The Coast of British Columbia book 1907

No. 96

HYDROGRAPHIC OFFICE

THE COAST OF BRITISH COLUMBIA

FROM JUAN DE FUCA STRAIT TO PORTLAND CANAL

TOGETHER WITH

VANCOUVER AND QUEEN CHARLOTTE ISLANDS

SECOND EDITION
1907

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Texada island is 27 miles in length, with an average width of 4 miles. Throughout its whole length stretches a ridge of rugged trap mountains, wooded generally to the summit; at the southern end mount Shepherd reaches a height of 2,906 feet; toward the northern end the range decreases in elevation, but there is scarcely an acre of land fit for cultivation throughout the island. Its shores are steep and bold on all sides, and the land rises abruptly, except at the northern extreme; good limestone is found at the northern end of the island.

A reef extends 400 yards off the northern end of the island; near the end of the reef is a rock that dries 4 feet.

Buoy.—A black spar buoy is moored in 6 fathoms of water off the end of the reef.

Gillies bay, the only anchorage, and that merely a stopping place, is on the SW. side, 2 miles north of the Mouatt islets, a small group lying nearly 1 mile from shore. The bay is easily recognized by a remarkable white patch on its northern point, which is seen for many miles, and shows as two distinct white spots; an anchor may be dropped at ¼ mile from the beach in 12 fathoms.

Upwood point, the SE. extreme of Texada island, is rugged and precipitous; stunted pines grow in the crevices of the bare trap rock; the land behind is more thickly wooded. Almost immediately over it rises mount Dick, a very remarkable hump-shaped hill, 1,136 feet high. A rock which covers lies 400 yards off the point.

Sturt bay is a small inlet situated on the NE. coast of Texada island, about 3 miles from its northern end.

It is about 700 yards in length, but at the entrance has a width of only 200 yards between the 5-fathom curves.

There is a wharf 114 feet long on the eastern side of the bay, and another 90 feet long at the head of the bay.

Van Anda cove is the bight next eastward of Sturt bay. At the head of the cove is a wharf, and a settlement is building up in connection with the development of copper mines. The approach to the wharf is free from outlying dangers.

The extremity of the spit extending from the eastern point of the cove is marked by a small beacon in 9 feet of water.

Lasqueti island is 9 miles long, with an average width of over 2 miles; mount Tremeton is a singular turret-shaped summit, 1,056 feet high, rising nearly in its center. On its southern side are several boat coves.

Tucker bay, on the north side of Lasqueti, is a very fair anchorage. Entering from the westward it will be readily known by a group of small wooded islands which form its eastern side; its western point (West point) is sloping, somewhat remarkable, and par-

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tially bare of trees. The water shoals rather suddenly from 30 to 16 fathoms.

The anchorage is in 14 fathoms, with the outermost and westernmost of the small islands bearing N. 46° E. (N. 22° E. mag.), and West point N. 50° W. (N. 74° W. mag.), which will be within ¼ mile of the shore. With a strong NW. wind and flood tide the bay, though safe, would not be a comfortable anchorage; from the eastward sailing vessels would find some difficulty in reaching it in consequence of the prevailing NW. winds and the narrowness of the channel at that end.

Small vessels may anchor in the SE. corner, inside the small island on the south shore, in 6 or 7 fathoms, sheltered from almost any wind.

Tides.—It is high water, full and change, at 7 h. 30 m.; springs rise 16 feet.

Sangster island, ½ mile long, lies 1 mile SW. from Young point, the SE. extreme of Lasqueti. There is a deep passage of 70 fathoms between the two, but a rocky ledge with shoal water on it extends off the NW. point of Sangster island.

Seal rocks, which cover at half tide, lie a little more than 1 mile N. 61° W. (N. 85° W. mag.) of the western point of Sangster island, and it is not recommended to pass between the island and the rocks.

Jenkins island lies 3 miles westward of Sangster, and close to the southern shore of Lasqueti.

