

2611

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey *Topographic*
Field No. _____ Office No. *2611*

LOCALITY

State *Alaska*
General locality *Prince William*
Locality *Sound.*
Southern Part

1902

CHIEF OF PARTY

H. Westdahl.

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Treasury Department,
U. S. COAST AND GEODETIC SURVEY.

P. H. Pittman
Superintendent.

State: *Alaska*

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JAN 16 1903
Acc. No. 2611

DESCRIPTIVE REPORT.

Topographic Sheet No. *2611*

LOCALITY:

Prince William Sound
Hinchinbrook Entrance
(Southern part)

1902

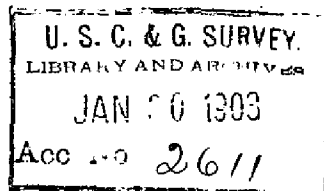
CHIEF OF PARTY:

L. Westdahl Asst.

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JAN 30 1903. 02444



*Descriptive Report
to accompany topographic sheet entitled*

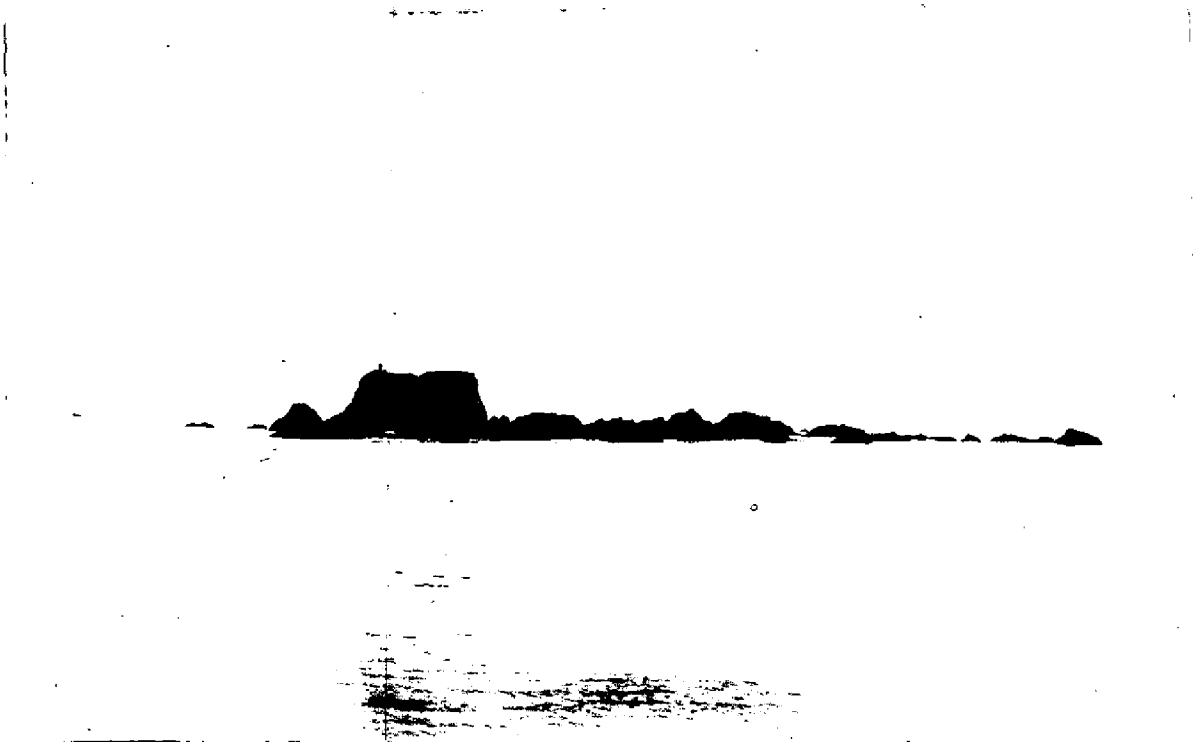
*Treasury Department
U. S. Coast and Geodetic Survey
O. H. Tittmann, Superintendent*

