

3772



Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *Virgin Islands.*

11-5013

DESCRIPTIVE REPORT.

Topo. Sheet No. 3772.

LOCALITY:

St. John.

Central Section.

1919

CHIEF OF PARTY:

Swainson, O. W.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3772 (Field F)

State . . . Virgin Islands

General locality . . . St John

Locality Central Section

Chief of party O.W. Swainson, Jr. Hyd. & Geo. Engineer

Surveyed by . . . Benjamin Friedenber, Aid.

Date of survey January to March, 1919

Scale 1 to 10,000 . . . -2.5 meters, average distortion

Heights in feet above 20 ft. contours ^{mean Sea level} M.S.L.

Contour interval . . 20 . feet.

Inked by B. Friedenber . . Lettered by B. Friedenber

Records accompanying sheet (check those forwarded): Photographs, ✓

✓ Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks:

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DESCRIPTIVE REPORT

TO ACCOMPANY SHEET NO. FIELD SHEET "F".

LIMITS OF SURVEY.

This survey comprises the central section, about 2/3ds of the island of St. John, Virgin Islands, on a scale of 1:10,000 with an average distortion of -2.5 meters per 1000 meters, showing 20 foot contours.

It joins Sheet No. (Field Sheet "E") on the west along Gift Hill Road and Susannaberg road, contours having been adjusted to join Sheet "E", Sheet No. . It should join Sheet No. Field Sheet "G" on the east from Δ need, north shore, through the center of Leinster Hill and along the Johnyhona Road to Δ East Base, then from Δ Penn to the top of the ridge through Minna Hill, and through Salt Pond.

DESCRIPTION OF THE COAST.

SOUTH SHORE.

Starting from \odot Kid on the south shore, to the extreme east, and going west, Kiddle Point is precipitous and weather beaten, forming the western arm of the sand-beach at Kiddle Bay. Salt Pond Bay, gravel beach is separated from Kiddle Bay by a low cliff promontory. Cabrite Point is ragged, bold and weather beaten with cliffs varying to a 100 feet in height. Lawsheer Bay consists of three beaches separated by two low rocky peninsulas. The middle bay, generally used by sailboats, has a beautiful sand beach. The eastern beach is sandy, but the western beach is made up of coral fragments and gravel with small boulders. A coral reef breaks just outside of this beach. White Point is precipitous and bold about 70 feet high, rather impassable, and is connected by a low rugged cliff to the mainland, the neck giving the appearance as though slices of the cliff were cut out.

From White Point to about 5/8ths of a mile to the west, the shore is made up of a cliff mostly of volcanic ash or some intrusive rock, to heights up to 150 feet. These cliffs, called the "White Cliffs", are so named from the appearance of these white washouts. Green streaks showing indication of copper deposits, mar the white appearance of these weather beaten patches. Reef Bay consists of a stretch of sand beach protected and fringed with coral reefs along the water outside.

Genti Bay has long stretches of sand beaches, with coral growths continually breaking outside. Between Genti Bay and Reef Bay, there is a small motor boat passage permitting entrance to Genti Bay and Reef Bay and anchorage therein. Fish Cay is a precipitous islet, covered with sea side grapes, connected to the shore by a reef sub-

merged about three feet, the main shore here being surrounded by coral reefs. The head of Fish Bay is sandy, the water here being very shallow for a considerable distance out, being covered with sea weeds. Ditlefs Point is a bold promontory which makes out from the land. The cliffs are bold and ragged ranging to heights of about 100 feet. The eastern shore consists of cliffs almost to the head of Fish Bay with a gravel beach at the 11 foot neck. The western shore consists of a small boulder beach for about 300 meters and blends into the sand beach at the 11 foot neck, then the shore continues to be rocky and precipitous again till the head of the eastern bight of Rendezvous Bay which is gravelly and sandy. The point at \odot Von is a rocky jut that peculiarly makes out from the massive hill in back. To the west, the shore is of cliff fringed with sand pockets at its waters edge, then continues to be rocky and increases in height to \odot station.

NORTH SHORE.