Sea Egg rocks, 12 feet high, lie 600 yards off the west end of Jenkins island.

False bay, in the west end of Lasqueti island, is a deep bight, but is not recommended as an anchorage, though small vessels would find shelter in its northwestern corner in 7 fathoms.

Stevens passage, between the Sisters islets and Lasqueti, is upward of 1 mile wide. Flat islands, on its eastern side, should be given a berth of ¼ mile, as should also Bare islands, a small group lying off the northwestern end of Lasqueti.

Sabine channel, between Texada and Lasqueti islands, is a good ship passage 9 miles long in a NW. and SE. direction, with very deep water; it is 3 miles wide at its western end, but several high conical islands (the two largest being Jedidiah and Jervis islands) lying off the NE. side of Lasqueti contract the width at the eastern end to ¾ mile in some parts. There is also a narrow but deep channel, Bull passage, to the SW. of these islands, running along the Lasqueti shore.

The tidal streams through Sabine channel run 2 knots an hour, the flood running NW., the ebb SE.

Malaspina strait is a wide navigable channel, separating Texada island from the mainland. Its general direction is NW. for 30

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miles, when it again enters Georgia strait between the north end of Texada and Harwood islands; its southern entrance lies between Upwood point and the western of the Thormanby islands, and is 4 miles in width. The Texada shore is steep-to, and almost straight for its whole length, fronted by narrow shingle or bowlder beaches.

Thormanby islands, two in number, about 550 feet high, almost joined, and upward of 2 miles in extent, form the SE. entrance point of Malaspina strait. Lying close to the mainland, these islands appear as part of it, terminating at their NW. point in a steep clay cliff, off which, at low water, dries a bowlder point. Shoal water extends from this point NW. for about 800 yards, and a bank with less than 10 fathoms on it extends from the northern side of the western island for 1 mile.

From the north point of the eastern island, Tattenham ledge extends ½ mile NW.; this ledge uncovers at the inner part, and has 4 fathoms of water on the outer.

On the outer part of the ledge, 700 yards NNW. from the point, is a rock which dries at low water springs.

Buoy.—A platform buoy surmounted by a latticework pyramid, the whole painted black, is moored in 4½ fathoms off the northern end of Tattenham ledge.

Welcome pass, separating Thormanby islands from the main, is a deep but narrow channel about 1 mile long. A detached rock which uncovers at lowest tides lies at the southern entrance to the pass and 400 yards from East Thormanby island; there is a depth of 18 fathoms close to the rock on the channel side. The mainland shore of the pass is steep-to and can be approached to a distance of 100 yards.

A rock which dries 9 feet, with deep water around, lies off the southern end of East Thormanby island; it is situated 1,150 yards N. 73° E. (N. 49° E. mag.) from Bare islet.

Merry island, lying about midway between the southern end of East Thormanby and the mainland, is about 250 feet high; there are several rocks off the south and east sides of the island, which should be given a berth of ½ mile.

Welcome point is the rounded point east of Merry island; off it a shoal extends for 600 yards. This shoal is marked by a red spar buoy moored in 6 fathoms.

Light.—From a wooden lantern surmounting a rectangular wooden building, the whole painted white, erected on the SE. point of Merry island, is shown a fixed white light, 57 feet above high water and visible 6 miles.

Buccaneer bay, formed by the junction of the two Thormanby islands, on their northern side, extends in a southerly direction for

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over 1 mile and affords good and sheltered anchorage at its head in 15 fathoms.

Caution must be observed when entering, as shoal water extends for fully ½ mile from the northern shore of both islands on both sides of the entrance.

Tattenham ledge, the northern edge of which is marked by a black buoy, will be avoided by keeping the outer of the Surry islands in line with Wolf point and the center of the beach at the head of the bay bearing S. 8° E. (S. 32° E. mag.).