*Topography of
Eastern Entrance to
Princer William Sound
(Southern Part)
Alaska*

*Executed by H. F. Flynn, Assistant
Stamer McArthur
J. Westdahl, Assist. Commanding*

*1902
Scale 40,000*

This projection, like the adjoining one of the northern part of the entrance, was made on board and was originally of the same dimensions so as to include upon it Point Steel Δ . The eastern end of it was destroyed by an accident while surveying the shore in the vicinity of Laikof Point. The tableman in carrying the instrument from one station to



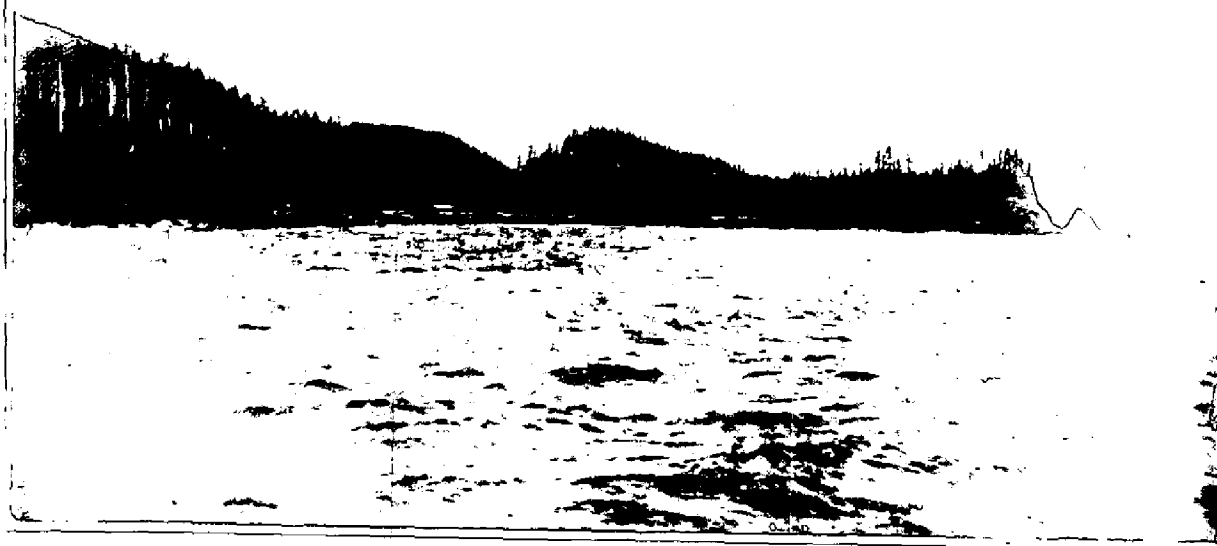
Plane-table station

Seal Rocks from the Westward

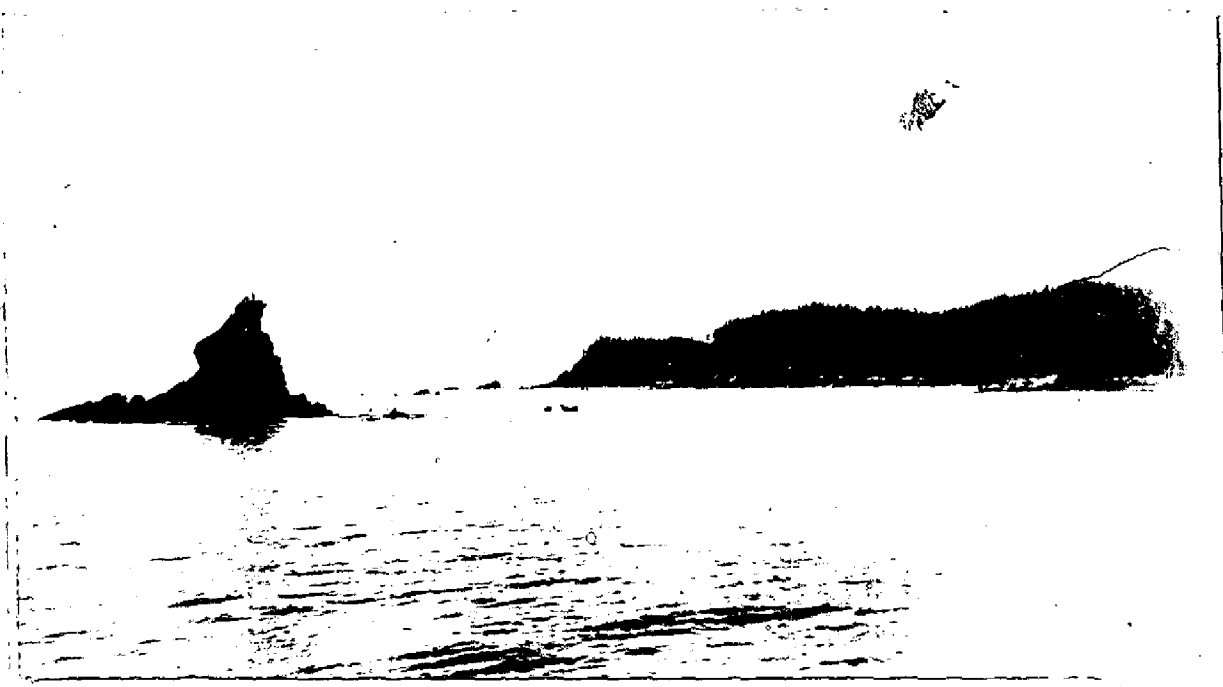


Triangulation station

Seal Rocks from the Northward



Zaikof Point from the Southward



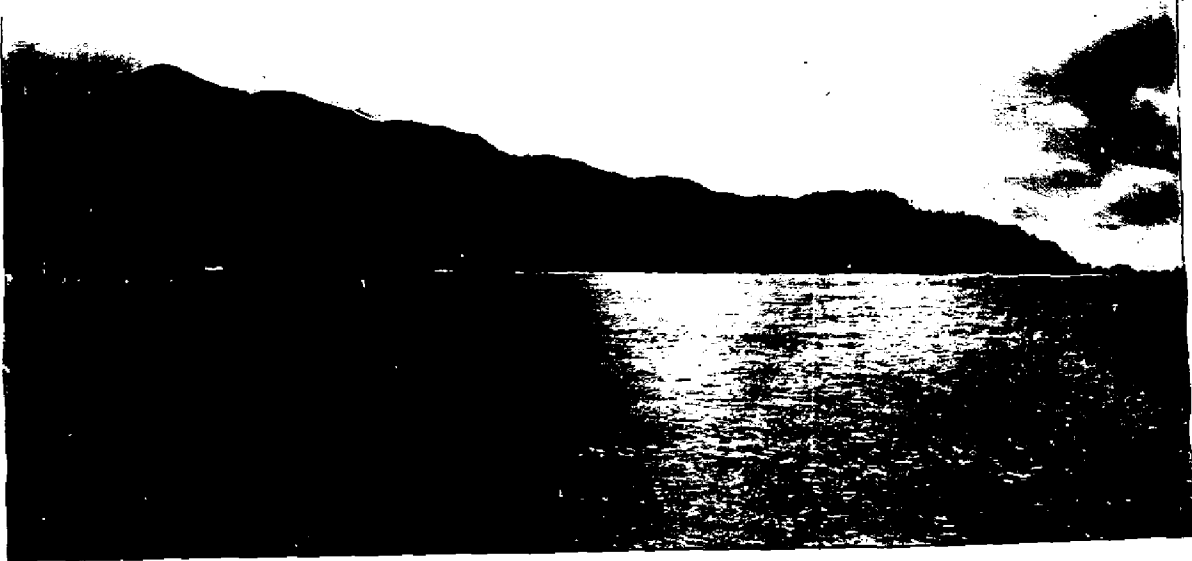
Schooner Rock and Zaikof Point from Northward

another missed his footing and slid down a bluff about forty feet high to the rocks below. The side of the table which held the rolled under eastern end of the sheet scraped along the smooth stratum of rock and cut the sheet in two.