Starting from the west and going east, Denis Bay is a beautiful sand bay marred by two coral reefs outside, these being separated to form a motor boat passage to the bay for anchorage. Jumbie Bay is a coral sand beach separated from Denis Bay by the knoll with low cliff shores. Trunk Bay is one of the most beautiful sand (coral) beaches on the island, is separated from Jumbie Bay by a low rocky cliff. Peter Beach is a sandy beach spoiled by coral formation surrounding it. A low stretch of passable cliff separates the two beautiful sand beaches of Peter Bay and Cinnamon Bay. America Point is a rocky cliff ranging to heights of 70 feet. The west side of Mohoe Bay consists of a gravel beach while the head of Mohoe Bay contains an excellent sand beach. Mary's Point Bay has another one of the finest sand beaches on the island. The shore from the head of Mary's Point Bay to \odot Hb is made up of small boulders and gravel, and continues to get precipitous to Fungi Passage. The western part of Mary's Point bordering on Fungi Passage is massive and bold cliffs ranging to a height of about 150 feet. The north shore of Mary's Point from Fungi Passage to \odot Nar is comprised mostly of weather beaten and rugged cliffs, lined with clusters of large boulders at the water line near \odot Nar. Between \odot Nar and Firewood Beach the shore is made up of large massive boulders. Firewood Beach is of gravel and sand and has coral reefs outside. From Firewood Beach to Δ Anna the shore consists of massive diorite cliffs about 20 to 40 feet in height. The north shore of Mary's Creek is swampy and covered with mangrove, the water being very shallow here. The head of the creek is a mud sand beach, while the south shore consists of swamp and mangrove, fringed here and there with rocky protrusions. From Mary's Creek to Len \odot ster Bay the shore consists of sand stretches with rocky points as Annaberg Point. Len \odot ster Bay is sandy as far as Len \odot ster Point which is a rock promontory with a 40 foot cliff. The stretch between Len \odot ster Point and Threadneedle Point is largely made up of gravelly beaches. Threadneedle Point is precipitous and bold ranging to heights of 70 feet.

Islands, ROCKS, AND OTHER DANGERS.

TRUNK CAY, 48 feet high, has a bold cliff shore the top of the island being covered with brush and trees.

CINNAMON CAY, 32 feet high, has cliff shore, but the islet is covered with tall grass and cactus.

WHISTLING CAY, 202 Feet high, has a splendid gravel beach at the south-east shore, the rest of the shore being precipitous and bold especially on the north side where cliffs rise to 130 feet. The island is covered with trees. Goats are kept here by the natives who live on shore. Sailboats come here to get gravel for building purposes.

JEWEL CAY, 30 feet high, has a sand spit that makes out to the south east, the rest of the island consisting of cliff shores, covered with brush and grass.

JOHNSON REEF, of coral formation, always breaking, is indicated by four sets of tangents taken to the limit of the breakers.

SHORE NOTES.

Landslides occur at the cliff just east of Peter Beach. Also at Annaberg Point, where the North Side Road is clogged up when this happens.

NATURAL FEATURES OF BEACHES AND BAYS.

Excellent surf bathing can be had at the following bays: Denis Bay, Jumbie Bay, Peter Bay, Trunk Bay, Cinnamon Bay, Mohoe Bay, Mary's Point Bay and Leinster Bay on the north shore and Lameshur (pronounced Lam-e-shur) Bay on the south.

Sailboats and motor boats can anchor in Denis Bay, Jumbie Bay, Trunk Bay, Cinnamon Bay, Mohoe Bay, Mary's Point Bay, Mary's Creek (where there is a narrow passage) and Leinster Bay on the north, Rendezvous Bay, the mouth of Fish Bay, the passage between Genti Bay and Reef Bay, Lameshur Bay, Salt Pond Bay and Kiddle Bay on the south.

Great quantities of edible fish abound in these bays and adjacent waters. The waters are also infested by dangerous fish as sharks, sunfish, barracoutas and King fish. Large size turtles can be caught and enormous quantities of "Fry" and "Sprat" can be seized at beaches.

The north shore is frequently swept by "ground seas" and ground swells which make anchoring and beaching rather treacherous.

The seas on the south side generally sweep in from the east, and as a rule the waters between Ditless Point and Kiddle Point are always rough except on exceptionally calm days. It is generally calm under the lee of the land, which are the western side of the promontories and points.