Secret cove.—At 1 mile northward of the entrance to Buccaneer bay is the entrance to Secret cove, formed between Turnagain island and the shore of the mainland. The channel in, between George point (the SE. end of Turnagain island) and Entrance island to the eastward, is 100 yards wide with depths of from 7 to 11 fathoms in it. One hundred yards S. 57° W. (S. 33° W. mag.) from the west end of Entrance island is a rocky patch which covers at three-quarters flood; it will be cleared by keeping White rock (2 feet high) inside the harbor on its west shore, just open of the NW. points of Entrance island, bearing N. 54° E. (N. 30° E. mag.).

When past Entrance island, anchorage may be taken up as convenient in 7 to 9 fathoms, midway between that island and Echo island.

Bjerre shoal.—Three miles northwestward from the entrance to Secret cove and 1,800 yards from the eastern shore of the strait is Bjerre shoal, rocky, 140 yards in extent, with 12 feet over it at low water.

Rocky patch.—From Secret cove the coast, which trends NW., is steep-to for 4 miles, at which distance a rocky patch of considerable extent lies 1 mile S. 33° E. (S. 57° E. mag.) from Francis point, and extends nearly the same distance parallel to the shore. The least water found on the patch was 7 fathoms, but less may probably exist.

Bargain harbor is a small harbor with depths of 5 and 6 fathoms in it. The entrance lies between the Whitestone islands (lying about 600 yards SE. from Francis point) and the islets off the shore to the eastward, the largest of which are Flat (the southern) and Green islets. By keeping in mid-channel the harbor may be safely entered.

Pender harbor is the only anchorage with a moderate depth of water to be found in the neighborhood of Jervis inlet, but its entrance is so encumbered by islands as to render it difficult of access to any but steam or coasting vessels.

When coming from Jervis inlet by Agamemnon channel, the passage between Channel islets and Pearson island to the SW. and Norman point to the NE. is the most convenient, but coming from

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any other direction it would be better to use either the one between Pearson island and Channel islets, or that between the former island and Martin island; the latter is to be preferred.

A pinnacle rock, with 4 to 8 fathoms close around, which dries at extreme low water, lies with the west extreme of Martin island S. 1° E. (S. 25° E. mag.), distant 667 yards; and the north extreme of Pearson island N. 58° W. (N. 82° W. mag.).

One hundred yards NE. of Martin island is a large rock, awash at high water. There is also a rock, which dries just after high water, on the edge of the shoal extending 70 yards NW. from Williams island.

Williams and Charles islands lie immediately across the entrance forming three channels; that to the northward between Williams island and the main (Henry point) is not 200 yards in width, but it is the best and has a depth of 20 fathoms.

A rock, which covers at three-quarters flood, lies more than 100 yards N. 2° E. (N. 22° W. mag.) from the east point of Charles island.

Skardon islands, two in number, lie 500 yards eastward from Williams island; pass on either side of them and steer up the harbor, which is over ¼ mile in width, and the depth will soon decrease to 12 fathoms. One mile within the entrance, a peninsula extends southward from the northern shore; pass between its southern point and Mary island.

A rock with only 4 feet of water on it at low water, with 7 and 8 fathoms between it and the shore, lies 85 yards from the northern shore of the harbor in a position from which the eastern extreme of Mary island bears S. 19° 30′ E. (S. 44° E. mag.) and the northern extreme of west Skardon island S. 82° 30′ W. (S. 58° W. mag.).

Anchorage.—Anchor in Gerrans bay, ¼ mile southward of the peninsula, in 6 or 7 fathoms; there is also good anchorage in Garden bay, just eastward of the peninsula, and abreast an Indian village, in 5 or 6 fathoms. The latter is the more suitable for a large ship.

A very narrow pass leads from the eastern end of the harbor into Gunboat bay, an extension of the inlet eastward, but it carries only 1½ fathoms, and the tidal stream sets strongly through.

