms water.

W.N.W. 4 miles from Bonne Bay is the entrance to the Bays of Facheux and Dragon; this entrance being very conspicuous at sea, the coast may here be readily known.

FACHEUX, which is the easternmost branch, is very easily seen to seaward, it runs in N.N.E. 2 leagues, and is one-third of a mile wide at the entrance, with deep water in most parts of it. On the west side of the bay are three coves, where ships may anchor in from 10 to 20 fathoms. Dragon Bay lies in N.W. 1 league, and is near half a mile wide, with 60 or 70 fathoms water, and no anchorage excepting near the head; and then you must lie very near the shore. One mile to the

westward of Facheux is Little Hole, with shelter for small craft; and 1 league to the westward of Facheux, is Richard's Harbour, a place fit only for small vessels and fishing shallops, with 23 fathoms water in it.

HARE BAY lies N.W. by W. 1 league from Richard's Harbour, which runs in N.N.E. about 5 miles, and is about one-third of a mile wide, with deep water close home to both shores on all parts of it, except about 1 league up on the west side, where there is good anchorage, in from 8 to 15 fathoms, with plenty of wood and water; and a small cove about 1 mile up on the east side, where there are 30 fathoms, with gradual soundings to the shore.

N.W. about $4\frac{1}{2}$ miles from Hare Bay, and 1 league N.E. from Hare's Ears Point, is Devil's Bay, a narrow inlet, extending a league to the northward, with deep water, and no anchorage until you come close to the head.

The BAY of RENCONTRE lies to the northward of Hare's Ears Point, and runs in N.W. by W. 2 leagues; it has deep water in most parts of it, and is near half a mile wide at the narrowest part. The anchorage is in 30 fathoms, above a low woody point on the south shore, quite land-locked. Hare's Ears Point is large, with a ragged rock upon it, which, from some points of view, looks like the ears of a hare. It lies W. by N. $\frac{1}{3}$ N. distant 10 miles from Richard's Harbour, divides the Bays of Rencontre and Chaleur, and bears N.W. $\frac{1}{2}$ W. 6 leagues from Pass Island. Off this point is a fishing bank, extending a full mile from the shore, having from 20 to 36 fathoms over it.

CHALEUR BAY. Two miles to the westward of Hare's Ears Point is the Bay of Chaleur, which runs in about 2 leagues N.N.W. It is very narrow, and has deep water in most parts. At the north entrance into the bay, and close to the land, is a small island of moderate height, and half a league within the island, on the N.E. side of the bay, is a rock above water; a little within this rock, on the same side, is a small cove, with a sandy beach, off which you can anchor in 28 fathoms, a cable's length from the shore.

West, near half a league from the Bay of Chaleur, is the *Bay Francois*, a small inlet, running in N.W. $\frac{1}{4}$ W. 1 mile, being at the entrance about a quarter of a mile broad, and 17 fathoms deep, but just within is 50 and 60 fathoms; at the head is from 30 to 20 fathoms, good anchorage, and very convenient for carrying on the fishing business.

Westward, 4 miles from the Bay Francois, on the east side of Cape la Hune, lies *Oar Bay*; off the east point of its entrance is a low rocky islet, and, in the entrance of the bay is another, with a passage on each side of it. The bay runs in N.N.E. about 4 miles, and is one-third of a mile wide, with deep water close to both shores all the way up; at the head is a harbour for small vessels, with only 5 fathoms water. At the west side of the entrance into the bay is Cul de Sac, a little cove, with 3 and 4 fathoms water, and good shelter for small vessels.

CAPE LA HUNE is the southernmost point of land on this part of the coast, and lies in latitude $47^{\circ} 31'$ N. bearing W.N.W. $\frac{1}{2}$ N. $8\frac{1}{2}$ leagues from Pass Island, and N.N.W. $\frac{1}{2}$ N. 10 leagues from Cape Miquelon: its figure much resembles a sugar-loaf: this cape may also be known by the high land of La Hune, which lies 1 league to the westward of it, appearing flat at the top, and may be seen from a distance of 16 leagues.

The PENGUIN ISLANDS lie W.S.W. $\frac{1}{2}$ S. $10\frac{1}{2}$ miles from Cape la Hune, and N.W. $\frac{1}{2}$ N. 10 leagues from Cape Miquelon: they are an assemblage of barren rocks lying near to each other, and altogether about 2 leagues in circuit, and may be approached in the day-time to the distance of half a league all round. On the W.S.W. side of the large island, which is the highest, is a small cove, fit for shallops, and convenient for the fisheries; and the ground about it is considered to be good for fishing.

E.S.E. 8 miles from the Penguin Islands, and S. by W. 3 leagues from Cape La Hune, lies the Whale Rock, on which the sea generally breaks; it is about 100 fathoms in circuit, with 10, 12, and 14 fathoms water close to all round it. From this rock a narrow bank extends 1 league to the westward, and half a league to the eastward, with from 24 to 58 fathoms water on it, rocky and gravelly bottom. In the channel between the shore and this rock, and also between the shore and the Penguin Islands, are 120 and 130 fathoms of water, muddy bottom, and there is the same depth of water at 1 league without them.

LA HUNE BAY lies close to the westward of Cape La Hune; it is about 2 leagues deep, and one-third of a mile wide, with deep water in most parts of it; but there is a sunken rock which lies off the west point of the entrance, nearly one-third of the channel over. In sailing in or out of this bay, you should keep the eastern shore on board, in order to avoid a sunken rock, which lies off the west point of the entrance into the bay, nearly one-third over.

Two miles up the bay is Lance Cove, having anchorage in 14 and 16 fathoms water, good clean ground: a cable's length off the southern point of this cove is a small shoal, with 9 feet water; and between it and the point there are 5 fathoms. To sail into this place keep the east point of the bay open of a red cliff point, off which is a rock above water, until the round hill you will see over the valley of the cove, is brought on with the north side of the valley, you will then be above the shoal, and may haul into the cove with safety. There is a narrow bank which stretches quite across the bay, from the south point of the cove to the opposite shore, whereon is from 27 to 45 fathoms.

LA HUNE HARBOUR lies half a league to the westward of Cape La Hune; it has an island before its entrance, and is fit only for small vessels, and open to westerly winds; before it lies an island near the shore; the channel into the harbour is on the N.W. side of the island; there is no danger going in, and you must anchor close up to the head, in 10 fathoms water. This harbour is well adapted for the fishery, there being good fishing ground about it, and a large beach quite across from the head of the harbour to La Hune Bay. A space of 800 feet, exposed to the open air, and well calculated for drying your fish.

Four leagues N.W. $\frac{3}{4}$ W. from Cape La Hune, is the entrance of *Little River*, which is about 100 fathoms wide at the entrance, and 10 fathoms deep; a little way up there is anchorage in 10, 8, and 7 fathoms water, good ground. Between Cape La Hune and Little River, the land is tolerably high, and forms a bay, where there are several small islands and rocks above water, the outermost of which lie N.N.E. $\frac{1}{2}$ E. 3 leagues from the Penguin Islands, and are called the Magnetic Rocks.

S. by W. $\frac{1}{2}$ W. 7 miles from the entrance of Little River, and N. by W. $\frac{1}{2}$ W. from the Penguin Islands, lie the Little River Rocks, which are just above water, with very deep water all round them.

The ISLES of RAMEA, which are of various extent, both in height and circuit, lie N. W. $\frac{1}{2}$ N. $5\frac{1}{2}$ leagues from the Penguin Islands, and 1 league from the main : they extend east and west 5 miles, and north and south 2 miles, and have several rocks and breakers about them ; but more on the south side than on the north. The easternmost island is the largest, and is very high and hilly : the westernmost, called Columbe, is a remarkably high round island, of small circuit, with some rocky islands and sunken rocks near it.

There is a harbour for small vessels, formed by the islands which lie near Great Ramea and the Columbe, called *Ramea Harbour*, where they may lie sheltered from all winds. To enter this from the westward, you should give the southern point a berth, on account of some rocks that lie off the starboard island, these are all above water ; steer E.N.E. towards the harbour, keeping as nearly mid-channel as you can ; the passage is above a cable's length broad, and run for the anchorage in Ship Cove ; this is the second inlet on the north-western shore ; you will here ride safely, on clean ground, in 5 fathoms water. To enter from the eastward, you must keep the northern side of Great Ramea on board, until you are up to the west end thereof, then steer S.W. into the harbour, keeping in the middle of the channel, in about 3 fathoms, and anchor as before directed. This harbour is very convenient for fishing vessels ; in it, and also about the islands, are several places fit for erecting stages, and drying fish, which seem to be well calculated for that purpose.

The RAMEA ROCKS are two in number, close to each other ; they lie about south, distant 4 miles from the east end of Great Ramea ; W.S.W. 1 league from these rocks is a small bank with only 6 fathoms water on it ; and, nearly in the middle, between Ramea and the Penguin Islands, is the New Bank with from 14 to 50 fathoms water : to run upon the shoalest part of this bank, bring the two Ramea Rocks on with the south-western part of Ramea Islands, and between them and Columbe ; and the entrance to Little River N.E. $\frac{3}{4}$ E.

Four miles to the westward of Little River is *Old Man's Bay*, which runs in N.N.E. about 7 miles, and is nearly a mile wide ; the water throughout the bay is very deep. About $1\frac{1}{2}$ mile up the bay, on the eastern side, is a small island, called Adam's Island, behind which vessels can ride, if necessary, in 30 and 40 fathoms, but the best anchorage is at the head, in 14 or 16 fathoms.

MOSQUITO HARBOUR lies about half a league to the westward of Old Man's Bay ; it is a snug and safe harbour, and will hold a great number of vessels in perfect security ; but the entrance is so narrow, being only 48 fathoms in breadth, that it is difficult to get in or out ; the land on both sides is high, and off the southern point of entrance is a large white rock, about a cable's length from which is a black rock above water, on the southern side of which is a sunk rock, whereon the sea breaks ; from this black rock to the entrance of the harbour, the course is about N.N.W. distant one-third of a mile. In sailing either in or out, you should give the black rock a small berth, keeping the western shore on board, and if obliged to anchor, be as quick as possible in getting a rope on shore, lest you drift on the rocks. In this harbour you will have from 18 to 30 fathoms water, with good riding every where, and plenty of both wood and water ; in the narrows you will find 12 fathoms, the shores being bold-to : south and easterly winds blow

right in, northerly winds right out; and with westerly winds it is commonly either quite calm, or descends in irregular puffs.

FOX ISLAND HARBOUR is formed by an island of the same name; it lies about half a league to the westward of Mosquito Harbour; between are several rocky islands and sunken rocks. This is a commodious harbour for small vessels, which may anchor in 8, 9, and 10 fathoms water. You may go in on either side of the island, and there is no danger but what shews itself.

WHITE BEAR BAY. This bay lies about 2 miles to the westward of Fox Island Harbour, and N.N.E. one league from Great Ramea Island: it has several islands at its entrance. It runs in N.E. $\frac{3}{4}$ N. about 4 leagues, is near half a mile wide in the narrowest part, and has deep water close to both shores in most parts, to the distance of 8 miles up; then the ground rises at once to 9 fathoms, whence it shoalens gradually to the head with good anchorage. The best passage into the bay is to the eastward of all the islands. On the S.W. side of Bear Island, which is the easternmost and largest in the mouth of the bay, is a small harbour, running in about east half a mile, with from 10 to 22 fathoms of water, but there are several sunken rocks before its mouth, rendering it difficult of access. At the western entrance is a high round white island, and S.W. half a mile from this island is a black rock above water. The best passage into the bay, from the westward, will be to the westward of this black rock, and between White and Bear Islands; some of the rocks are above a mile off the land.

Six miles to the westward of White Bay, and nearly north from Ramea Columbe, are two small harbours, called *Red Island Harbours*, formed by Red Island, which lies close under the land. The westernmost is the largest and best, and has from 6 to 8 fathoms water, good anchorage. In going in, keep the island close on board, the outer part of which is composed of steep red cliffs.

THE BURGEO ISLES are a cluster of islands extending about 5 miles along shore, and forming several snug and commodious harbours. They lie about 2 leagues N.W. by N. from Ramea Columbe. To sail into Burgeo from the eastward, the best passage is on the N.E. side of Boar Island, which is the northernmost, and lies N.N.W. from Ramea Columbe. S.E. by S. from this island half a league, is a rock, uncovered at low water, on which the sea generally breaks; you may go on any side of this rock, the water being deep all round it: so soon as you are to the N.W. of it keep the north side of Boar Island on board, and steer W. $\frac{1}{2}$ N. for Grandy's Cove the north point of which is the first low point on your starboard bow; haul round that point, and anchor in the cove in 14 fathoms, and moor with a fast on shore. The best place for large ships to anchor in is, betwixt Grandy's Cove and a small island lying near the west point of Boar Island, in 20 or 24 fathoms good ground, and sheltered from all winds. To sail into Grandy's cove from the westward is dangerous, unless well acquainted: there are several safe passages in from southward and eastward, between the islands, and good anchorage; and in bad weather, all the sunken rocks discover themselves, and you may run in any without fear; but the islands do not afford either wood or water.