OTHER INFORMATION SHOWN ON THE SHEET.

Tangents to British Possessions are shown; Little Tobago

Island, cut to highest point of Watson Rock, Tobago Island, Great Thatch Island, Little Thatch Island and the western tangent to Jost Van Dyke.

Magnetic meridian obtained by declination.

DESCRIPTION OF ROADS.

All roads shown can be classed as horse trails, as they are rugged and frequently subject to washouts when heavy rains set in. Roads in double line are commonly known as "Kings' Road", because they are public roads and are maintained, sometimes once a year or once in two years.

The Center Line Road and the North Side Road are mostly used. The former, maintained in a manner, has long stretches of easy grades and, visitors, in going from one end of the island to the other will use it. For the most this road is cool and shaded with trees. The North Side Road runs for the most along the north shore and frequently to the waters edge. It is used by visitors when marine scenes appeal to the taste. In fair condition.

The Caroline Road is the widest, best maintained and easiest grade road on the island, is frequently used for horse racing.

The Johnyhoe Road, South Bordeau and North Bordeau Roads are rather steep and poorly maintained. The Le Esperance Road and Reef Bay Roads are two very cool roads, being covered for the most with overhanging branches. These roads are poorly maintained and can said to be nothing but good trails. The Le Esperance Road from Reef Bay to Mohlental is rather of steep grade.

The Susannaberg Road is a rocky trail of tedious grade. Hammers Farm Road is of uniform grade and in fairly good shape although very little maintained.

Mohoe Road is in good shape and is of a rather easy and uniform grade.

Gift Hill Road surveyed on Field Sheet "E" is a good trail to Gift Hill from the Center Line Road.

The Bordeau Road of easy grade with many comparatively level stretches, is nothing but a good trail.

All the above roads can be traversed by horses.

Ditless Point trail, Seeven Trail and America Hill trail are short cuts. These have been sketched by prismatic compass as they have overgrown with brush. Mohoe Track is a short cut in poor condition.

DESCRIPTION OF THE COUNTRY.

The entire country presents the appearance of bold and steep hills thrown around in a haphazard way. For the most they are covered with trees and brush and paths must be cut to get through. The timber is slim and is generally used when cut, for firewood and charcoal burning.

Grass patches of grass are seen here and there used for grazing purposes for cattle and horses.

There is very little cultivation on the island to speak of. Sugar cane is grown at Reef Bay, the only place on the island. There is a sugar cane works there which also makes rum.

At Laweshur Bay there are two stills one for lime juice, the other for bay oil. Lime trees and Bay trees grow wild on Laweshur estate. There is a bay oil still at Caroline estate, one at Mohoe Bay and one at Cinnamon Bay. Bay trees are uncultivated in the vicinity of Bordeau Mountains, along the Bordeau Road and in the vicinity of America Hill. / There are Banana patches at Reef Bay Estate, Caroline Estate, Mary's Point Estate and Mohoe Bay Estate. There is a cultivation patch at Peter Bay and one at Susannaberg. There are cocconut-palms at Denis Bay, Trunk Bay (many), Cinnamon Bay, Mary's Point Bay and Reef Bay Estate. Uncultivated guavas grow on Hammers Farm and vicinity of Adrian. Mango trees are few and far between.

There are white sandalwood-trees on Minna Hill, which can be cut and used for inlaid woodwork.

There are a few mahogany trees scattered here and there on the hillsides.

The island is best adapted to cattle and horse raising. Laweshur Estate, Caroline Estate and Lester Bay Estate have many hundreds of head of cattle. Horses are also raised here, but few. There are cattle also on Denis Bay, Annaberg, Mary's Point Estate, Mohoe Bay, Cinnamon Bay, Adrian and Reef Bay Estate.

Hogs and pigs are raised but not many, and these are domesticated from the wild boar that used to roam around the hills. There are no more indications of wild boars on the island. Goats are also raised on many estates.

Fowls are scarce on account of the ever present mongoose, which kill the young and steal the eggs.

INTERMITTENT STREAMS.

The streams shown on the sheet are all intermittent. They simply indicate eroded beds or washouts. Reef Bay waterfalls is only in action after heavy rains.

GEOGRAPHIC FEATURES.

The highest hill on the island is Bordeau Mount which is 1277 feet.