Tides.—It is high water, full and change, in Pender harbor at 6 h. 0 m.; springs rise 12 to 14 feet.

Jervis inlet is one of the most considerable of those numerous and remarkable arms of the sea which indent the continent of America from the parallel of Juan de Fuca strait as far as lat. 60° N.; it extends by winding reaches in a northerly direction for more than 40 miles, while its width rarely exceeds 1½ miles, and in most places is even less.

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It is hemmed in on all sides by mountains of the most rugged and stupendous character, rising from its almost perpendicular shores to heights of 5,000 to 8,000 feet. The hardy pine, which flourishes where no other tree can find soil to sustain life, holds but a feeble and uncertain tenure here; and it is not uncommon to see whole mountain sides denuded by the blasts of winter, or the still more certain destruction of the avalanche which accompanies the thaw of summer.

Nelson island, in the middle of the entrance to Jervis inlet, is 10 miles long in a northeasterly direction, and about 4 or 5 miles wide; its shores are much broken and indented by several bays, in none of which, however, can anchorage be obtained in consequence of the great depth. The island is mountainous, ranging from 500 to 1,500 feet in height. Cape Cockburn, its SW. point, is of white granite, about 80 or 90 feet high, covered with a few dwarf pines; a rock lies 200 yards south from it.

Captain island, NE. of Nelson island, and separated from it by a narrow passage, is about 1 mile in extent, rocky, and steep-to.

Nelson rock.—When entering by the eastern passage, Agamemnon channel, or passing along the southern shore of Nelson island, avoid Nelson rock, which dries about 6 feet at low water and is 100 yards in extent in a NE. and SW. direction; it lies 1 mile S. 85° W. (S. 61° W. mag.) from Fearney point, is steep-to, and vessels are recommended to pass outside, or southward, of it.

Beacon.—A pyramidal stone beacon, surmounted by a staff and drum, the whole painted black and showing 26 feet above high water, stands on the NE. end of Nelson rock.

Rocks, with depths of 3 and 4 fathoms, are reported to lie SE. by E., distant $1\frac{3}{4}$ and $2\frac{1}{4}$ miles, respectively, from cape Cockburn, the SW. point of Nelson island, and about $\frac{1}{2}$ mile offshore.

Agamemnon channel, the southern entrance to Jervis inlet, runs between Nelson island and the main in a general northerly direction for 9 miles, then joins the main channel of the inlet; its average width is little more than $\frac{1}{2}$ mile; the tides run from 1 to 3 knots; the depth of water varies from 50 to 100 fathoms, and it affords no anchorage.

The western entrance to Jervis inlet is between Alexander point, the SW. extreme of Hardy island, on the east, and Scotch Fir point on the west. The points are not remarkable, but the opening is easily made out; it is nearly 2 miles in width, and takes for a short distance a northerly direction and then turns eastward. Scotch Fir point is rocky, and has two small islets lying close westward of it, which, like the point itself, are covered with stunted pines. Hardy island lies close to and is nearly connected with Nelson island; Blind bay, between them, is useless, and its entrance choked by small islands.

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Thunder bay, formed on the western side 1½ miles above Scotch Fir point, is one of the few places in Jervis inlet where a vessel may drop an anchor, and being near the entrance is likely to prove convenient. The bay is about ½ mile deep, with a sandy beach at its head, off which 17 fathoms will be found; immediately outside it there are 30 fathoms, and the lead then drops suddenly to a great depth.

Hotham sound, a wide opening, trends north, terminating at the distance of 7 miles in a double-headed bay; the water in every part of it is too deep for anchorage.

One Tree islet, off the east side of the inlet, at the entrance to Prince of Wales reach, 1¼ miles east from Captain island, is small, and has a single tree on its summit, which is very conspicuous; its height is about 50 feet. A rock awash at low water lies 200 yards off its east side; just inside it, on the east shore, is a bight where a coasting vessel may drop an anchor.