WOLF BAY extends inwards N.E. by E. 1 league; the entrance is E.N.E. 2 miles from Boar Island, and two miles to the westward of Red Island Harbour; the east point of the entrance is composed of low

rugged rocks, off which is a sunken rock, at a distance of a quarter of a mile from shore, over which the sea breaks in bad weather. Near the head of the bay is tolerably good anchorage, and plenty of wood and water.

KING'S HARBOUR lies round the west point of Wolf Bay, and runs in N.E. by E. three-quarters of a mile; before its mouth is a cluster of little islands. To sail in, keep the east point of these islands on board, and steer N. by W. and North for the entrance of the harbour, anchoring under the east shore in 9 fathoms.

On the south side of the islands before King's Harbour, and nearly north 1 mile from Boar Island, is the entrance into the HA-HA, which runs in W.N.W. 1 mile, and is about a quarter of a mile broad, with from 20 to 10 fathoms water, and good ground all over. Over the south point of the entrance into this harbour is a high green hill: and a cable's length and a half from the point is a sunken rock that always shews itself. Over the head of the Ha-Ha, is Richard's Head, a mark for running upon Ramea Shoal.

About 4 miles to the westward of the Burgeo Isles is the Great Barrysway Point, which is low, white, and rocky; and E.N.E. $\frac{1}{2}$ E. half a league from this point is the west entrance into the Great Barrysway, wherein is room and depth of water for small vessels. Between the Burgeo Isles and the Great Barrysway Point, are several sunken rocks, some of which are half a league from the shore.

CONNOIRE BAY. N.W. $\frac{1}{2}$ N. 4 leagues from the Burgeo Isles, is the east point of the Bay of Connoire: this point is so far remarkable, that it rises with an easy ascent to a moderate height, and much higher than the land within it; the west point of the bay is low and flat, and to the westward of this are several small islands. The bay runs in N.E. by N. about a league from the east point to the middle head, which lies between the two arms, and is half a league wide, with 14, 12, 10, and 8 fathoms close to both shores, good anchorage, and clear ground, but open to S.W. winds. The N.E. arm affords shelter for small vessels from all winds. To sail in, keep nearest the starboard shore, and anchor before a small cove on that side, near the head of the arm, in $3\frac{1}{2}$ fathoms; towards the head of the arm on the north-western side, is a bank of mud and sand, upon which a vessel may run, if necessary, and receive no damage.

THE BAY OF CUTTEAU lies about 2 leagues to the westward of Connoire; its depth will admit small vessels only. Round the west point of Cutteau is Cinq Serf, wherein are a number of islands, which form several small snug harbours. Right off Cinq Serf, about half a league from the shore, is a low rocky island, westward of which is the safest passage into the largest harbour; keep near this rock, steering E.N.E. $\frac{1}{4}$ E. towards the south eastern shore, until you get abreast of a small woody island; this is the easternmost except one, and lies about a quarter of a mile E.N.E. from a white rock in the middle of the channel; haul short round this island, and anchor behind it in 7 fathoms water, here you will lie safely, sheltered from all winds, or you may go further up, and anchor at its head in 4 fathoms.

Four miles to the westward of the rocky island of Cinq Serf, is the harbour of **GRAND BRUIT**, which is small but commodious; and may be known by a very high remarkable mountain over it, half a league inland, which is the highest land on all the coast: down this mountain

runs a considerable brook, emptying itself by a cascade into the harbour. Before the mouth of the harbour are several little islands, the largest of which is of middling height, with three green hillocks on it. A little outside of this island is a round rock, rather high above water, called the Columbe of Great Bruit; and a quarter of a mile to the southward of this rock, is a low rock: in a direct line between the low rock and the rocky isles of Cinq Serf, half a league from the former, is a sunken rock, whereon the sea does not break in fine weather. The safest passage into Grand Bruit is to the north-eastward of this rock, and of the islands lying before the harbour, between them and the three islands (which are low and lay under the shore); and, after you are to the northward of the sunken rock above mentioned, there is no danger but what shews itself. The harbour extends N.N.E. half a mile, and is but a quarter of a mile wide in the broadest part; but it is bold-to on both sides, and a depth of from 4 to 7 fathoms.

BAY OF ROTTE. To the westward of Grand Bruit, between it and La Poile Bay, lies the Bay of Rotte, wherein are a great many islands and sunken rocks. The southernmost is a remarkable high round rock, called the Columbe of Rotte, which lies N.W. by W. $8\frac{3}{4}$ leagues from the southernmost of the Burgeos. Between this island and Grand Bruit is a reef of rocks, some above and some under water, but they do not lie to the southward of the direct line between the islands.

Within the islands of Rotte there is shelter for shipping: the safest passage in is to the westward of the islands between them and Little Ireland, which lies off the east point of La Poile Bay.

LA POILE BAY. This bay is large and spacious, and has several commodious harbours. It may be known by the high land of Grand Bruit, which is only 5 miles to the eastward of it; and likewise by the land on the east side of the bay, which rises in remarkably high craggy hills. About $1\frac{1}{4}$ mile S.W. from its east point lies Little Ireland, a small low island, environed with sunken rocks, some of which are one-third of a mile off: north, about half a mile from Little Ireland, is a sunken rock that shews itself at low water, this is the only danger in going into the bay, excepting such as lie very near the shore.

Two miles within the west point of the bay, and N. $\frac{1}{2}$ W. 2 miles from Little Ireland, is Tweeds, or Great Harbour; its south point is low, and it extends inwards W.N.W. 1 mile; it is about $1\frac{1}{2}$ cable's length wide in the narrowest part, and the anchorage is near the head of the harbour, in 18 or 20 fathoms, clear ground, and sheltered from all winds. Half a mile to the northward of Great Harbour, is Little Harbour, the north point of which, called Tooth's Head, is the first high bluff head on the west side of the bay; the harbour extends inwards W.N.W. about a mile. In sailing in, give the south point a small berth. You may anchor about half way up the harbour, in 10 fathoms water, before the stage which is on its northern side.

GALLY BOY'S HARBOUR lies on the east side of the bay, opposite Tooth's Head; it is small, snug, and convenient for ships bound to the westward. The north point is high and steep, with a white spot in the cliff, and near its southern point are some hillocks close to the shore. To sail in or out, keep the north side on board. You must anchor so soon as you are within the inner south point, in 9 or 10 fathoms, good ground, and sheltered from all winds. One mile to the northward of Gally Boy's Harbour, between two sandy coves on the east side of the

bay, and nearly 2 cables' length from the shore, is a sunken rock, that just uncovers at low water.

BROAD COVE is about 2 miles to the northward of Tooth's Head, on the same side of the bay. In this there is good anchorage in 12 or 14 fathoms.

The **N.E. ARM** lies about 2 leagues up the bay, on the eastern side; it is a spacious, safe, and commodious harbour. In sailing in, give the low sandy point on the S.E. side a small berth, and anchor above it where convenient, in 10 fathoms water, good holding ground, sheltered from all winds, and very convenient for wood and water.

INDIAN HARBOUR and **DE PLATE** lie just within the outer west point of La Poile Bay; these are two small coves, conveniently situated for the fishery, but fit only for small vessels, which may get in at high water.

LITTLE IRELAND bears from the southernmost of the Burgeois N.W. by W. $\frac{1}{4}$ W. $9\frac{3}{4}$ leagues, and lies nearly 11 leagues to the eastward of Cape Ray.

GARIA BAY. From Little Ireland to Harbour la Coue, and La Moine Bay, the course is W.N.W. $\frac{3}{4}$ W. 9 or 10 miles; between lies the bay of Garia, and several coves, fit only for small vessels; before these there are several islands and sunken rocks scattered along the shore, but none of them lie without the above course. In bad weather, all the sunken rocks discover themselves. To sail into Garia Bay, you will, in coasting along shore, discover a white head, this is the south point of an island, lying under the land, off the eastern point of the bay, and a little to the westward of two green hillocks on the main: bring this white point N.N.E. and steer directly towards it; keep between it and the several islands that lie to the W.S. westward: from the white point, the course into the bay is N. by W. borrow toward the eastern point, which is low. The bay of Garia affords plenty of timber large enough for building of ships.

LA MOINE AND LA COUE HARBOURS. The S.W. point of the entrance into Harbour la Coue, called Rose Blanche Point, (near to which are some rocks above water,) is tolerably high, and the land near the shore over Harbour la Coue and La Moine Bay is much higher than any other land in the vicinity: by this they may be known. La Moine Bay extends inwards N.E. $\frac{3}{4}$ E. about 4 miles, and is one quarter of a mile broad in the narrowest part. Off the east point are some small islands, and rocks above water. In sailing in, keep the west point on board, until you have entered the bay; then edge over towards the east shore, and run up to the head of the bay, where you may anchor in 10 or 11 fathoms, good ground: here is plenty of wood and water.

To sail into Harbour la Coue, which lies at the west entrance into La Moine Bay, steer in N.N.W. between a rock above water, in the mouth of the harbour, and the west shore; so soon as you are within the rock, haul to the westward into the harbour, and anchor in 6 or 8 fathoms water, mooring with a hawser on shore; or you may steer into the arm, which runs in N.E. by E. from the harbour, and anchor in 20 fathoms, sheltered from all winds. This has been the resort of the small fishing vessels for many years.

To the westward of Rose Blanche Point, is the harbour of the same name; it is small and snug, and the anchorage is in 9 fathoms water. The channel into the harbour is between the island lying off its western

point, and Rose Blanche Point ; give the island a good berth, on account of some sunken rocks which lie on its eastern side, and keep the west side of the small island which lies close to the point on board, anchoring within the N.E. point of this island in 9 fathoms. To enter into the N.W. part of the harbour would be dangerous, if a stranger, because of its numerous islands and rocks.

MULL FACE is a small cove 2 miles to the westward of Rose Blanche Point, wherein is anchorage for small vessels in 4 fathoms. Off the west point of the cove are two small islands, and several sunken rocks ; the passage in is to the eastward of these.

Seven miles to the westward of Rose Blanche Point are the Burnt Islands, which lie close under the shore, and are not easily to be distinguished from it ; behind these is shelter for small vessels. Off these islands are sunken rocks, some of which are half a mile from the shore.

Ten miles to the westward of Rose Blanche Point, is Conney Bay and Otter Bay, both of which are rendered difficult of access by several sunken rocks outside the passage, which do not shew themselves in fine weather ; but when once you are safe within Otter Bay, there is good riding in 7, 8, and 9 fathoms water.

W.N.W. $\frac{3}{4}$ W. nearly 4 leagues from Rose Blanche Point are the Dead Islands, which lie close under the shore ; in the Passage to Dead Islands Harbour, between the islands and the main, is good anchorage for shipping in 6 or 8 fathoms, sheltered from all winds ; but it is very dangerous of access to strangers, as there are several sunken rocks in both the east and west entrances. The eastern entrance can be known by a remarkable white spot on one of the islands ; bring this spot to bear N. by W. and steer in for it, keeping the starboard rocks on board, and leave the white spotted island on your larboard side. The western entrance may be recognised by a high point on the main, a little to the westward of the islands, on the western part of which point is a green hillock ; keep this point close on board, until you get within a little round rock, near to the westernmost island, at the eastern point of entrance ; then haul over to the eastward for the great island, distinguished by a high hill, and steer E. $\frac{3}{4}$ N. keeping the before-mentioned little rock in sight.

PORT AUX BASQUE. From the Dead Isles to Port aux Basque, the course and distance are W.N.W. about 4 miles ; between lie several small islands close under the shore, and there are sunken rocks, some of which are half a mile from the shore. Port aux Basque is a small commodious harbour, which lies about $2\frac{1}{2}$ leagues to the eastward of Cape Ray. To fall in with it, bring the Sugar-Loaf Hill over Cape Ray to bear N.N.W. $\frac{1}{2}$ W., or the west end of the Table Mountain N.N.W. Steer in for the land with either of these marks, and you will fall directly in with the harbour : the S.W. point, called Point Blanche, is of a moderate height, and of white appearances ; but the N.E. point is low and flat, and has close to it a black rock above water. In order to avoid the outer shoal, on which are three fathoms, and which lies E.S.E. three quarters of a mile from Point Blanche, keep the said point on board, and bring the flag-staff which is on the hill, over the west side of the head of the harbour, on with the S.W. point of Road Island ; that direction will lead you in the middle of the channel, between the east and west rocks, the former of which always show themselves, and

these you leave on your starboard hand: continue this course up to Road Island, and keep the west point on board, in order to avoid the Frying-pan Rock, which stretches out from a cove on the west shore, opposite the island.