Camelberg Peak, 1192 feet high, stands out prominently from seaward.

Bordeau 1220 foot hill gives an exceedingly splendid view of St. Croix, when visible, Virgin Gorda, Anna Gado, Tortolo (British Possessions) and Coral Bay.

An excellent view is obtained from America Hill, where St. Thomas, Tortolo and many islands on the north can be seen.

ISLAND CULTURE.

DENIS BAY has a boarding house that accommodates casual strangers and picnics. It is one of the two "hotels" on the island.

ADRIAN ESTATE has many old ruins on its grounds. There is a remnant of a once prosperous sugar factory, which houses an old and unique steam engine and sugar cane crusher.

AT REEF BAY water falls are "Carib Inscriptions" carved on the bold rocks at its bed.

AT SEVEN may be seen the remains of a once stately mansion, and two old guns may be seen partly buried in the earth, which remind you of the old pirate days.

AT LENISTER BAY is a Reformed school for naughty boys of St. Thomas.

AT CORAL HARBOR there is the Emissus Moravian Mission.

AT BORDEAU there is a boring sunk by a mining engineer drilling for mineral. (Test Hol&). Strong magnesium water was encountered in the course of sinking the drill.

CONTROL.

The control for this sheet was furnished by Mr. O. W. Swainson, Jr. Hydrographic and Geodetic Engineer, Chief of Party. Main scheme stations, intersection stations (shown on sheet) and many unmarked flags on hilltops were located by secondary triangulation on the same datum as that of St. Thomas and Porto Rico. Δ East Base to Δ West Base is the base line located on Caroline Estate.

Main scheme stations were observed for vertical angles and these can be computed for elevations. All elevations however shown on the sheet have been obtained by topographic methods.

The following is a list of main scheme Δ stations.

| Name of Station | Locality | Elevation |
|------------------|----------------------|--------------|
| Gift | Gift Hill | 827 Ft. |
| Dit | Ditless Pt. | 105 doubtful |
| Camel | Camelberg Peak | 1192 |
| Mary | Mary's Point | 578 |
| Marmie | Marmie Gardens | 1164 |
| Ajak | Ajak Peak | 1009 |
| Lenister | Lenister Hill | 473 |
| East Base | Coral Harbor | 3 |
| West Base | Caroline Estate | 117 |
| Bordeaux | Bordeaux Mts. | 1200 |
| Minna | Minna Hill | 974 |
| Great Thatch Is. | Gr. Thatch Is. (For) | 613 |
| West End | Tortola | 616 |

The following is a list of intersection stations. All elevations determined by topography.

| Name of Station | Locality | Elevation | Remarks. |
|-----------------|-------------------|-----------|----------------------|
| △ Perkins | Perkins Cay | 17 | |
| △ Cin | Cinnamon Cay | 32 | |
| △ Whistle | Whistling Cay | 5 | |
| Sugar | Denis Bay | 175 | Top of Mill |
| △ Anna | Mary's Point | 15 | |
| △ Jewel | Jewel Cay | 30 | |
| △ Need | Threadneedle Pt. | 4 | |
| Annaberg Mill | Annaberg | 128 | Top of Mill |
| America | America Hill | 520 | At foot of Fl. staff |
| △ Lam | White Pt. | 73 | |
| △ Brite | Cabrite Pt. | 86 | |
| △ Booby | Booby Rock | | |
| △ Brit | Little Thatch Is. | 5 | Tortola |

PROPERTY POSTS.

Property posts where shown on the sheet are recoverable. They are mostly located on the roads and indicated thus with the elevation at the ground. The complete boundary lines could not be drawn for lack of full information. Boundary lines where shown are shown thus.

Names shown on sheet are used locally or obtained from charts.

SURVEY METHODS AND DEGREE OF ACCURACY.

The plane table was used exclusively for mapping, elevations being determined by means of the hydrograph, from distances obtained by stadia readings and vertical angles.

As can be seen by elevations on the roads, traversing was done with frequent three point fixes as checks elevations being carried along and checks obtained wherever possible. Elevations to critical points of the ground would be obtained wherever possible, but interpolation had to be used in thickly wooded sections. All elevations are to the ground.