Prince of Wales reach.—Dark cove, on the west side of Jervis inlet, inside the Sydney islets, is 2 miles NE. from Captain island, and 12 miles from the entrance. The cove is only about 400 yards in extent, but affords a snug anchorage in 15 fathoms; a vessel of considerable size could moor within it. There is a clear deep passage 200 yards wide into this cove on both sides of Sydney islets.

Vancouver bay, on the east side of the inlet, 19 miles from the entrance, is about ½ mile in extent. From its head, which is low, a considerable valley extends to the eastward, but the shores on both sides are craggy and precipitous, and the bay is too deep to afford anchorage, there being 60 fathoms within 200 yards of the bank which extends a short distance from its head.

Princess Royal reach.—Deserted bay, also on the east side of Jervis inlet, at the termination of Princess Royal reach, and about 37 miles from the entrance, is small, and affords an indifferent anchorage in its eastern part near the head in about 16 fathoms, exposed to westerly and southwesterly winds. A valley extends from the head of the bay to the NE., through which a trail runs to the Lilooet lakes on the Fraser river, and is much frequented by the natives in the summer season.

Queens reach.—The head of Jervis inlet terminates in a patch of low swampy land, through which flow some small streams, and a bank dries off about 200 yards; it does not afford any anchorage, there being 25 fathoms within 100 yards of the outer edge of the bank. A remarkable peak, mount Victoria, rises 2 miles north of the water's edge to a height of 7,452 feet, and is a very conspicuous object on approaching the head of the inlet.

At the head of Jervis inlet there is a valley by which the Indians go to Clahoose (Desolation sound) in 2 days.

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Princess Louisa inlet, on the east side of Jervis inlet, 5 miles below the head, is narrow, and about 4 miles long in a NE. direction; it is connected to the main inlet by a narrow gorge, which at low tide becomes almost a waterfall, rendering it impossible for boats to enter except at high water; inside, like Jervis inlet, it is deep, and the mountains on both sides rise to 7,000 and 8,000 feet.

Seechelt arm, the entrance to which is 1 mile east of Agamemnon channel, is an extensive arm of the sea, penetrating the land for 17 miles in a southeasterly direction and only separated from the strait of Georgia by a low neck of land, 1,100 yards wide. On the east side of the arm, at distances of 7 and 11 miles from its entrance, are two smaller branches, Narrows arm and Salmon arm, extending to the northeastward for upward of 10 miles.

The arm, at 3 miles within its entrance, contracts in breadth to less than $\frac{1}{3}$ mile, and is partially choked up with rocks and small islands, which, preventing in a great measure the free ingress and egress of the tide, cause most furious and dangerous rapids, the roar of which may be heard for several miles. These rapids prevent any vessel, or even boat, from entering the arm, except for a short time after high and low water, when the tide slackens for a very limited period; it would, however, be hazardous for any vessel, except a very small one, to attempt to enter at any time, although there is a passage with from 4 to 7 fathoms between the islands and the southwestern or peninsula shore.

The shores of the arm, except near its south part or head, are high and rocky, and in the summer season the natives catch great quantities of salmon there.

Tides and tidal streams.—It is high water at full and change in Jervis inlet at 6 h. 0 m.; the rise and fall being about 14 feet; within the Seechelt arm the rise and fall seldom exceeds 6 or 7 feet.

The tidal streams are, except near the entrance of Seechelt arm, weak and irregular and influenced by winds.

Harwood island, off the north entrance to Malaspina strait, $1\frac{1}{2}$ miles from the continental shore and about 3 miles north from point Marshall, is $2\frac{1}{2}$ miles long in a northerly direction, $1\frac{1}{2}$ miles wide, from 150 to 200 feet high, flat, and thickly wooded. It is bordered by a sandy beach, and at its north point is a low grassy spit. There is deep water between the island and the shore.