The part of Montague Island shown on this sheet was surveyed with the plane-table. Of the part of Hinchinbrook Island only about one mile of the northern extremity was done with the plane-table; thence as far as Holmes Δ from a whaleboat and by sextant angles: and from Holmes Δ to Pin Δ the shoreline is cut in from the ship only, with no opportunity to send a boat along shore to sketch in details on account of constant rough weather. From Pin Δ eastward for about five miles the shore-line has been cut in from the ship and details sketched in from a whaleboat bent in as close as practicable. This is plotted on the hydrographic sheet of the Entrance on same scale, as related in the descriptive report of that sheet. It was found impracticable to land and set up a plane-table along this coast all around Cape Hinchinbrook owing to the high, steep bluffs with no bordering beach. An attempt was made to land on rocks exposed at the base of the cliffs near low water at the northern end, but

with rising tide and swell running officers, men and boats were dangerously exposed, so much so that the use of the plane-table had to be abandoned. There are two short stretches of rock and shingle beach on the south-west side of Cape Hinchinbrook, but they are dangerous to land upon except in smooth weather, and we did not have more than two or three such days during the entire season. Around the cape proper, from Holmes A to Pin A, there is in addition strong, conflicting currents which raise a confused, choppy sea, too rough to send a boat into even. It was tried several times but hard pulling and much bailing left no time for anything else. There may be opportunities earlier in the season to make a more accurate survey of the southern coast of Hinchinbrook Island to Point Steel, but I do not think it will ever be practicable to use a plane-table unless the party could camp on shore and walk long distances to and from work.

The Seal Rocks were surveyed with the plane-table on scale 20,000 on separate piece of paper and afterwards reduced to this scale and transferred to the sheet. It was done on an exceptionally smooth day when the triangulation signal was put up. The eastern summit of the main rock was occupied with the table



Holmes Δ
Cape Hinchinbrook from Southwestward



Green Δ (on extreme point)
Part of Cape Hinchinbrook from S.S.E.-ward



Porpoise Δ Gnat Δ

Green Δ Holmes Δ
(on rock off extreme point)

Cape Hinchinbrook from the Westward

and the rod carried about to the outlying rocks in the ship's dinghy. The southeast shore of Montague Island, from Point C to Bluff A, was surveyed in one day.

Early in the morning on a promising day the party was landed near the former point and their boat returned to the ship. In the evening the party was picked up near Bluff A.

I have in a preceding report of the adjoining northern topographic sheet called attention to the two main ridges of mountains of which Hinchinbrook Island is composed. The southern ridge of the island comes to the sea at Cape Hinchinbrook, not so abruptly however as the northern ridge at Bear Cape. There is a narrow, bordering terrace, eroded by residual glaciers, of about three hundred feet in elevation surrounding it, and fragments of a lower terrace of about fifty feet elevation here and there, like at the points upon which Green and Hinchinbrook Stations are located, and some projecting points in Port Etches. The Seal Rocks also are remains of this lower terrace. To the eastward of Pine A this border gradually disappears and the mountains fall in steep slopes towards the sea for about twelve to fifteen miles to an open bight apparently shallow and bordered by what looks like a sand beach from