The compass was used frequently when there were no local magnetic disturbances as wire fences, galvanized roofs, etc., by means of a skipped set up and orienting by compass and locating the position of the plane table by a back stadia reading. This method is fast and gives a good degree of accuracy.

The shore line was located with care by traversing, three point fixes and stadia shots. No sketching was resorted to in mapping the shore or roads. All topographic stations whether inked in red, blue or black have been located by plane table.

MISCELLANEOUS.

For historical, statistical and other information references should be made to the following of recent origin.

1. "The Danish West Indies", their resources, and commercial importance. Department of Commerce of the United States, special agents series No. 129, Washington, D. C., 1917.
2. "Census of the Virgin Islands of the United States". Bureau of Census, Department of Commerce. 1918.
3. "The Virgin Islands of the United States". Theodore de Booy. 1918.
4. "The Virgin Islands of the United States of America". Luther K. Zabrishie. 1918.

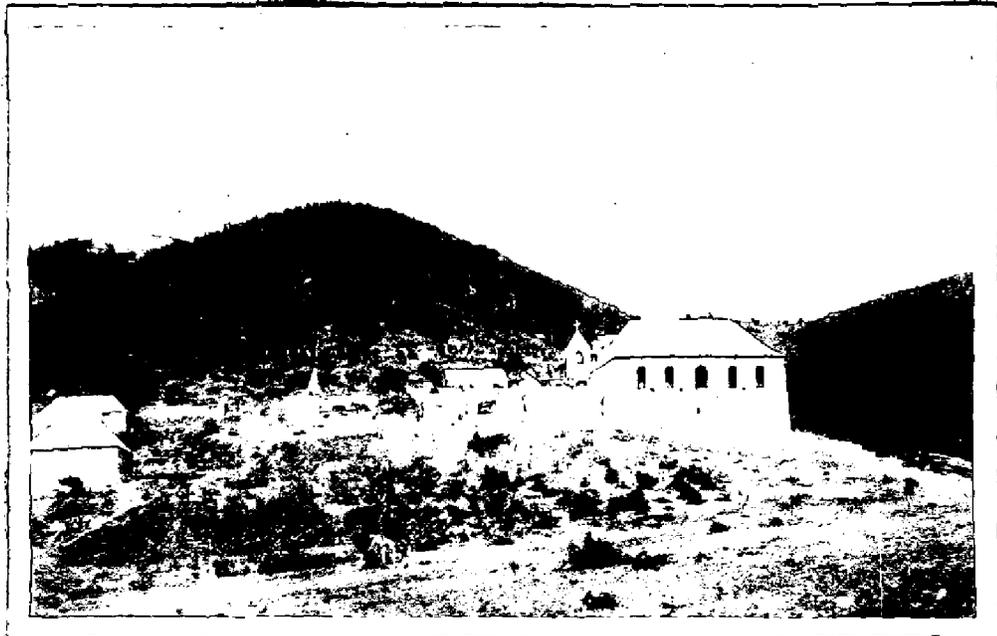
Submitted by *Benjamin Friedenberg*
 Aid. C&GS, 8-28-19
 Chief-of-Party O.W. Swainson
 Jr. H&G E.

LIST OF RECOVERABLE TOPOGRAPHIC OBJECTS.