So soon as you are above the island, haul to the E.N.E. and anchor between it and Harbour Island wherever you please, in 9 or 10 fathoms, good ground, and sheltered from all winds; this is called the Road or Outer Harbour, and is the only anchoring place for men of war, or ships drawing a great depth of water, but small vessels always lie up in the Inner Harbour. To sail into it, run in between the west shore and the S.W. end of Harbour Island, and anchor behind the said island in 3 or 4 fathoms. In some parts of the harbour ships can lay their broadsides so near to the shore as to reach it with a plank. This place has been frequented by fishermen for many years, it is well situated for their purposes, and is capable of most excellent accommodations; 1 mile to the eastward of Basque is Little Bay.

GRAND BAY lies about 2 miles to the westward of Port aux Basque; there are several small islands and rocks in and before it, the outermost of which are not above a quarter of a mile from the shore, on these the sea generally breaks: it is only fit for small vessels.

From Port aux Basque to Point Enragée, the bearing and distance are W.N.W. about a league, and thence to Cape Ray N.N.W. nearly $1\frac{1}{2}$ league. Point Enragée is low; off it and to the eastward of it, are some sunken rocks a mile from the shore, on which the sea breaks.

CAPE RAY is the S.W. extremity of Newfoundland, situated in latitude $47^{\circ} 37' N.$ and longitude $59^{\circ} 17' W.$ The land of the cape is very remarkable; near the shore it is low, but three miles inland is a very high table mountain, which rises almost perpendicular from the low land, and appears to be quite flat at the top, excepting a small hillock on the S.W. point of it. This land may be seen, in clear weather, from the distance of 16 or 18 leagues. Close to the foot of the table mountain, between it and the point of the cape, is a high round hill, resembling a sugar-loaf, (called the Sugar loaf of Cape Ray,) whose summit is a little lower than that of the table mountain; and to the northward of this hill under the table mountain, are two other conical hills, resembling sugar loaves, which are not so high as the former; one or other of these sugar-loaf hills are, from all points of view, seen detached from the table mountain.

There is a sandy bay between Cape Ray and Point Enragée, wherein ships may anchor with the winds from N.N.W. to East, but they should be cautious not to be surprised there with S.W. winds, which blow directly in, and cause a great sea. The ground is not the best for holding, being fine sand. Towards the east side of this bay is a small ledge of rocks, 1 mile from shore, on which the sea does not break in fine weather. The best place for large ships to anchor in is, to bring the point of the cape N.W. and the high white sand-hill in the bottom of the bay N.E. in 10 fathoms water. Small vessels may lie further in. Be careful not to run so far to the eastward as to bring the end of the table mountain on with the sand-hill, in the bottom of the bay, by which means the ledge of rocks before mentioned will be avoided.

N.W. $\frac{1}{2}$ W. nearly 1 mile from the point of the cape, is a small ledge of rocks, called the Cape Rocks, whereon the sea always breaks; and one mile to the northward of the cape, close under the land, is a low

rocky island; there is a channel between the ledge and the cape, with 14 and 15 fathoms water, and also between it and the island with 4 and 5 fathoms; but the tides, which run here with great rapidity, render it unsafe for shipping.

The soundings under 100 fathoms do not extend above a league from the land to the southward and eastward of the cape, nor to the westward and northward of it, except on a bank which lies off Port aux Basque, between 2 and 3 leagues from the land, whereon are from 70 to 100 fathoms, good fishing ground. S.E. $\frac{1}{2}$ S. about 13 leagues from Port aux Basque, in the latitude of 47 deg. 14 min. north, is said to be a bank, where on are 70 fathoms.

THE TIDES. Between Cape Chapeau Rouge and Cape Ray, in all the bays, &c. the tide generally flows till 9 o'clock, on full and change, and its perpendicular rise is about 7 or 8 feet on springs: but it must be observed, that the tides are every where greatly influenced by the winds and weather. On the coast, between Cape Chapeau Rouge and St. Pierre, the current sets generally to the S.W. On the south side of Fortune Bay, it sets to the eastward, and on the north side to the westward. Between Cape La Hune and Cape Ray, the flood sets to the westward in the offing very irregularly; but generally two or three hours after it is high water by the shore. The tide or current is inconsiderable, excepting near Cape Ray, where it is strong, and at times sets quite contrary to what might be expected from the common course of the tides, and much stronger at one time than at another: these irregularities seem to depend chiefly on the winds.

SECTION III.

WEST COAST OF NEWFOUNDLAND.

CAPE RAY TO COW HEAD.

THE ISLAND OF ST. PAUL lies W.S.W. $\frac{1}{2}$ W. 14 leagues from Cape Ray, and E.N.E. $\frac{1}{2}$ E. 4 leagues from the North Cape of Breton Island: it is about 5 miles in compass, including the islet at its N.E. end, with three high hills upon it, and deep water close to all round: hence it may be safely passed on either side. It lies in latitude 47° 11' N. long. 60° 4' W.

CAPE NORTH is a lofty promontory at the N.E. extremity of Breton Island, in latitude 47° 3' N. and longitude 60° 19' W. The entrance into the Gulf of St. Lawrence is formed by this cape and Cape Ray, and the latter bears from the former E.N.E. $\frac{1}{2}$ E. distant 18 $\frac{1}{2}$ leagues. The depth of water between, excepting near the Island of St. Paul, is generally above 200 fathoms.

CAPE RAY, as we have already stated, is the S.W. extremity of Newfoundland: the land is remarkable, the shore being low, while at the short distance of 3 miles inland, there is a high table mountain,

which rises nearly perpendicular from the low land, and appears to be quite flat at the top, excepting a small hillock on S.W. point of it: this land may be seen in clear weather, 16 or 18 leagues.

CAPE AUGUILLE, which is distant N. $\frac{1}{4}$ E. 17 or 18 miles from Cape Ray, is the northernmost point of land you can see, after passing to the westward of Cape Ray; it is high table land, and covered with wood, in the country above it. Between the high land of the two capes the coast is low, and the shore forms a bay, wherein are the great and little rivers of Cod Roy; the northernmost is the great river, which has a bar-harbour fit to admit vessels of 8 or 10 feet draught only at high water. The shore may be approached between the two capes to half a league, there being no danger so far off. It is a good salmon fishery, and for building small vessels and boats, there being timber in abundance.

THE ISLAND OF COD ROY lies $1\frac{1}{2}$ or 2 miles to the southward of Cape Anguille, close under the high land; it is a low, flat, green island, of nearly 2 miles in compass, in the shape of a horse-shoe, forming, between it and the main, a small snug bar-harbour for vessels of 10 or 12 feet draught; the safest entrance to it is from the southward.

COD ROY ROAD lies south-eastward from the island, wherein is very good anchorage for shipping, in 8, 7, or 6 fathoms, on a clay bottom. With the south point of the island bearing about W.N.W. and the point of the beach on the inside of the island, at the south entrance into the harbour, on with a point on the main to the northward of the island, you will lie in 7 fathoms, and nearly half a mile from the shore; 1 league to the southward of Cod Roy Island is a high bluff point, called Stormy Point, off which a shoal stretches out a full mile; this point covers the road from the S.S.E. winds, and there is good anchorage all along the shore, between it and the island.

ST. GEORGE'S BAY. From Cape Anguille to Cape St George, the course and distance are N.N.E. $\frac{1}{2}$ E. nearly 12 leagues: these two capes form the Great Bay of St. George, which extends inwards E.N.E. 18 leagues from the former, and E.S.E. 11 leagues from the latter; at the head of this bay, on the south side, round a low point of land, is a good harbour, with excellent anchorage in 8, 10, or 12 fathoms water: the river St. George empties itself into the head of this bay, but it is not navigable for any thing but boats. On the north side of the bay, before the isthmus of Port-a-Port, is good anchorage in 7 or 8 fathoms, with northerly winds: from off this place a fishing bank stretches two-thirds across the bay, with from 7 to 19 fathoms water on it, dark sandy bottom.

CAPE ST. GEORGE lies in latitude $45^{\circ} 28'$ north; it may be readily known not only by its being the north point of the Bay of St. George, but also by the steep cliffs on the north part of it, which rise perpendicularly from the sea to a considerable height; and by Red Island, which lies 5 miles to the north eastward of the cape, and half a mile from the shore: this island is about $1\frac{1}{2}$ mile in length, and of a middling height; the steep cliffs around it are of a reddish colour: there is anchorage with off-shore winds under the N.E. end of the island, before a sandy cove on the main, which lies just to the northward of the steep cliffs, in 12 or 14 fathoms, you will there ride, covered from the S.W. winds by the island, and from the southerly and easterly winds by the main land, but there is no shelter whatever with winds from the N. or N.W. although this place was heretofore much resorted to by vessels in the fishing trade.

From abreast of Red Island, distant 4 or 5 miles, to Long Point, at the entrance into the bay of Port-a-Port, the bearing and distance are E. by N. 7 or 8 leagues: from Red Island to Guernsey Island, in the mouth of the bay of islands, E.N.E. $\frac{1}{2}$ N. nearly 16 leagues; from Red Island to Cape St. Gregory, N.E. by E. full 20 leagues; and from Red Island to Point Rich, which is the north point of Ingornachoix Bay N.E. $\frac{1}{4}$ E. $48\frac{1}{2}$ leagues.

PORT-A-PORT. The land between Red Island and the entrance into Port-a-Port is rather low, with sandy beaches, except one remarkable high hillock, called Round Head, close to the shore, about 2 leagues to the E.N. Eastward of Red Island; but up in the country, over Port-a-Port, are high lands; and if you are 3 or 4 leagues off at sea, you cannot discern the Long Point of land which forms the bay: this bay is capacious, being about 5 miles broad at the entrance, and 4 leagues deep, running in to the south and south-westward, with good anchorages in most parts of it.

LONG POINT is the west point of the bay; it is low and rocky, and a ledge of rocks extends from it E.N.E. nearly a mile. S.E. by E. $\frac{3}{4}$ E., 4 miles from Long Point, and half a league from the east shore, lies Fox Island, which is small, but of middling height; from the north end of this island a shoal stretches out nearly 2 miles to N.N. Eastward, called Fox's Tail; and, nearly in the middle of the bay, between Fox Island and the west shore, lies the Middle Ground, on one place of which, near the S.W. end, there is not above 3 or 4 feet water. From the head of the bay, projecting out into the middle of it, is a low point, called Middle Point, off which, extending 2 miles N.E. by N. is a shoal spit, part of which dries at low water; this Middle Point divides the bay into two parts, called East and West Bays.

From the head of the East Bay over to the Bay of St. George, the distance is a large quarter of a mile; this isthmus is very low, and has a pond in the middle of it, into which the sea frequently dashes over, especially at high tides, and with gales of wind from the southward. On the east side of it is a tolerably high mountain, rising directly from the isthmus, and flat at top: to the northward of this, and at about 5 miles distance from the isthmus, is a conspicuous valley, or hollow, hereafter to be used as a mark. N.E. by E. $\frac{1}{2}$ E. above 2 leagues from Long Point, and half a league from the shore, lies Shag Island which appears at a distance like a high rock, and is easily to be distinguished from the main; and W.N.W. about a league from it lies the middle of Long Ledge, which is a narrow-ledge of rocks stretching E.N.E. and W.S.W. about 4 miles; the eastern part of them is above water, and the channel into the bay of Port-a-Port, between the west end of this ledge and the reef which stretches off from the west point of the bay, is a league wide.

In sailing in, if coming from the south-westward, advance no nearer to the Long Point of the bay than $1\frac{1}{2}$ mile, until you have brought the valley, in the side of the mountain before mentioned, (on the east side of the isthmus) over the east end of Fox Island, or to the eastward of it, which will then bear south a little easterly; you will then be clear of the Long Point Reef, and may haul into the bay with safety, but if coming from the N.E. without the Long Ledge, or turning into the bay in order to keep clear of the S.W. end of Long Ledge, bring the isthmus, or the foot of the mountain, (which is on the east side of the isthmus,) open to

the westward of Fox Island, nearly twice the breadth of the island, and it will lead you into the bay clear of Long Ledge; and when Shag Island is brought on with the foot of the high land on the south side of Coal River, bearing then E. $\frac{3}{4}$ S. you will be within the Long Ledge; there is also a safe passage into the bay, between the Long Ledge and the main, on either side of Shag Island, and taking care to avoid a small shoal of $2\frac{1}{2}$ fathoms, which lies W. by N. 1 mile from the island.