Pin Δ

Shine $\odot$

Cape Hinchinbrook from the Eastward



Fall $\odot$

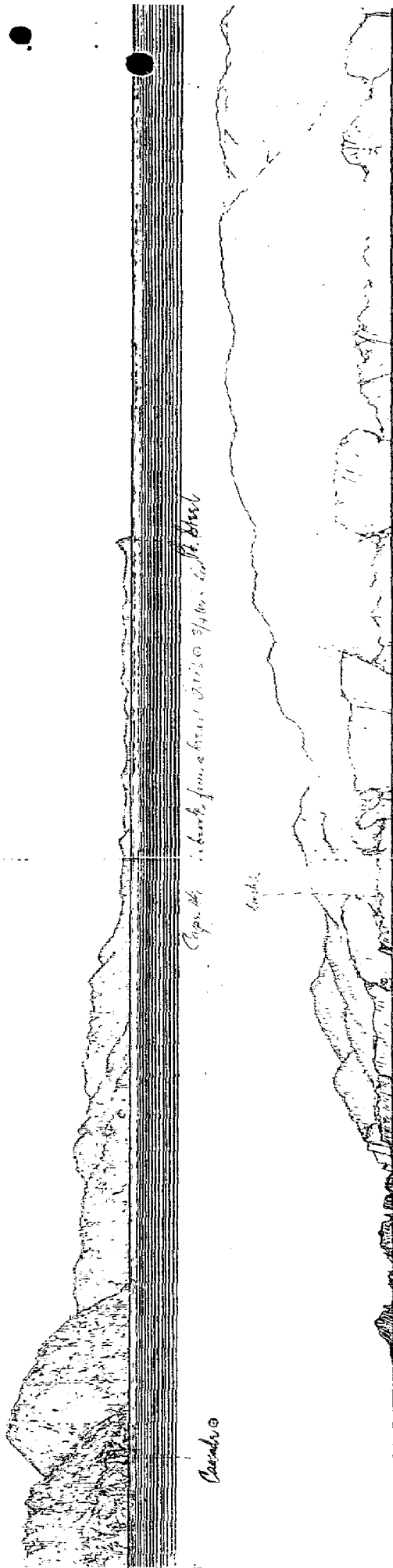
Coast of Hinchinbrook Island Eastward of the Cape

a distance. On the northeastern side of this bight is low, rolling land projecting several miles from the main ridge and ending at Point Steel, almost the exact counterpart of the northwestern extension from the northern ridge ending at Johnstone Point. Several rocks lie off this part of the shore line from about three miles to the westward of Point Steel and continuing around it to the northward adjoining the shoreline surveyed by Assist. Ritters party. Where the mountains slope steeply to the sea no outlying rocks were seen from the ship.

The sculpturing caused by transverse glacial action is finely exhibited in the accompanying photograph of the coast to the eastward of Cape Hinchinbrook. Though not included on this sheet I have inserted this brief general description of its topographic features in this report. But for the accident mentioned in the beginning it would have included had time and weather permitted its completion. I also insert herewith some outline sketches, rough and unfinished, made of portions of this coast from the ship, principally because it is the only one I have of Point Steel, and shows the projecting low land ending in the slightly higher elevation at the point itself, which has upon it in addition a bunch of trees much taller than others in the vicinity. I also copy from my note-book a small sketch of the extremity of the point

Peak 40?

Pl. Steel. from 2 miles off Richmond A



Quartzite

Quartzite

Gneiss

Yon A

Yon A



Quartzite

Quartzite

Quartzite

Quartzite

Quartzite

Quartzite

Quartzite

Quartzite

Quartzite



made from a position about half a mile nearly eastward from it. The stratification of the rocks here is almost perpendicular and flakes off in an east and west direction so that the southern face of the point is a flat and smooth looking cliff with some crumbled rock forming a slight talus at its base.

The coast of Montague Island delineated on the sheet is bordered with low rocks close in shore. For about three miles southward of Laikof Point the immediate shore-line consists of rocky cliffs about fifty feet high, the rock-strata of which dip at an angle of about forty-five degrees to the eastward and flake off in directions parallel to the coast. Harder portions of this formation are left in the shape of high, pyramidal rocks, like Schooner Rock entirely detached, and Squirt  and Cone , both of which are still parts of the shore-line. Further to the south-southwest to the limit of the sheet the high southern ridge of the island forms the coast-line and slopes steeply towards the sea. There is a narrow beach composed of shingle and boulders at the base of these slopes but so full of bordering rocks as to make it dangerous to land upon except on smooth days. Driftwood is piled high upon these beaches and ground up into small pieces by

was falling upon them in stormy weather. The ship has not cruised beyond the limits of the work upon this sheet but the coast of Montague Island seems to be of the same general character apparently as far as the Wooded Islands lying off it.

For further information regarding the region represented on this sheet I beg leave to refer to the descriptive report of the hydrographic sheet of the Eastern Entrance to Prince William Sound.