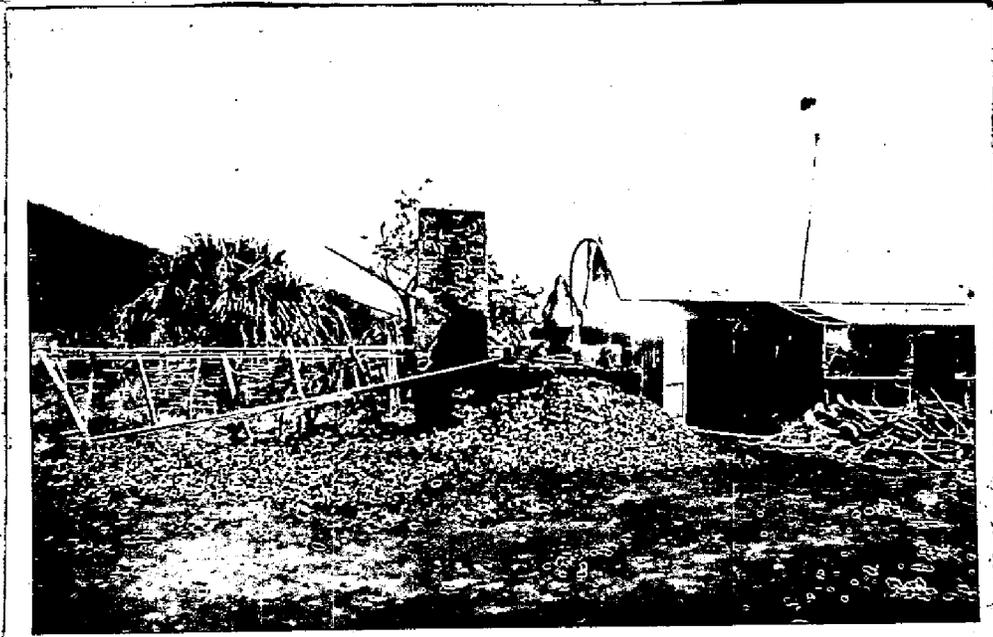
| Station | Lat. | Meters | Long. | Meters | El. | Remarks. |
|--------------------|--------|--------|--------|--------|--------|------------------------|
| ○ Trunk | :18-21 | : 837 | :64-46 | : 237 | : 28 | :N. end of Trunk Cay |
| ○ Pete | :18-21 | : 799 | :64-45 | : 1414 | : 6 | :N.W. Pt. Peter Bay |
| ○ Mo | :18-21 | : 1560 | :64-44 | : 1522 | : 8 | :Rky Pt. |
| ○ Bol | :18-21 | : 1614 | :64-43 | : 583 | : 4 | :Boulder |
| ○ Dran | :18-20 | : 1143 | :64-46 | : 196 | : 599 | : |
| Adrian Chimney | :18-20 | : 1074 | :64-46 | : 138 | : 684 | :Top - 50 ft. high |
| Susannaberg Mill | :18-20 | : 1328 | :64-46 | : 647 | : 702 | :Top |
| Hammers Farm Mill | :18-20 | : 1421 | :64-45 | : 1190 | : 730 | :Top |
| ○ Leap | :18-20 | : 1242 | :64-45 | : 1048 | : 757 | : |
| America Chimney | :18-21 | : 406 | :64-45 | : 419 | : 84 | :Top |
| Marys Pt. Fl. St. | :18-21 | : 1808 | :64-45 | : 744 | : 130 | : |
| ○ Jon | :18-21 | : 1340 | :64-42 | : 1649 | : 246 | : |
| Caroline Wind Mill | :18-20 | : 1652 | :64-43 | : 109 | : | : |
| Caroline Mill | :18-21 | : 97 | :64-43 | : 499 | : 87 | :Top |
| ○ King | :18-21 | : 451 | :64-43 | : 1747 | : 704 | : |
| ○ Bor | :18-20 | : 183 | :64-43 | : 850 | : 1082 | : |
| ○ Kid | :18-18 | : 896 | :64-42 | : 1335 | : 7 | : |
| ○ Shur | :18-19 | : 95 | :64-43 | : 1004 | : 23 | : |
| ○ Mar | :18-19 | : 652 | :64-43 | : 1157 | : 20 | : |
| Lameshur Fl. St. | :18-19 | : 784 | :64-43 | : 1022 | : 226 | :Top |
| ○ Reef | :18-19 | : 1693 | :64-44 | : 839 | : 72 | : |
| Reef Bay Chimney | :18-19 | : 919 | :64-44 | : 1316 | : 36 | :Top |
| ○ White | :18-19 | : 329 | :64-44 | : 781 | : 3 | : |
| ○ Seeve | :18-20 | : 13 | :64-45 | : 1216 | : 574 | : |
| ○ You | :18-19 | : 476 | :64-45 | : 434 | : 17 | : |
| ○ Fish | :18-19 | : 30 | :64-45 | : 1081 | : 36 | : |
| ○ Mole | :18-19 | : 1549 | :64-45 | : 116 | : 515 | : |
| □ Old | :18-20 | : 1785 | :64-44 | : 1021 | : 781 | :Foot of property post |
| ○ Cross | :18-21 | : 1722 | :64-43 | : 215 | : 199 | :Top |
| Test Hole | :18-20 | : 120 | :64-43 | : 1109 | : 1080 | : |
| Fun | :18-22 | : 672 | :64-45 | : 318 | : 4 | :Recoverable Pt. |
| Ho | :18-22 | : 319 | :64-44 | : 1636 | : 3 | :Boulder |
| Nab | :18-21 | : 1731 | :64-43 | : 1566 | : | :N.gable house. |
| ○ Penn | :18-20 | : 1038 | :64-42 | : 1396 | : 10 | : |
| Rov | :18-19 | : 380 | :64-45 | : 1403 | : 5 | :Recoverable PT. |
| Mar | :18-22 | : 872 | :64-44 | : 963 | : 5 | :Detached rock. |