To sail up into the West Bay and Head Harbour, keep the western shore on board; this shore is bold to. In turning between it and the Middle Ground, stand no nearer to the Middle than into 8 fathoms; but you may stand to the spit of the Middle Point into 6 or 5 fathoms. The anchorage in West Bay is in about 8 fathoms, and in Head Harbour in about 5 fathoms. The West Road lies before a high stone beach, about 2 miles south-westward of Long Point, where you may lie very secure from westerly and N.W. winds, in about 10 or 12 fathoms water: this beach is steep-to, and forms an excellent place for landing and drying your fish; there is a good place at the northern end of Fox's Island, for the same purpose. The whole bay and the adjacent coasts abound with cod, and extensive fishing banks lie all along the coasts.

The East Road lies between Fox Island and the east shore; to sail up to it, you should keep the high bluff head, which is about a league to the E.N.E. of the island, bearing to the southward of S.E. by E. $\frac{1}{4}$ E. until the isthmus is brought to the eastward of Fox Island; you will then be within the shoal called the Fox's Tail, and may haul to the southward, and anchor any where between the island and the main, in from 10 to 18 fathoms.

To sail up the East Bay, pass between the island and the east shore, and after you are above the island, come no nearer to the main than half a mile, until you are abreast of a bluff point above the island, called Road Point, just above which is the best anchorage with N.E. winds, in about 12 fathoms water; and to sail up the East Bay between the Middle Ground and the Fox's Tail, bring the said bluff point on with the S.W. point of Fox Island; this mark will lead you up in the fair way between the two shoals; give the island a berth, and anchor as before directed, in from 8 to 12 fathoms water.

BAY OF ISLANDS. From the Long Point at the entrance of Port-a-Port to the Bay of Islands, the bearing and distance are N.E. by E. 8 leagues. Be careful to avoid the Long Ledge; the land between is of considerable height, rising in craggy barren hills, directly from the shore. The Bay of Islands may be known by the many islands in the mouth of it, particularly the three named Guernsey Island, Tweed Island, and Pearl Island, which are nearly of equal height with the land on the main. If you are bound for Lark or York Harbours, which lie on the S.W. side of the bay, and are coming from the southward, run in between Guernsey Island and the South Head, both of which are bold-to; but with southerly and S.W. winds approach not too near the South Head, lest calms and sudden gusts of wind should proceed from the high land, under which you cannot anchor with safety. There are several channels formed by the different islands, through which you may sail in or out of the bay, there being no danger but what shows itself, excepting a small ledge of rocks, which lie half a mile north-eastward from the northern Shag Rock, and in a line with the two Shag Rocks in one. If you bring the south Shag Rock open on either side of

the North Rock, you will go clear to the eastward or westward of the ledge. The safest passage into this bay from the northward, is between the two Shag Rocks, and then between Tweed Island and Pearl Island.

LARK HARBOUR. From Guernsey Island to Tortoise Head, which is the north point of York Harbour, and the S.E. point of Lark Harbour, the course and distance are nearly S.S.W. 6 miles: Lark Harbour extends inwards W.S.W. nearly 2 miles, and is one-third of a mile broad in the entrance, which is the narrowest part: in sailing into it with a large ship, keep the larboard shore on board, and anchor with a low point on the starboard side, bearing W.N.W., N.N.W., or N.N.E. and you will ride in 6 or 7 fathoms water securely from all winds.

YORK HARBOUR lies W.S.W. nearly 1 league from Tortoise Head: there is good turning room between the Head and Governor's Island, which lies before the harbour; but you must avoid a shoal which runs off from a low beach point on the west end of Governor's Island, called Sword Point: there is also a shoal which spits off from the next point of Governor's Island, which must also be avoided: Tortoise Head just touching Sword Point will lead clear of it: in sailing in, give Sword Point a berth, passing which, the best anchoring ground is in 10 fathoms, along a sandy beach on the main, with Tortoise Head open of Sword Point: west and north-westerly winds blow here with great violence.

HARBOUR ISLAND lies at the entrance of the river Humber, and S. by E. $\frac{3}{4}$ E. 7 miles from Guernsey Island; at its S.W. point is Wood's Harbour, which is unfit for shipping. The River Humber, at about 5 leagues within the entrance, becomes narrow, and the stream is so rapid in some places, for about 4 leagues up to a lake, that it is with great difficulty that even a boat can stem the current. The banks of this river are well clothed with timber, and formerly a great salmon fishery was carried on here.

The **NORTH** and **SOUTH ARMS** are both long inlets, with very deep water up to their heads. On the east side of Eagle Island, between the North and South Arms, is anchorage in 8, 10 or 12 fathoms water. Under the north side of Harbour Island also is good anchorage with S.W. winds; and opposite to the S.E. end of Harbour Island, on the south side of the bay, is Frenchman's Cove, wherein is good anchorage in from 20 to 12 fathoms. The Bay of Islands was formerly much frequented by vessels in the cod fishery, and stages were erected at Small Bay, which lies a little on the outside of South Head; and the large beach on Sword's Point, in Governor's Island, is an excellent place for drying the fish.

From the North Shag Rock to Cape St. Gregory, the course and distance are nearly N.E. 8 miles; and thence 13 or 14 miles, on a similar bearing, will carry you to the entrance of Bonne Bay. The land near the shore from the north Shag Rock to Cape St. Gregory is low along which lie sunken rocks, a quarter of a mile from the shore; but a very little way inland it rises into a high mountain, terminating at top in round hills.

CAPE ST. GREGORY is high, and between it and Bonne Bay, the land rises directly from the sea-shore to a considerable height: it is the most northerly land you can discern when you are sailing along shore between Red Island and the Bay of Islands.

BONNE BAY. This bay may be known, at the distance of 4 or 5 leagues, by the land about it; all that on the S.W. side of the bay being

very high and hilly, and that on the N.E. side, and thence along the sea-coast to the northward, being low and flat; but at about one league inland, is a range of mountains which run parallel with the sea-coast. Over the south side of the bay is a very high mountain, terminating at top in a remarkable round hill, very conspicuous when you are to the northward of the bay. This bay extends inwards E.S.E. nearly 2 leagues, then branches into two arms, one of which runs in to the southward, and the other to the eastward; the southern arm affords the best anchorage; small vessels should ride just above a low woody point at the entrance into this arm, on the starboard side, before a sandy beach, in 8 or 10 fathoms water, about a cable's length from the shore; there is no other anchorage in less than 30 or 40 fathoms, excepting at the head of the arm, where there are from 25 to 20 fathoms water: in sailing into the East Arm, keep the starboard shore on board; and a little way round a point at the entrance, will be found a small cove, with good anchorage in 17 to 20 fathoms, but you must moor to the shore.

There is a snug cove also close within the North Point, with anchorage in 6 or 7 fathoms water: in sailing in or out of Bonne Bay, with W.S.W. winds, come not near the weather shore, lest you should happen to be becalmed, or should meet with heavy gusts of wind; as the depth of water is too great to admit of your anchoring.

Ten miles to the northward of Bonne Bay is Martin Point, high and white, off which, about three-quarters of a mile, is a small ledge of rocks, whereon the sea breaks. Broom Point is low and white, and lies about a league to the northward of Martin Point; about half a mile W.S.W. from it lies a sunken rock that seldom shews itself; on the north side of Broom Point lies the Bay of St. Paul, wherein vessels may anchor with off-shore winds, but it is quite exposed to the sea.

Cow HEAD lies about 3 miles to the northward of the Bay of St. Paul; this is a promontory, which has the appearance of an island, it being joined to the main only by a very low and narrow neck of land: about three-quarters of a mile off this head lies Steering Island, which is low and rocky, and is the only island on the coast between the Bay of Islands and Point Rich. Cow Cove lies on the south side of Cow Head, and ships may lie there in from 7 to 10 fathoms, sheltered from northerly and easterly winds. Shallow Bay lies on the north side of Cow Head, and has water sufficient for small vessels; at the N.E. side of the entrance is a cluster of rocky islands, extending E.N.E. and W.S.W., and at the W.S.W. side are two sunken rocks close to each other, which generally shew themselves; they lie a cable's length from the shore, and there is a channel into the bay on either side of them. Steering Island lies right before this bay, which you may pass on either side, but come not too near its N.E. end, as there are some sunken rocks extending from it. This is considered the best situated for a fishery on all the coast, and the ground about its environs are eminently productive.

COW HEAD TO CAPE NORMAN.

INGORNACHOIX BAY. Point Rich, the northern point of Ingornachois Bay, is distant about 50 miles N.E. from Steering Island; all the way between Shallow Bay, and the south point of Ingornachois, the coast forms nearly a straight line without creek, cove, or shelter from seaward, though vessels may here and there anchor, with land winds.

About 6 leagues from Steering Island, half a mile inland, stands Portland Hill, so called from its resemblance to the Bill of Portland; the appearance of this hill continues the same from whatever point it is viewed.

Keppel Island lies at the entrance of Ingornachoix, and though at a distance it appears joined to the main land, yet there is a passage on either side of it. In sailing into Port Saunders, the inland will be left on the starboard side, and when you are half a mile within the entrance, anchor in 12 or 14 fathoms. Vessels proceeding to the head of the harbour, must keep the larboard shore on board, to avoid a ledge of rocks that lies near the mid-channel. Port Saunders, which lies with Hawkes Harbour within and to the eastward of Ingornachoix Bay, is considered the best harbour for vessels bound to the southward.

HAWKES HARBOUR. The entrance to this harbour is to the southward of Keppel Island; the starboard shore is shoal, and has a sand bank, which stretches along the land, running out two-thirds of the passage over, and great part of which dries at low water. The course in is E.S.E. keeping nearer the island than the main, until the eastern end of the former, a low sandy beach, bears N.E. by N. or N.N.E. then steer S.S.E. $\frac{1}{2}$ E. for a small island you will see, situated further up the harbour; keeping the larboard shore well on board, run direct for this island, and when you have brought the point at the south entrance of the harbour to bear N.N.E. $\frac{1}{2}$ N., and are at the S.S.E. point of a bay on the starboard side of the harbour, you will then be beyond the shoal ground, and may anchor in 12 fathoms water; or else run within half a mile of the small island, and anchor there, which will be more convenient for both wood and water. This is the best harbour for ships bound to the northward. The land round about these harbours is generally low, and covered with wood: you may occasionally anchor outside, in the Bay of Ingornachoix, according as you find the prevailing winds.

POINT RICH, in lat. $50^{\circ} 40' 10''$ N., and long. $57^{\circ} 23'$ W. is the southwestern point of a peninsula, which is almost surrounded by the sea, being every where of moderate height, and projecting further to seaward than any other land on this side of Newfoundland, the coast from thence, each way, taking an inward direction.

PORT AU CHOIX. Rounding Point Rich, on its northern side, you will meet with Port au Choix, small, but yet capable of admitting a ship of burthen, mooring head and stern; to sail in you should keep the starboard shore on board, and anchor just above a small island lying in the middle of the harbour. In this place, and also in Boat Cove, which lies a little to the north-eastward, there are several stages and places for drying fish.

OLD PORT AU CHOIX lies to the eastward of Boat Cove; it is a small but safe harbour, having at its entrance an island called Harbour Island, and on its western side some rocks, both above and under water: there is also another island lying E.N.E. $\frac{1}{2}$ N., distant nearly a mile from Harbour Island, about which are several rocks, some of which stretch out towards Harbour Island, and render the passage very narrow between them; there are 4, 5, 6, and 7 fathoms water between Savage Island and the main, and 4 and 5 fathoms between Savage Island Rocks and Harbour Island, and nearly the same depth between Harbour Island, and the western shore.

To sail into Old Port au Choix, on the western side of Harbour Island, you must keep the island close on board; but to go in on the eastern

side of the island, give the north-eastern point of the island a berth, and having well entered, you may anchor any where on the larboard side of the harbour, only avoiding the starboard side, for a shoal of sand and mud runs all along it.