Respectfully submitted

Ferdinand Hestdahl

Asst. C. & G. Survey

Comdg "McArthur"

V. 945
1907
W

Fig. 122

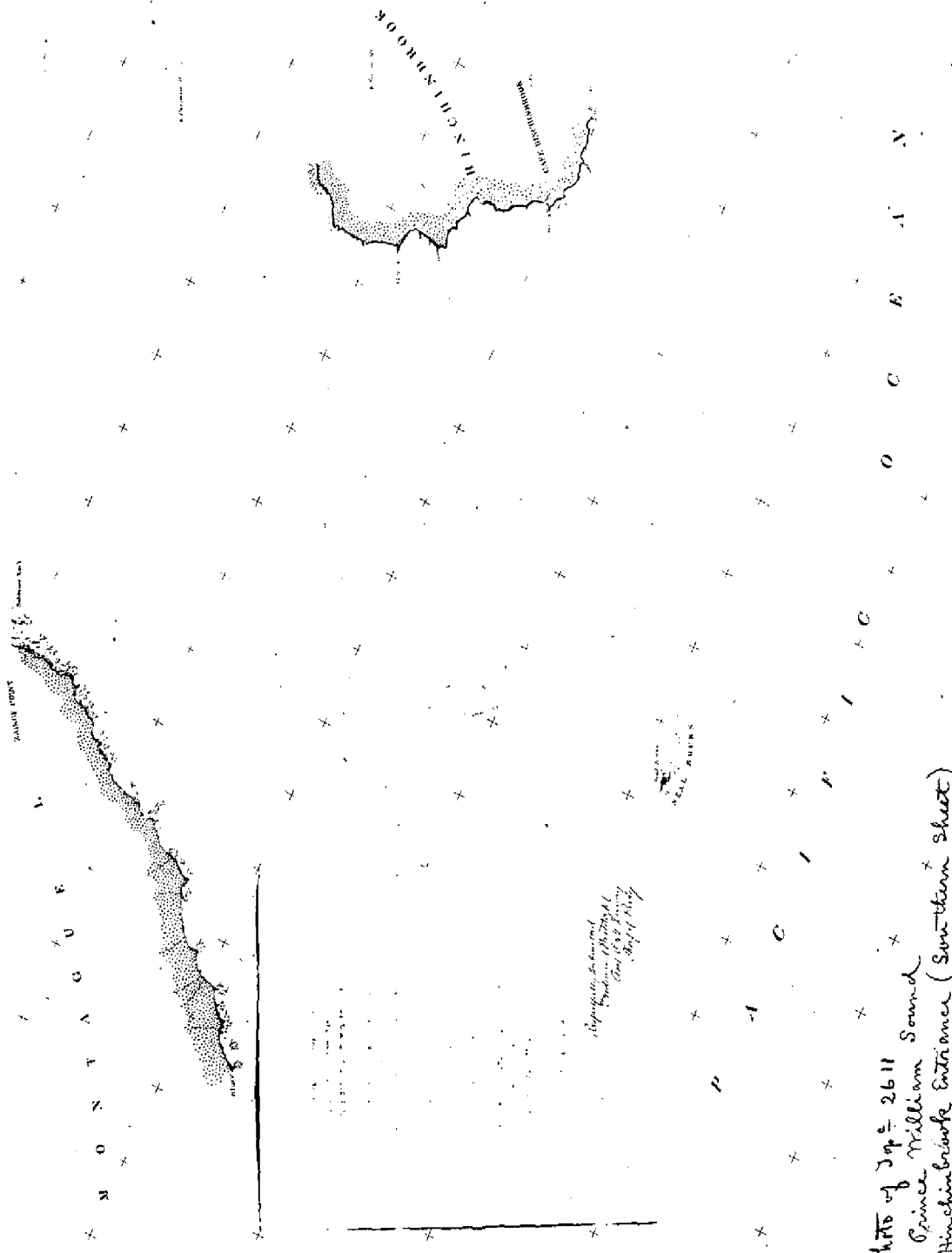


Photo of Sept 26 11
Prince William Sound
Hutchinson Entrance (Southern Sheet)
Alaska

7. Westdahl, H. F. Flüggen
1902
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