White Cliffs



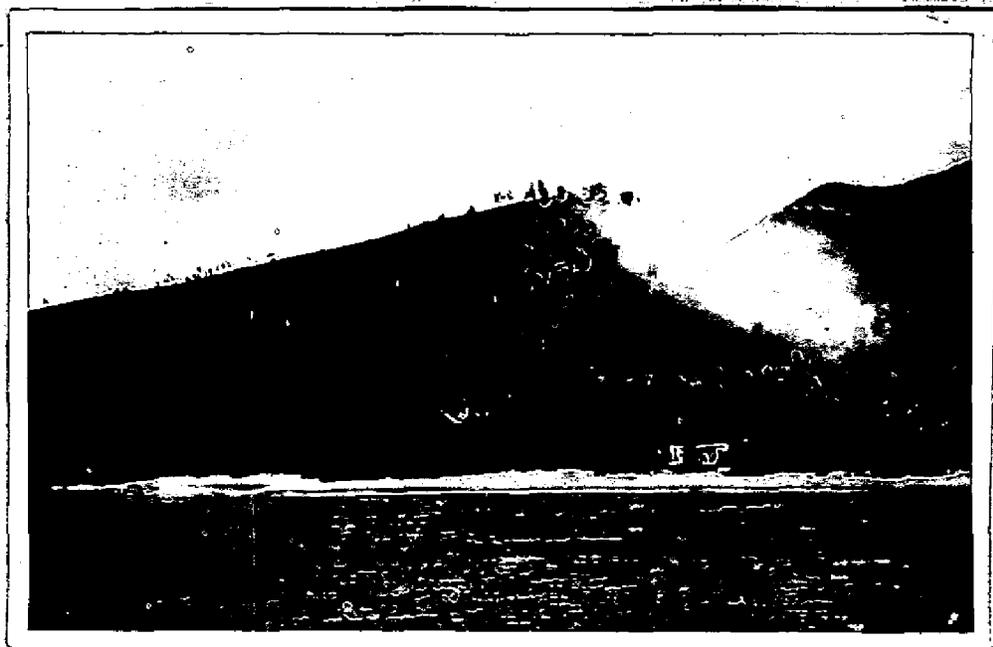
Emilius Moravian mission



Bay Oil Still, Caroline Estate



Emms Moravian Mission
Coral Harbor



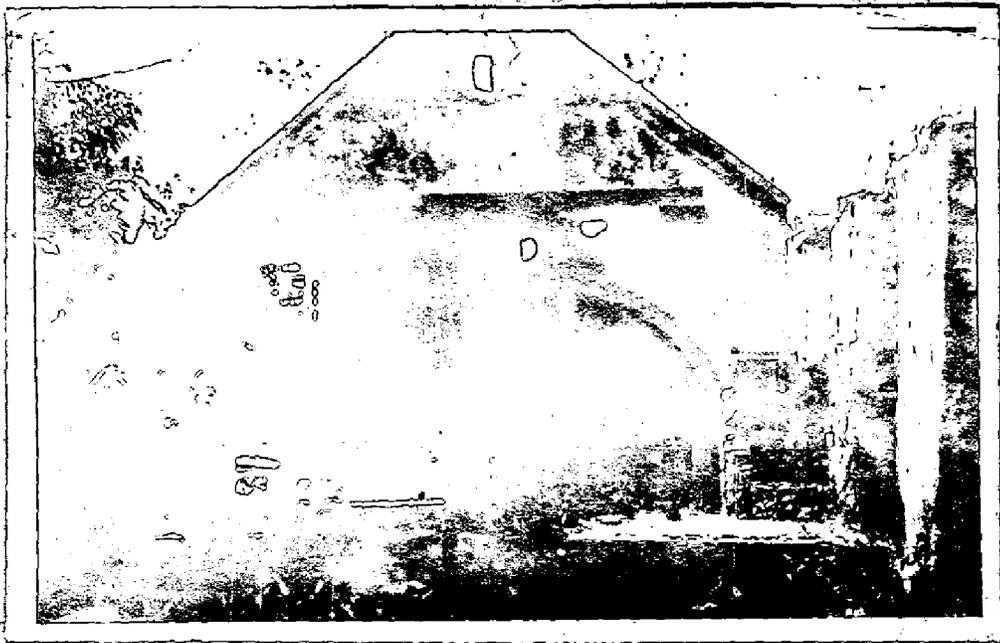
America Hill from Cinnamon Bay beach from the west.