BAY OF ST. JOHN. This is an open and extensive bay, bounded by Point Rich to the southward, and Point Ferolle to the northward, having several islands within it, and some sunken rocks; the largest of these islands is St. John's, about $2\frac{1}{2}$ miles in length, and $1\frac{3}{4}$ broad; this lies E.N.E. distant $8\frac{1}{2}$ miles from Point Rich; on its south-western side is a small harbour well calculated for the cod fishery, but too much exposed for shipping, as south-westerly winds commonly drive in a heavy sea. On the south-eastern, or inner side of the island, and between it and One Head Island, vessels may lie much more secure, in 14 or 16 fathoms water, and sheltered from most winds; and this is considered to be the only safe anchorage in the whole bay. West from St. John's Island one large mile is Flat Island, having a rock above water at its southern end; the channel between St. John's and Flat Island has from 13 to 25 fathoms in it, and they are both bold-to: the Twin Islands lie N.E. by N. from Flat Island distant one league, and have no danger about them. To the westward of the Twins are several scattered rocks above water, named the Bay Islands; they have deep water around them, but no anchorage. The land at the bottom of the bay is very high, and there is the little river of Castors, the entrance to which is dangerous and shallow, therefore seldom frequented. From the northern point of this bay a rocky shoal extends all the way to Point Ferolle, stretching out $2\frac{1}{2}$ miles from the shore.

POINT FEROLLE lies N.E. by E. from Point Rich, distant 22 miles; it is of moderate height, and joined to the main by a neck of land, which divides the Bay of St. John's from New Ferolle Bay, making it appear like an island when seen from a distance; its northern shore is bold-to, and this part of the coast will easily be known by the adjacent table land of St. John's, the west end of which mountain lies from the middle of Ferolle Point S. by W., and its eastern end S.E. $\frac{3}{4}$ S.

NEW FEROLLE BAY is a small cove lying to the eastward of the point, and is quite flat all over, there being not more than 2 and 3 fathoms at any part; it is quite open to the northerly winds, has a stage on each side of it, with plenty of room for others.

ST. MARGARET'S BAY is large, and has several islands within it, also various inlets or coves, affording good anchorage, particularly on its western side, which is the best situation for ships, being most clear of danger, and convenient for wooding and watering; on its banks are spruce and fir trees in plenty, and many rivulets of fresh water. Dog Island is to the eastward of Point Ferolle full 3 miles, and only divided from the main at high water; it is higher than any land near it, which gives it the appearance, when seen from the eastward, of an island situated at some distance from the main.

OLD FEROLLE. Ferolle Island lies about 5 miles to the eastward of Dog Island. This island lies parallel to the shore, and forms the harbour of Old Ferolle, which is very good and safe: the best entrance to it is at the S.W. end of the island, passing to the southward of a small island in the entrance, which is bold-to: as soon as you are within it, haul up E.N.E. and anchor under the S.W. end of Ferolle Island, in 8 or 9 fathoms, good ground, quite land-locked. There is also good anchorage

any where along the inside of the island, and a good channel up to the N.E. end thereof. There are some little islands lying at the N.E. end of Ferolle Island and on the outside are some ledges of rocks a small distance off.

BAY OF ST. GENEVIEVE. From the north end of Ferolle Island to St. Genevieve Head the course is E.N.E. $4\frac{1}{2}$ miles, and thence to the west end of Currant Island it is north eastward about 3 miles. There are several small islands lying in and before this bay, only two of which are of any considerable extent. The afore-mentioned Currant Island is the northernmost of the two, and the largest: it is of a moderate height, and when you are to the E.N.E. of it, the western point will appear bluff, but not high; and when you are to the westward of it, it appears flat and white. The other, called Gooseberry Island, lies nearly a mile to the southward of it, and its west point bears from the west point of Currant Island S.S.W. $\frac{1}{2}$ W. nearly a mile. Gooseberry Island has a cross on its S.W. end, from which point stretches out a ledge of rocks, near half a mile to the southward; there is also a shoal about half a mile to the W.S.W. from the S.W. point of Currant Island. The best channel into this bay is to the southward of these islands, between the rocks which stretch off them and a small island lying S.S.W. from them (which island lies near the south shore); in this channel, which is very narrow, there are not less than 5 fathoms at low water, and the course is E. by S. southerly until you come the length of the afore-mentioned island, passing which you should haul to the southward, and bring St. Genevieve Head between the small island and the main, in order to avoid the middle bank. You may either anchor behind the small island in 5 or 6 fathoms water, or proceed further, with the said mark on, until the S.W. arm is open, and anchor in the middle of the bay, in 7 or 8 fathoms water. Here is wood and water to be had. There is tolerable good anchoring in most parts of the bay; but the snugest place is the S.W. arm; the entrance to it is narrow, and has only 4 fathoms at low water. In coming into the bay, if you get out of the channel on either side, you will shoalen your water immediately to 3 or 2 fathoms.

BAY OF ST. BARBE. From the west end of Currant Island to St. Barbe Point, it is E. by N. $2\frac{1}{2}$ miles, and from St. Barbe Point to Anchor Point, it is N.N.E. nearly $1\frac{1}{2}$ mile. Between them lies the Bay of St. Barbe; it runs in S. by E. about 2 miles from Anchor Point. To sail in, give Anchor Point, and all the east side of the bay, a good berth, to avoid the sunken rocks which lie along that shore; you must be well in before you can discover the entrance into the harbour, which is but narrow; then steer south, keeping in the middle of the channel, and anchor as you are within the two points, in a small cove, on the west side in 5 fathoms water, on sand and mud, quite land-locked. Near this place branch out 2 arms or rivers, one called the south, and the other the east; the latter has 3 fathoms a good way up, but the former is shoal. Between the S.W. point of the bay and west point of the harbour is a cove, wherein are sunken rocks which lie a little without the line of the two points; in the open bay are 7, 8, or 9 fathoms; but the N.W. winds cause a heavy sea to fall in here, which renders it unsafe.

SEAL ISLANDS. From Anchor Point to the extremity of the Seal Islands, the course is N.E. $\frac{1}{2}$ E. one league; off Anchor Point a ledge stretches itself W. by S. about one-third of a mile; there are no other

dangers between it and the Seal Islands but what lie very near the shore. The Seal Islands are white and rocky and must not be approached but with care on their north and western sides, because there are some sunken rocks near them.

From the N.W. Seal Island, to the N.W. extremity of Flower Ledge, it is N.N.E. near 2 miles; part of this ledge appears at low water, and there are 10 fathoms close on its off side.

From the north part of Flower Ledge to Grenville Ledge, it is about $1\frac{1}{2}$ mile E. by S. and Grenville Ledge lies about two-thirds of a mile W. by N. from the eastern point of Mistaken Cove, between which and Seal Islands lies also Nameless Cove and Flower Cove, neither of which are fit for ships.

Close to the eastward of Mistaken Cove is Savage Cove, which has a little island in its entrance, and is only fit for small vessels and boats. Sandy Bay lies 2 miles eastward from Savage Cove, where small vessels may ride in 3 or 4 fathoms water, with the wind from E. to S.W.

GREEN ISLAND. About E.N.E. 5 large miles from Sandy Bay is Green Island; between them, at 3 miles distance W. $\frac{1}{2}$ S. from Green Island, is the north extremity of Double Ledge, which extends nearly two-thirds of a mile from the shore, and has only 8 or 9 feet water on it. Green Island lies about three-fourths of a mile from the main, is two-thirds of a mile in length, very low and narrow, and agreeable in colour to the name it bears; from the east end of it a ledge of rocks extends three-fourths of a mile to the eastward, on which the sea breaks in bad weather. There are 4 or 5 fathoms water in the channel between the island and the main, where ships may anchor if necessary. To go in from the westward keep the island close on board for the deepest water, which is 4 fathoms; and going in from the eastward keep the main on board. From this island to the opposite part of the Coast of Labrador, called Castle or Red Cliffs, which is the narrowest part of the Strait of Belle Isle, the distance is about $3\frac{1}{2}$ leagues, and they bear from each other N.N.W. and S.S.E.

From Green Island to Boat's Head it is E. $\frac{1}{2}$ N. 8 leagues; between there is no shelter on the coast, but to the south-eastward of Boat's Head is a cove, called Boat Harbour, where small vessels and boats may lie very secure except with N.E. winds.

Cape Norman lies E. 4 miles from Boat's Head, and is the northernmost point of land in Newfoundland, as already stated.

TIDES. The tides flow at the full and change of the moon as follows: at New and Old Ferolle, till a quarter after eleven o'clock; in the Bays of Genevieve and St. Barbe at half after ten, and at Green Island until nine. Spring tides rise 7 feet, neaps 4 feet. In the Bay of Pistolet it flows till three-quarters after six, and in Noddy Harbour and Griquet until a quarter after five: spring tides rise 5 feet, neaps about 3. Before Quirpon, in settled weather, the tide sets to the southward 9 hours out of the 12, and stronger than the northern stream. In the Strait of Belle Isle, the flood, in the offing, sets to the westward two hours after it is high water on the shore; but in blowing weather, this stream is subject to many alterations.

In crossing the Straits of Belle Isle from Quirpon to Chateau Bay, your soundings will be irregular, from 20 to 30, and in some places, from 30 to 38 fathoms. In the stream, or middle of the strait, you will find 25 and 35 fathoms, coarse sand and broken shells, and towards

Chateau Bay 45 to 80 fathoms ; within a mile of the Labrador Coast are 35, 30, and 25 fathoms. To the northward, between Belle Isle and St. Peter's Bay, there are 59, 86, 90, 96, 65, and 30 fathoms.

SECTION IV.

COAST OF LABRADOR.

YORK POINT TO SANDWICH BAY.

YORK, or CHATEAU BAY. This bay lies about 16 miles N.W. $\frac{3}{4}$ N. from the south-western point of Belle Isle, and 8 leagues N. $\frac{3}{4}$ W. from the Harbour of Quirpon ; it may easily be known by two very remarkable hills, situated on Castle and Henley Islands, which lie at the entrance of the bay ; these rocky hills appear flat at the tops, and the steep hills around them have the appearance of castle walls ; the islands form the eastern side of the entrance to the bay, while the Capes York and Temple are to the westward ; but as the mariner may not be able to discover the above hills at a distance, because of the high land behind, the better marks will be, to observe that all the land to the westward is of a high and uniform figure, terminating at the west side of the bay with a conspicuous nob or hillock, while the land to the eastward of Chateau Bay is hilly and broken, having many islands near the shore ; while to the westward there are none.

In sailing into Chateau Bay, leave Castle and Henley Islands on your starboard side, keeping Point Grenville, distinguished by a beacon, on with the western point of Henley Island ; this point is a smooth black rock, having a little dark rock just above water near to it. Having kept this mark on until abreast of Whale Island, you will avoid the middle rock of 6 feet, lying nearly midway between the east of that island and the black point of Henley, by hauling close to the latter ; or you may borrow towards Whale Island, but go not too near, as it here runs off shallow and flat.

PITT'S HARBOUR. Having advanced so far as to open the narrow channel into Temple Bay, with a view of proceeding up to Pitt's Harbour, you must haul to the westward until the outer point of Castle Island comes a little open of Whale Island, which will lead into the harbour. Pitt's Harbour is spacious, clear from danger, and well sheltered from all winds : here you may ride in 10 or 14 fathoms, with plenty of timber and other convenience for fishing. There is also a narrow passage into this harbour, to the northward of Henley Island, having a depth of 3 fathoms.

SEAL ISLAND lies about a mile to the eastward of Henley Island, and $3\frac{1}{2}$ miles further is Duck Island ; between these are Goose and Bad Bays, but they are both full of rocks, above and below water, and open to easterly winds.

ST. PETER'S ISLANDS are a cluster of barren rocks lying 6 miles to

the eastward of Seal Island; within them is a good place of anchorage, called St. Peter's Bay, but it is exposed to the south and south-east.

CAPE CHARLES lies to the north-eastward of St. Peter's Island; it makes with a hill, steep to seaward, and sloping down inland; so that when you are to the westward to Chateau Bay, it has the appearance of an island. Cape Charles Island lies S.E. by E $\frac{1}{4}$ E. about $1\frac{1}{4}$ mile from the cape: it is moderately high, having several small rocks eastward and westward of it.

From St. Peter's Islands to Charles Island the course is E.N.E. $\frac{1}{4}$ E. 14 miles: between these lies Niger Sound, an inlet about 6 miles deep and having several small islands before it. To enter the sound these may be passed either to the north or south, steering in about N. by W. the anchorage being on the north side of the sound in 9 fathoms.

CAPE CHARLES HARBOUR. From the north point of Cape Charles Island into Cape Charles Harbour, the course is N.W. $\frac{3}{4}$ N. and the distance 4 miles. This harbour is formed by Eyre and Little Carabou Islands on the east and N.E. sides, and by the main on the S.W. side: in it there is very good anchorage from 17 to 22 fathoms water, on a muddy bottom. You may sail into it on either side of Centre Island, but the best passage is between it and Little Carabou.