Rebecca islet, lying midway between point Marshall and Harwood island, is of small extent, and 5 feet above high water.

Bare islet, 1 mile west from the south end of Harwood island, is a bare, yellow, cliffy rock, about 400 yards in extent, and 30 feet above high water.

The coast.—Westward from Jervis inlet, the north shore of Malaspina strait, takes a westerly direction for 11 miles, terminating

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at Grief point; for a considerable distance inland it is low, and bordered by a sandy beach.

From Grief point the north or continental shore of Georgia strait trends NW. for nearly 20 miles almost straight to Sarah point, the SE. entrance point of Desolation sound. Throughout the whole distance the coast does not rise more than 500 or 600 feet, and is but slightly indented. There is a fresh-water stream, Powell river, of considerable size 4 miles north of Grief point, communicating, at about 2 miles from the shore, with Powell lake, which extends some 20 miles northward toward the head of Toba inlet. There are some remarkable falls on the Powell river only 100 yards from the sea.

At 1 mile farther westward a vessel may anchor in fine weather for night or tide at a distance of 600 or 800 yards offshore near the coast abreast Harwood island in 12 to 13 fathoms. Anchorage must be taken up with caution as flats extend a considerable distance offshore. When anchoring do not shut in the north shore of Savary island.

Navigating along this coast between Grief and Sarah points, a vessel will avoid danger by keeping a mid-channel course between Harwood and Savary islands and the mainland. When past Hurtado point, steer more westward, and pass southward or westward of the White, Double, and Powell islets.

Sliammon and Lund are settlements on the mainland, the former NE. of Harwood island, the latter, at which there is a post-office, in approximately lat. 49° 59′ N., long. 124° 46′ W.

At Sliammon the beach dries off for a distance of 400 yards southward of the village. Vessels anchoring off Sliammon should keep Dinner rock open of the point westward of the village. The church of the Roman Catholic mission is conspicuous from seaward.

Atrevida reef and buoy.—At a point on the coast 2½ miles NW. of Sliammon a reef extends for ½ mile off the shore. Dinner rock shut in with Hurtado point clears the reef.

A red spar buoy is moored in 5½ fathoms off the edge of the reef.

Dinner rock, 35 feet high, lies ¼ mile offshore 2¾ miles northwestward from Atrevida reef and 1½ miles southeastward of Hurtado point.

Savary island, nearly 6 miles NW. from Harwood island and 1 mile from the continental shore, is 4 miles long in a west direction, and less than 1 mile wide. A sandy beach with huge scattered bowlders surrounds it, and extends a considerable distance off its north and west sides, which should not be approached nearer than ½ mile; these bowlders extend a greater distance from the south side of the island, which side, therefore, should not be closed nearer than ¾ mile. The height of the island varies from 80 to 120 feet, and the south side is faced by some remarkable, white, sandy cliffs,

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very conspicuous from the SE.; its eastern extreme is a granite cliff, steep-to. There are several clear grassy patches on the island, but the soil is poor and sandy. A sandy bar or ledge, with 1 to 2 fathoms of water over it, extends from its west point to Hernando island.

A reef extending about 1,000 yards NW. and SE., with a breadth of 500 yards, the bowlders on which dry at low water, is reported, with the SE. extreme of Savary island about N. 30° E. (N. 5° E. mag.), distant 3 miles. The position is doubtful. All the water inside a line from Bare island toward the west point of Savary island is said to be foul.

Mystery rock, 2¾ miles S. 27° E. (S. 52° E. mag.) from the east end of Savary island, is a patch which uncovers 4 feet at low water. From the rock, shoal patches of from 1 to 3 fathoms extend toward the east end of Savary island. When navigating this locality observe great caution. By keeping Grief point just open to the northward of the north extreme of Harwood island this danger will be avoided.

The ground between Harwood and Savary islands is said to be foul; the passage between these islands should not be attempted.