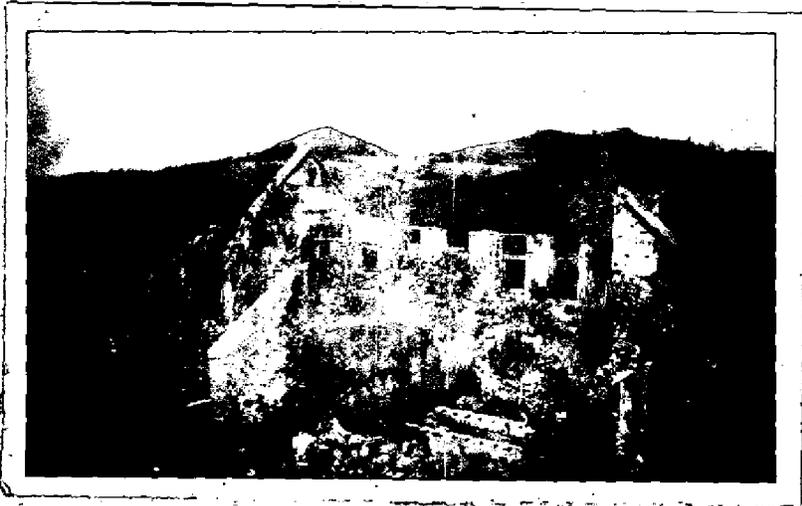
Cinnamon Bay from beach

- 1. Cinnamon Bay beach
- 2. Cinnamon Cay
- 3. Whistling Cay
- 4. Fungi Passage

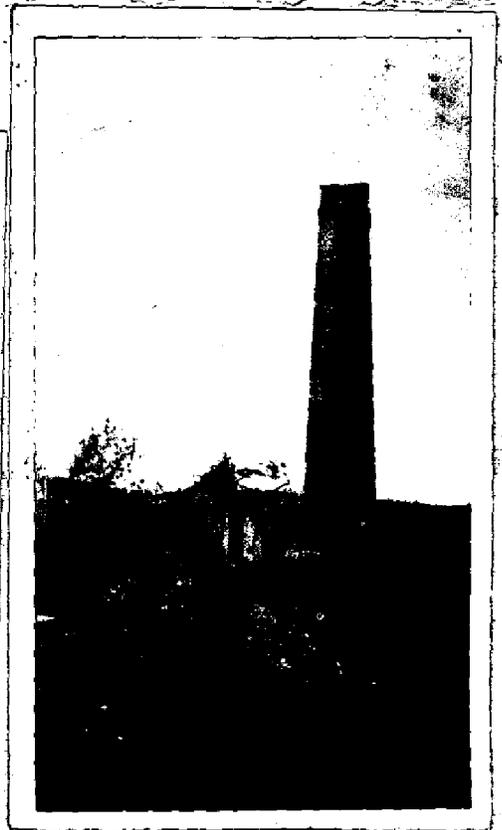
- 5. Jost Van Dyke
- 6. Great Thatch Is.
- 7. Mary's Point



Old Steam Engine , Adrian Ruins



Adrian Ruins



Adrian Chimney

Applied to chart 938 January 1941 - L.A. McGinnis