From Cape Charles Island to the Battle Islands, the course is E.N.E. $\frac{1}{4}$ N. and the distance $4\frac{1}{2}$ miles. This course will carry you to the eastward of the rocks which lie a large mile to the eastward of the northernmost Battle Island, which island is high and round at top.

From the northernmost Battle Island to the River Islands the course is N.W. $\frac{1}{4}$ W. distance 6 miles. To the westward of Pocklington Island (which is one of the River Islands) there is anchorage for vessels in 30 or 35 fathoms water, on muddy bottom. Vessels may pass to the southward of these islands up the river St. Lewis.

From the south point of Pocklington Island to CUTTER HARBOUR, the course is W. $\frac{3}{4}$ S. distance one mile. In this harbour is tolerable good anchorage for small vessels.

From the northernmost Battle Island to the entrance of the river St. Lewis, the course is N.N.W. $\frac{3}{4}$ W. 7 miles; thence the course up the river is N.W. $\frac{1}{4}$ W. 5 miles; then N.N.W. $\frac{1}{2}$ W. 8 miles to Woody Island. At about 4 miles up from the entrance is very good anchorage, and continues so until you get up as high as Woody Island; but above the island there are several shoals. The north point of the river is low land for about 2 miles up, then the land on both sides is rather high and woody; at the head of the river is very fine wood of different kinds, such as birch, fir, juniper, and spruce. The river seems to be well stored with salmon.

ST. LEWIS SOUND lies 1 mile to the northward of the north point of St. Lewis River; it runs up W. by N. 3 miles, at the head of which is very good anchorage, but care must be taken to avoid a shoal which stretches off from a sandy beach on the larboard side, at about 2 miles within the entrance.

DEER HARBOUR. From the northernmost Battle Island to the entrance of Deer Harbour, the course is N.N.W. $\frac{1}{2}$ N. distance $2\frac{3}{4}$ leagues. This is a very good harbour, in which you may anchor in from 10 to 18 fathoms water, secure from all winds. There is not the least danger in sailing in, and the best anchorage is at the back of Deer Island, called also Marnham Island. Port Marnham is formed by the

east end of Marnham Island and the main to the northward and eastward of it. From the northernmost Battle Island to Cape St. Lewis, the course is N. $\frac{1}{4}$ W. and the distance 5 miles. This cape is high ragged land, $1\frac{1}{2}$ mile to the N.W. of which lies Fox Harbour, which is but small, and only fit for small vessels, but seems to be very convenient for a fishery.

POINT SPEAR. From Cape St. Lewis to Point Spear is about $6\frac{1}{2}$ miles N.E. $\frac{1}{2}$ N. Between, at the distance of 4 miles from the former, is Petty Harbour, which runs in about $1\frac{1}{2}$ mile N.W. by N. but is very narrow at the entrance.

About 3 miles N.W. by N. from Point Spear is the entrance of a bay which branches off into three harbours: namely, Sophia Harbour, Port Charlotte, and Mecklenburg Harbour, in either of which there is good anchorage, and well sheltered from all winds: a large plan of them is on the plate.

From Point Spear to St. Francis Island, the course is nearly N. and the distance 6 miles; between them is the entrance of Alexis River, in which are several anchoring places.

About W. $\frac{1}{2}$ S. nearly 2 miles from St. Francis Island is Merchantman Harbour, on the east end of Denbigh Island; it is small, and the depth is from 15 to 7 fathoms.

FISHING SHIP HARBOUR. From St. Francis Island to the northernmost Fishing Island the course is N.N.E. $\frac{3}{4}$ N. and the distance 3 miles. The Fishing Islands are three in number, the two northernmost of which are connected by a beach, which with the main forms Fishing Ship Harbour, where ships may lie land-locked secure from all winds, in from 14 to 5 fathoms water. The entrance is to the southward, on either side of the southern Fishing Island.

Between Fishing Islands and Granby Island to the southward is the northern entrance into Gilbert's River; but the southern entrance, between Denbigh Island and the main, is the widest: there is also an entrance between Denbigh and Granby Islands. Six miles N. by W. $\frac{1}{4}$ W. from the northernmost Fishing Island, and 16 miles N. by W. $\frac{3}{4}$ W. from Point Spear, is Cape St. Michael, which is high and steep towards the sea.

About $2\frac{1}{4}$ miles to the southward of Cape St. Michael, is the entrance of Occasional Harbour, which runs in W.S.W. nearly 2 miles, with a depth of from 30 to 10 fathoms.

CAPE ST. MICHAEL lies in the latitude of $52^{\circ} 47'$ N. and besides being high and steep towards the sea, may be known by a large bay which forms to the northward of it, having a number of large and small islands in it. The largest of these islands, called Square Island, lies in the mouth of the bay, is $3\frac{1}{2}$ miles long, and is very high land.

ST. MICHAEL'S BAY. The best anchorage for small vessels in St. Michael's Bay, is on the south side; that is, keep Cape St Michael's shore on board, then keep along the south side of the first island you meet with, which is called Long Island, till you are nearly as far as the west end of it, where you may anchor in from 12 to 20 fathoms, land-locked, and may work out to sea again on either side of Long Island.

From Cape St. Michael to the entrance of Square Island Harbour, the course is N.N.W. $3\frac{1}{2}$ miles; in the entrance lies a small isle of a moderate height to the westward of which is the best passage into and out of the harbour, there being only 2 fathoms water in that to the eastward of it.

The N.E. point of Square Island is a high round hill, and makes, in

coming from the southward, like a separate island, being only joined by a low narrow neck of land. N.N.W. distance 1 league from this point, lies the entrance into Dead Island Harbour, which is only fit for small vessels, and is formed by a number of islands. Between these islands and Cape Bluff there is a passage out to sea.

CAPE BLUFF lies distant 8 miles from Cape St. Michael, and is very high land, ragged at the top, and steep towards the sea. These capes form the bay of St. Michael, in which are several arms well stored with wood.

CAPE BLUFF HARBOUR is small, and only fit for small vessels. To sail into it, keep Cape Bluff shore on board till you come to a small island, then pass to the eastward of it and anchor.

From Cape Bluff to Barren Island the course is north, distance 1 league; and from the south point of this Island to Snug Harbour, the course is west, distance $1\frac{1}{2}$ mile. This is but a small harbour, but in it there is very good anchorage in 26 fathoms water, and no danger in sailing in or out.

One mile to the northward of Barren Island lies Stoney Island; and within these islands on the main, lies Martin and Otter Bays, in the northernmost of which is very good anchorage and plenty of wood, and no danger but what shows itself.

DUCK HARBOUR. On the west side of Stoney Island is Duck Harbour, which is very good for small vessels. Large vessels may anchor between the west point of Stoney Island and Double Island, in 20 or 24 fathoms water, and may sail out to sea again, on either side of Stoney Island, in great safety.

HAWKE ISLAND lies 1 mile to the northward of Stoney Island. Within Hawke Island lies Hawke Bay, which runs to the westward 2 leagues, and then branches into two arms, one running to the W. by S. 2 leagues, and the other N.W. by W. 5 miles; these arms are well stored with wood. After you are within Pigeon Island there is very good anchorage quite to the head of both arms.

On the south side of Hawke Island lies Eagle Cove, wherein is very good anchorage for large vessels, in 30 or 40 fathoms water: small vessels may anchor at the head in 7 or 8 fathoms. On the main within Hawke Island, about 5 miles to the E. by N. of Hawke Bay, lies Caplin Bay, in which is very good anchorage, and plenty of wood at the head.

PARTRIDGE BAY lies $4\frac{1}{2}$ miles to the northward of Hawke Island. In this bay is very good anchorage, but difficult of access, unless acquainted, by reason of a number of small islands and rocks which lie before the mouth of it. The land hereabout may be easily known. The south point of the bay is a remarkable high table hill and barren; and all the land between this hill and Cape St. Michael is high, but the land to the northward of it is low.

SEAL ISLANDS. From Cape St. Michael to the southernmost of the Seal Islands the course is N.E. $\frac{1}{2}$ N. 9 leagues; and from thence to Round Hill Island the course is N. by E. and the distance $11\frac{1}{2}$ miles: this island is the easternmost land on this part of the coast, and may be known by a remarkable high round hill on the west part of it.

From Round Hill Island to Spotted Island the course is N.N.W. $\frac{1}{2}$ N. distance $1\frac{1}{2}$ league. From Spotted Island the land trends away to the N.W. and appears to be several large islands.

From the southernmost Seal Islands to White Rock the course is N.N.E. $\frac{1}{2}$ E. about 5 miles. From this rock the course into Shallow Bay

is W. $\frac{1}{2}$ S. distance 4 miles. There is tolerable good anchorage in this bay, and no danger except a small rock which lies off a cove on the larboard hand, and about one-third of the bay over; this rock is uncovered at low water. There is very little wood in this bay.

From White Rock to Porcupine Island the course is N.N.W. distant 2 leagues. This island is high and barren, and you may pass on either side of it into Porcupine Bay, where you will have very good anchorage but no wood.

SANDY BAY lies on the S.E. part of the Island of Ponds, and N. $\frac{1}{2}$ W. 5 miles from White Rock; in it is very good anchorage in 10 fathoms water, on sandy bottom, and seems very handy for a fishery, except the want of wood. Between this bay and Spotted Island are a great number of islands and rocks, which render this part of the coast dangerous.

SPOTTED ISLAND is high barren land, and may be known by several large white spots on the east side; is about 3 miles long, and 3 miles broad. The north part lieth in the latitude $53^{\circ} 30' N.$ Within this island, to the westward, lieth Rocky Bay: you may sail into this bay by passing to the northward of Spotted Island, and between either of the islands that lie before the entrance of the bay. There is not any good anchorage in the bay, the ground being mostly rocks, till you are between Level Point and Eagle Island, where you may anchor in 8 or 10 fathoms water, good bottom, taking care to give Level Point a good berth. The best anchorage is on the west side of Eagle Island, in 8 or 9 fathoms water, mud. Passing between Eagle Rocks and Duck Rocks, you may borrow on either to within two-thirds of a cable's length, or may run up and anchor on the south side of Narrow Island, in Narrow Harbour, and be handy for wooding and watering.

From Spotted Island to Wolf Rock, the course is N.N.E. $\frac{1}{2}$ N. 18 miles. This rock just appears above water, and is about 14 miles from the main; there are several islands between it and the main.

Indian Island lies 2 miles to the northward of the entrance of Rocky Bay; it is remarkable high land, the western end being highest. Between this island and the main is tolerable good shelter for small vessels, and it appears to be a good place for a seal fishery.

SAND-HILL COVE. About 4 leagues to the westward of Indian Island, lies Sand-hill Cove, (so called from several sand-hills lying on the south side of the entrance :) in this cove is tolerable good anchorage about half a mile within the entrance, in 3 and 4 fathoms water, sandy bottom. In sailing into the cove take care to give the north point a good berth, there being a ledge of rocks stretching off from the point about a cable's length, and run to the westward along shore for about 2 cables' length.

TABLE BAY. The south head of this Bay lies 2 leagues to the N. by W. of Sand-hill Cove, and may be known by a remarkable table hill that lieth on the north side of the bay, at about 8 miles within the entrance; this hill may be seen plainly from the Wolf Rock, which lieth N.W.W. $\frac{1}{2}$ N. $7\frac{1}{2}$ leagues from the entrance of the bay. In the bay, about 4 miles from the entrance, lieth Ledge Island, so called from a ledge of rocks stretching to the westward from the island up the bay for about 2 miles. On the south side of this island is anchorage in 12 or 14 fathoms water, called South Harbour, or you may run higher up and anchor in Table Harbour. On the north side of the bay, just within

Ledge Island, lieth North Harbour ; in it is very good anchorage. In sailing up the bay to Table Harbour take care to keep the main close on board, in order to avoid a rock that lieth nearly half way between the ledge off Ledge Island and the main.

The GANNET ISLANDS are a cluster of islands lying from about 7 to 11 miles from the main ; the outer one bears N.N.W. $\frac{3}{4}$ W. 10 leagues from the Wolf Rock.

CURLEW HARBOUR lies nearly S.W. of Gannet Islands, and may be known by a round green island lying before the mouth of it. The entrance into the harbour is between this island and a low point of the main to the south-eastward of it, having a small rock above water, close to the point : there is no danger in sailing into this harbour. The best anchorage for large vessels is about 1 mile within the entrance, bringing the small rock off the point of the entrance on with the north point of Long Island (which lieth about half a league to the N. by W. of Green Island ;) they will then lie in 14 or 15 fathoms water, good bottom. Small vessels may run higher up, and anchor in 10 or 7 fathoms water. On the south side of the harbour is a shoal a small distance off shore. There is no wood to be had in this harbour, but plenty of water.