Hurtado point, on the mainland abreast Savary island, is about 250 feet high, bold, and cliffy. There is 37 fathoms of water in mid-channel between it and the island.

Ragged islands, lying close to and parallel with the continental shore, are a rocky group of small islands 2½ miles long and 600 yards wide; their SE. part is about 2½ miles NW. from Hurtado point, and some rocks extend 800 yards from their NW. extreme.

White islet, 1 mile SW. from Ragged islands, is a very remarkable, bare, white, granite rock, about 70 feet high. A rock which uncovers at low water lies 200 yards eastward from it.

Double islets, ½ mile west from the NW. part of the Ragged group, are small, and about 90 feet high, with a single tree on each of their summits.

Powell islets, 1 mile NW. from Double islets, are two in number, small, about 90 feet high, and covered with a few stunted bushes and trees; the westernmost islet is steep-to on its north and west sides.

Sarah point, 20 miles NW. of Malaspina strait, may be called the NE. entrance point of Georgia strait. It is a rounded, rocky point, sloping gradually to the sea from a height of about 750 feet, at a short distance within it. The coast here turns sharply round to the eastward into Malaspina inlet.

Mitlenatch island lies 16 miles NNW. from cape Lazo and is ½ mile in extent, 200 feet high, bare and peaked. Between it and the Vancouver island shore, distant nearly 6 miles, is the fair chan-

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nel to cape Mudge and Discovery passage. Shoal water extends about ½ mile northward of Mitlenatch island.

Sentry shoal, within the limits of the 10-fathom curve, extends 1½ miles NNW. and SSE., the least depth found being 5 fathoms, from which the summit of Mitlenatch island bears N. 5° W. (N. 30° W. mag.), distant 2 1/10 miles.

Hernando island, 2 miles NW. from Savary island, is about 2 miles in extent, flat, thickly wooded, and from 120 to 170 feet high. A ledge composed of sand and huge bowlders extends ⅔ mile from its SE. point, and there is only a depth of 1¼ fathoms in the channel between it and Savary island; this is known as False passage. From the west side some rocks extend off upward of 400 yards in many places, and it should not be approached nearer than ½ mile in passing.

A dangerous rock, which dries at low spring tides, lies 150 yards off Hidalgo point, and there is no passage between.

Stag bay, on the north side of Hernando, affords anchorage in 12 to 15 fathoms at a distance of about 400 yards offshore, and is useful as a stopping place for vessels bound to Bute inlet or Desolation sound. There is a small fresh-water stream in the east part of the bay.

Tongue point, the NW. extreme of Hernando and of Stag bay, is a low, sharp, sandy point or spit, covered with a few trees. Vessels should anchor at about ¾ mile from this point, with the east part of Twins islands bearing N. 12° E. (N. 13° W. mag.).

Baker passage, to the northward of Hernando island and leading from the strait of Georgia to the entrance of Desolation sound, is about 3 miles long in an easterly direction, and 1 mile wide in the narrowest part, being bounded on the north side by Cortes and Twins islands.

A bowlder ledge extends ¾ mile SW. from Reef point; the bowlders cover at three-quarters flood. The outer extremity of the ledge is marked by a red can buoy.

To avoid the ledge off Reef point (the south extreme of Cortes island), when entering Baker passage, bring Tongue point on a N. 69° E. (N. 44° E. mag.) bearing, and steer for it, passing about 200 yards off; then keep midway between Hernando and the Twins.

Tides.—It is high water, full and change, in Baker passage at 6 h. 0 m.; springs rise 12 to 14 feet.

Twin islands, about 1½ miles north from Hernando, are two rocky islands connected by a sandy beach at low water, covering an extent 2 miles long in a northwesterly direction, and about 1 mile broad. The northernmost Twin is 490 feet high, rising to an almost bare summit in the center; the southern one is about 300 feet, and on both of them are numerous indications of iron and copper ores.