ISTHMUS BAY. Round the west point of Curlew Harbour lies the entrance into Isthmus Bay : in sailing into it from this harbour, be sure to keep Great Island on board, in order to avoid a shoal that stretches off the point towards the island. There is another passage into this harbour, between the west point and a small bare rock, of a moderate height, that lieth off the south point of Great Island : this passage is narrow, and has five fathoms water in it ; here is both wood and water to be had.

HARE HARBOUR. One league to the westward of Great Island lieth Hare Harbour ; this is only fit for small vessels, the ground being bad till you are near the head, where you may anchor in $3\frac{1}{2}$ fathoms water, good ground. Hare Island, which lieth before the entrance of the harbour, is high land. The east point of Huntingdon Island lies about two miles to the northward of Hare Island, and W.S.W. $\frac{3}{4}$ W. 13 miles from the outer Gannet Island ; is of a moderate height, and is in length, from east to west, $6\frac{1}{2}$ miles. There is a safe passage along the south side of this island into Huntingdon Harbour : in it you may anchor from 15 to 5 fathoms water, but the best anchorage is in about 6 fathoms near the island ; here you will lay secure from all winds, and be very handy for wooding and watering, there being plenty of both on the island.

SANDWICH BAY. On the S.W. side of Huntingdon Island lies Earl Island, on either side of which is a passage into Sandwich Bay, which is a very fine one, being 6 or 8 miles broad and 6 leagues deep, having great plenty of wood, and four fine rivers that seem to be well stored with salmon. There is very good anchorage in a cove on the east side of this bay, and on the north side under a high mountain ; from the shore at the foot of the mountain, and for about 5 miles to the westward, the soundings stretch off gradually from 5 to 25 fathoms, muddy bottom, and are about 3 miles from the shore. The passage into the bay, on the west side of Huntingdon and Earl Islands, has not been sufficiently sounded to be recommended, though by far the widest. The passage on the east side of Earl Island is narrow, and has but 3 fathoms

water in it. Returning to Chateau Bay, we now proceed to give directions from thence to the Esquimaux Islands, at the entrance of the River St. Lawrence.

CAPE YORK TO THE ESQUIMAUX ISLANDS.

GREEN, RED, AND BLACK BAYS. From York Point, the southern entrance of Chateau Bay, to Barge Point, the course and distance is W. by S. $5\frac{1}{2}$ leagues; from Barge Point to Saddle Island is nearly west 10 miles; between these is Green Bay, a place where small vessels may anchor in 12 fathoms water, but open to the south-easterly winds.

RED BAY is an excellent harbour, and may always be known by Saddle Island, which lies at its entrance; this island rises up at each end, and sinks down in the middle, somewhat similar to a saddle; there is also a remarkable round hill on the western side of the bay, and opposite to the west end of Saddle Island, which will tend to point out the harbour; the land on the west side of the bay is high, the eastern side rather low, and the head of the bay is high and woody; in sailing into this place there is little danger, the passage is to the westward of Saddle Island, only taking care to give a berth to the rock, which, at a quarter ebb, is above water, and lies off the western point of the main land, and also not to come too near to the inner part of Saddle Island, as a shoal stretches off it about the length of a cable. The western bay lies in to the northward of the western point, and has very good anchorage with westerly winds, but somewhat open to the eastward; there is no passage except for boats, to the eastward of Saddle Island: vessels coming from the eastward must be careful to go clear of a small rock, which lies about a mile from the two black rocky islets which are at the east end of Saddle Island, and near a mile off the shore: the high round hill at the west side of the bay on with the saddle of Saddle Island, will lead you directly upon the rock, and the sea commonly breaks over it.

BLACK BAY lies to the W.S. Westward, distant 10 miles from Saddle Island; the anchorage here is tolerably good, but too much exposed to the S.E. winds. S.W. by S. from Ship Head, which is the western point of entrance to Black Bay, distant $1\frac{3}{4}$ miles, is St. Modeste Island; it is small and low, but vessels frequently run into a place within the island, called St. Modeste Bay, and anchor; but this, though occasionally used, cannot be recommended.

WOLF'S COVE, OR L'ANCE DE LOUP. S.W. by W. from St. Modeste Island, distant $4\frac{1}{2}$ miles, begin some remarkable red cliffs, which continue full 2 miles, and form the eastern part of Wolf's Cove; this is high table land, terminating with steep cliffs towards the sea. The entrance to Wolf's Cove is about 2 miles wide, the two points of the cove bearing from each other S.W. and N.E.; there is good anchorage at the head of this cove in 12 fathoms water, and also on the western side, in Schooner's Cove, where small vessels may lie safely in 7 fathoms, on a bottom of sand.

FORTEAU BAY. This bay lies 5 or 6 miles to the westward of Wolf's Cove, the shore between them is rather low; it is about 3 miles broad, and runs in nearly the same distance; on the western side, near the head of the bay, is good riding, in from 10 to 16 fathoms, but

exposed to the southward. Off the east point of the bay is a rock, which appears like a shallow under sail ; and on the western side of the bay is a fall of water, which, on coming from the eastward, will easily be perceptible. West 7 miles from the western point of Forteau bay is Island au Bois, and 2 miles westward of that is Green Island ; the former of these is of moderate height, and has a good passage round it ; it lies in front of Blanc Sablon Bay, where a vessel may occasionally find anchorage ; but the ground is loose sand, and will not hold. The channel between Bois and Green Islands is good, and has 11 fathoms water in it ; there is a cove on the eastern side of Green Island, where a fishery is sometimes carried on ; there is also a passage between Green Island and the main, which leads to Bradore Bay and Harbour ; but you should be careful to give Grand Point a good berth in passing, as some sunken rocks lie directly off the point.

BRADORE HARBOUR. From Green Island to Island of Ledges, the course is nearly north, distant 5 miles ; the Harbour of Bradore may readily be known by the land between it and Point Belle's Amour ; the point itself is low and green, but about a mile inland, it rises up to high table land : and further inland are three remarkable hills called our Lady's Bubbies ; these are round, and may be seen all around the coast, lying to the north-eastward about 2 leagues distance from the Island of Ledges ; this island is of a moderate height, having a great many islets and rocks about it ; on its eastern side is Blubber Cove, where small vessels may anchor in 2 and 2½ fathoms. There are two passages into Bradore Harbour, but that to the northward of the Island of Ledges is by no means safe, on account of the number of rocks scattered about it. To enter the eastern passage, you must take care to avoid a small rock, which lies about S.W. by W. a quarter of a mile from the low point on the main, where the houses stand ; on this rock the sea commonly breaks, and shows itself at a quarter ebb : on the eastern side, within this rock, is Shallop Cove ; from the point above the cove, a shoal stretches off about a cable's length from the shore, and continues nearly the same distance, quite to the head of the harbour.

ESQUIMAUX RIVER AND BAY. From Point Belle's Amour to the outer Esquimaux Island, the course and distance is W. by S. 10 or 11 miles ; N.N.E. about 4 miles from which there is good anchorage, between two high islands, for small vessels ; and within these lies the River Esquimaux. From hence to Dog Island, is a chain or cluster of small islands and rocks, the easternmost of which are commonly called the Esquimaux Islands ; the middle ones, the Old Fort Islands ; and the western ones, the Dog Islands ; within these, and on the main land, are various good bays and places of shelter ; but the entrances to them are so intricate, narrow, and dangerous, that no person, unless well acquainted, should attempt to navigate a vessel through them ; these islands extend from the outer Esquimaux Island nearly 4 leagues, and some of them are full 4 miles from the land.

LITTLE BAY lies W.N.W. about 5 miles from the Dog Islands, in which small vessels may find very good anchorage ; nearly a mile to the westward of Little Bay, is the Bay D'Omar ; this bay runs up N.E. by N. nearly 3 miles, the land on both sides being very high, but the western shore is the highest ; its width is about 2 cables' length, but off the coves it is broader ; outside of the eastern point of the bay are 2 small islets, a cable's length from land. This bay has good anchorage, the best place

being 2 miles within the entrance, opposite a woody cove, on the west side, where you will lie secure in 14 and 16 fathoms water, with abundance of wood and water. On the west side also, a mile within the entrance, is a remarkable green cove, but this becomes shoal a short distance from the shore.

From the entrance of the Bay D'Omar to Bowl Island, the course and distance is W.S.W. $\frac{1}{2}$ S. 2 miles; this is a remarkable round island, of moderate height, and lies a mile from the main land; about it, and between Bowl Island and Shecatica, are a great number of islets and rocks, the coast being thereby rendered dangerous to navigate, unless you have a fresh of wind, the rocks will then show themselves by the sea breaking over them.

From Bowl Island to Shecatica, the course is W. by N. about 2 leagues; and 3 miles E.N.E. from Shecatica Island is the Bay of Petit Pene, running in N.N.E. about 5 miles; but this place is scarcely fit for vessels to go into, because the water is too deep, the entrance too narrow, the ground bad, and the whole bay open to the southerly winds.

MISTANOGUE BAY lies about 2 miles to the westward of Petit Pene; there is a good channel between the Island Shecatica and the main, and many seals are frequently caught there. Before the entrance to the Bay of Mistanogue, lies an island of the same name; here, between the island and the river, the anchorage is good, with from 15 to 20 fathoms water, the ground holds well, and there is room enough to moor. To go into this road, you should pass round the western end of the island, which is bold-to, or else round its eastern end, and between it and Shecatica; but this latter passage is fit only for small vessels. In the Bay of Mistanogue the anchorage is good up to the very head, the channel is both long and narrow; the island and the main land, at the entrance, has a barren appearance, and is high, but both wood and water may be obtained in the bay.

SHECATICA BAY runs close in to the westward of Mistanogue Island, and extends many miles up the country, its course bending to the northward, and having various branches and turnings, with numerous islands capable of giving shelter to vessels of all descriptions; but these are little frequented, and consequently not well known, besides the passages are too narrow for strangers to attempt the navigation of.

SHAG ISLAND and ROCKS. Nearly S.W. by W. distant above 2 leagues from the Island of Mistanogue, is the Shag Island and Rocks: the island is small, high, and has a round peaked hill in the middle: to the eastward of it are a number of rocks above water, the outermost lying E.S.E. $\frac{1}{2}$ E. $1\frac{1}{3}$ mile from the island.

CUMBERLAND HARBOUR lies N.N.E. $\frac{3}{4}$ N. about 3 miles from the outer Shag Rocks, and may readily be distinguished by a remarkable high hill on the main land, appearing like a castle at its summit, being a steep cliff, looking like walls; this hill lies N. by W. nearly $3\frac{1}{4}$ leagues from the entrance to the harbour. The outer islands, which form the harbour, are called the Duke and Cumberland Islands; these are moderately high, the eastern one making in two round hills. To enter this harbour there is no danger but what appears above water, except one small rock, which lies south about half a mile from the western head; the entrance to the harbour is a quarter of a mile wide, and the inlet half a mile long; from the eastern head you must steer for the inner point on the western side, and after you

reach that point, haul over to the eastward, and anchor in from 20 to 7 fathoms, excellent ground, and room enough for any ships: this is by far the most commodious and best harbour on the coast, and also the easiest of access; fresh water is plentiful, but for wood you must go to Shecatica Bay.

SANDY ISLAND BAY. N.W. by N. about $2\frac{1}{2}$ miles from Shag Island, is the bay and harbour of Sandy Island; to sail into this, you should pass to the eastward of the Murr Rocks, keeping the starboard point of the bay on board, you will then perceive a small rock above water to the N.N. Westward; this lies off the entrance of the harbour; you may pass on either side of this rock, and then steer in N.N.E. $\frac{1}{2}$ N. for the harbour; there is no other danger: here you will have room enough to moor in 5 or 6 fathoms water, with good ground and safe riding; there is no wood here, but water in plenty.

PORT AND RIVER ST. AUGUSTINE. The entrance to the Port and River St. Augustine, is between Shag Island and St. Augustine Square; the west island, which is moderately high, the western part being the highest, and quite low in the middle, but not easily to be distinguished at a distance, on account of the islands within it being much higher; a third of a mile to the eastward of this is the East Island, somewhat larger, not quite so high, but even at the summit; between these islands, after passing the Chain and Square Islands, is a safe passage for small vessels to enter this port; and they can anchor between the West and Round Islands, or run on to the northward, pass Round Island, and stop in 6 or 7 fathoms, with plenty of room to moor.

S.W. by W. about half a league from west part of St. Augustine's Island, is a string of small Islands, commonly called St. Augustine's Chain, the outermost of which is a remarkable smooth round rock, and to the westward of this one-quarter of a mile are several rocks under water, over which the sea constantly is breaking, some of these are visible at one-third ebb; half a mile W.S.W. from these is a high black rock above water, and between these two is the best passage for large vessels into the Port of St. Augustine: you should steer from this black rock, towards a remarkable low point, which will bear N.N.E. $\frac{3}{4}$ N. until you open the port, then haul in and anchor as before directed; or you may steer up the passage between this point and Round Island, and anchor.

The RIVER ST. AUGUSTINE is $4\frac{1}{2}$ leagues from the entrance of the port, and lies to the N.N.W. having several islands lying in the passage; but the river is shallow, and only fit for boats to enter; there is a sandy bar across, which dries at low water. Two miles up it divides into two branches, both running to the N.N. Westward for 14 or 15 leagues; wood and water is plentiful.

From St. Augustine's Chain to the bluff head of Great Mecatina Island, the course and distance is W.S.W. 8 leagues and 1 mile; the coast is lined with islands, within and about which are many harbours; the main land, in sailing along this part, from Shecatica to Ha-Ha Bay, cannot be seen, and the adjacent islands are so high, so numerous, and so near each other, that although there are navigable passages between them, yet you cannot discover their entrances, nor perceive them to be islands, until you get near and are entangled among them.

EAGLE HARBOUR. This lies at the western end of Long Island, to the eastward of Ha-Ha Bay, and is formed by a cluster of islands,

being capable of holding a great number of vessels in security; in it are from 20 to 10 fathoms water, the ground holding well. In order to find out this anchorage, it will be advisable to make for the Great Island of Mecatina, from whence you should shape your course for the Fox Islands, which lie S.S.E. $\frac{1}{2}$ S. one large mile from the westernmost entrance of the harbour; it may also be known by a deep bay to the eastward, without any islands in it, while to the westward there are a great many. But if you intend sailing in to the eastward, you should steer from the Fox Islands N.N.E. $\frac{1}{2}$ E. $2\frac{1}{2}$ miles into the bay, when you will observe, to the N.N. Westward of you, a remarkable high island, round which, to the northward, is a safe passage of three fathoms into the harbour, where you will ride in safety, well sheltered from all winds. In the western passage to this harbour there are $2\frac{1}{2}$ fathoms; this is, however, a narrow channel, fit only for small vessels, and running in between many small islands.

This part of the coast is very dangerous for any vessel to fall in with, in dark and foggy weather, on account of the infinite number of small low islets and rocks about it, many of the latter being under water, and to avoid which no practical mark can be given; it will, therefore, always be advisable and prudent to keep off the coast to a considerable distance.

HA-HA BAY. This bay lies on the main, to the westward of Eagle Harbour, and has several small islands at its entrance, forming separate entrances; the best of these is that which lies between Seal Point and Round Island, leaving all the islands on the starboard side; this is a wide and safe passage, having no danger but what is visible. Ha-Ha Bay runs into the northward about 7 miles, and has many islands at its head, on the starboard side; within these islands, to the eastward, are numerous anchorages, with from 9 to 20 fathoms water; vessels may also occasionally anchor all along the eastern side of the bay in 12 and 14 fathoms, muddy bottom, but on the western side the water is too deep. N.N.W. $\frac{1}{2}$ N. about two miles from the entrance on the west side, is a high bluff head; round this head N.W. by W. half a mile, is a small but safe harbour for small vessels, in which you will have 12 fathoms, good ground; this harbour is formed by an island, on either side of which there is a narrow but safe passage.

LITTLE FISH HARBOUR is to the southward of Ha-Ha Bay, and runs in westerly; it is small and formed by an island covered with wood; you may sail in on either side of the island; but the northern passage is considered to be the better of the two; in the bay to the southward of the island is a ledge of rocks, partly visible at all times. S.E. by E. from the Woody Island lies a rock, on which are only two fathoms at low water. You may anchor in the harbour at the back of this island in 7 or 8 fathoms, and have plenty room to moor. Off the northern point of the entrance to this harbour, called Seal Point, are two little islands, and a small sandy cove, where a seal fishery is carried on.

Between Fish Harbour and Ha-Ha Bay there is a very remarkable round high hill, making in a peak, which may serve as a land mark to point out either of these places of anchorage.

GREAT MECATINA ISLAND lies 3 miles off the main land, it is $3\frac{1}{2}$ miles long and about 3 miles broad, being the most remarkable land at this part of the coast; it rises up in the middle, which is much higher

than either of the ends ; its E.N.E. point makes like a bluff head, and round this head to the northward, within a cluster of small islands, there is a cove running in about one mile and a half ; in this cove vessels can safely anchor in from 14 to 20 fathoms, good ground, and may obtain both wood and water.

MECATINA HARBOUR is formed behind Mecatina Island on the main ; it is safe but small, yet will admit vessels of burthen, there being not less than three fathoms, at low water, in either passage to it ; but they must moor head and stern, there being no room to moor otherwise. To sail in through the western passage there is no danger, but to sail in through the eastern channel you must observe the following directions. From the eastern point of Mecatina Island steer North towards the main land, keep that close on board until you get the western point of the island on with the point of Dead Cove ; this is a small cove on the main, which lies open to the eastward ; the land which forms it is very low, with some brushwood upon it ; then sail on in that direction until you get above a stony point, which is the north side of the said cove ; or until you bring the north point of Gull Island, which is a small island lying E. by N. distant one mile from Mecatina Island, on with the E.N.E. point of Mecatina Island, you will then be within a spit of rocks which stretches off the island, and must haul over for Mecatina Island, in order to avoid a ledge which runs off from the point of Dead Cove ; and when you bring the western passage open, you may anchor in 6 or 7 fathoms water. Vessels coming from the eastward, and bound for the Harbour of Mecatina, in passing to the northward of Gull Island should be careful either to keep Gull Island or the main land close on board, in order to avoid a sunken rock that lies near half way between Gull Island and the main, on one part of which there is not above 3 feet water. The highest part of the land between Grand Point and Ha-Ha Bay is directly over the Harbour of Mecatina.

THE GRAND POINT OF MECATINA is the extremity of a promontory, which runs out from the main land, it is low at the point, but rises inland, sloping gradually up until it becomes of considerable height ; it may easily be recognized by the adjacent islands and rocks which are about it ; the nearest is a small low rock, not far from the point ; two of these islands are much larger, and rise much higher than the others ; and the outermost are small, low, rocky islands, lying $2\frac{1}{4}$ miles off the point. S.E. by E. five miles and a half way between the Grand Point, are the Murr Islands and Rocks, and these are the most southerly islands on all the coast. The northernmost Murr Island bears from the other North a little Westerly, distant one mile ; they are remarkable objects, being two barren rocks of moderate height, and steep all round. About half a mile E.S.E. from the southern Murr Island, are the two Murr Rocks, both appearing above water, and E. $\frac{1}{4}$ S. from the same island lies a ledge of rocks under water on which the sea generally breaks.

BAY DE PORTAGE. N.W. by N. from the Murr Islands, distant two leagues, is the Bay de Portage, the land over which makes in a valley, each side being high ; at its entrance lies an island of moderate height, which forms the harbour ; you may enter on either side of this island, but the eastern passage is fit only for small vessels, there being only 2 fathoms, in some part of it, at low water. The western channel is sufficiently large and safe for any vessel to turn, there being from 6 to

8 fathoms in it ; but they must be careful to avoid two sunken rocks, on which are only $2\frac{1}{2}$ fathoms at low water. The northernmost of these lies from Mutton Island S. by W. distant one mile and a half; the southernmost rock bears from the Seal Rocks N.E. $\frac{3}{4}$ N. distant half a mile ; they are both bold-to, and vessels may borrow within a cable's length of Mutton Island or the Seal Rocks.

To the westward of the Grand Point of Mecatina until you reach the Islands of St. Genevieve, the easternmost of the Esquimaux Islands, the coast appears unsurveyed. From the Grand Point it runs about W.S.W. 15 leagues to Cape Whittle, skirted by many islands and rocks, some of them lying 7 miles from the land ; in coasting along it will consequently be necessary to give it a wide berth.

Vessels entering the Strait of Belle Isle, and being abreast of Chateau Point, distant 7 or 8 miles, or having brought the Red Cliff to bear West, distant 5 or 6 miles, may steer a W.S.W. $\frac{1}{2}$ W. course, and they will go clear of all dangers. When having passed the Southmaker's Ledge, which is the outermost reef, distant 7 miles from Cape Whittle, and bringing that cape to bear N. by W. or N. distant 8 miles or more, they may steer W. by N. past Wolf Island, until they see Mount Joli, a high mountain on the main-land ; bring that to bear N.W. by N. and a N.W. $\frac{1}{2}$ W. course will take them to St. Genevieve Island.

All the islands along the coast of Labrador have a barren appearance, the outer ones being for the most part small, low, rocky islets, and the inner ones large and high, covered with a sort of green moss ; while wood is scarce, and can only be procured in some places.

TIDES. The course and flowing of the tides along the whole coast are irregular and uncertain, depending much upon the prevailing winds ; and when the weather has been settled, high water takes place at Shecatica, on the full and change, about 11 o'clock ; and at Mecatina at half-past 2 : the rise of the tides being about 7 feet. At Red Bay, the tide flows full and change at half-past 9 ; at Forteau Bay, at 11 ; and at Bradore, at half-past 11. Springs rise at those places 7 feet, neaps 4 feet.



COURSES AND DISTANCES.

	Magnetic Bearings.	Miles distant.
From Grand Point of Mecatina to the Outer Rocks	S.S.E. $\frac{1}{2}$ E.	2 $\frac{1}{4}$
— the Outer Rocks to the Murr Rocks	E.S.E. $\frac{1}{2}$ S.	3 $\frac{1}{4}$
— Murr Rocks to Flat Island	E.N.E. $\frac{1}{2}$ E.	5
— Flat Island to Treble Hill Island	N.E. by N.	5 $\frac{1}{4}$
— Treble Hill Island to Fox Island	N.N.E. $\frac{3}{4}$ N.	9
— Fox Island to St. Augustine's Chain	E. by N.	15
— St. Augustine's Chain to Shag Island	E.N.E. $\frac{1}{2}$ E.	7 $\frac{1}{2}$
— Shag Rocks	E. by N.	9
— Shag Rocks to Shecatica Island, east end. .	E.N.E. $\frac{1}{4}$ E.	9

These courses will carry you outside of all the other islands and rocks. Passing within Great Mecatina Island, the courses and distances along shore are—

From the Outer Rocks to the Bay of Portage ..	N.N.W. $\frac{1}{2}$ N. ..	4
————— Mecatina Island,		
outer point	N. $\frac{1}{2}$ E.	4
— Mecatina outer point to Gull Island	E. by N.	1
— Gull Island to Green Island, Red Bay ..	N.E. $\frac{1}{2}$ E.	3
————— La Boule Rock.	E.N.E. $\frac{1}{2}$ N.	4
— La Boule Rock to Green Island.	W. by N.	1 $\frac{1}{2}$
————— Duck Island.	N. $\frac{3}{4}$ W.	3
— Duck Island to Round Island, Ha-Ha Bay	N.E. $\frac{1}{2}$ N.	1 $\frac{1}{2}$
— Round Harbour into Little Fish Harbour	W. $\frac{1}{4}$ S.	1 $\frac{1}{2}$
————— Ha-Ha Bay	N.E. $\frac{1}{2}$ E.	1 $\frac{1}{2}$

Vessels often taking their departure from the Great Island of Mecatina, the following bearings and distances will be found useful:

From the Round Head of Mecatina to Mecatina Island	W. by N. $\frac{1}{4}$ N. ..	3 $\frac{1}{2}$
————— to the Outer Rocks	S.W. $\frac{1}{4}$ S.	5
————— Murr Islands	S.S.W. $\frac{1}{2}$ S.	5
————— Flat Island	S. by E.	5
————— Loon Islands	N. $\frac{1}{2}$ E.	4
————— Round Island, Ha-Ha Bay	N.N.W. $\frac{1}{2}$ N. ..	6 $\frac{1}{2}$
————— Treble Hill Islands.	E. $\frac{3}{4}$ S.	3 $\frac{1}{2}$
————— Double Hill Islands ..	N.N.E.	5 $\frac{1}{2}$
————— Goose Islands.	N.E. $\frac{3}{4}$ N.	5 $\frac{1}{2}$
————— Fox Islands	N.E. $\frac{1}{2}$ E.	11
————— St. Augustine's Chain	E.N.E.	25
————— Shecatica	E.N.E.	41