U. S. COAST AND GEODETIC SURVEY.

F. M. Thorne, Superintendent.

State: Mass.

DESCRIPTIVE REPORT.

Topographic Sheets Nos. 1702
4 1882.

LOCALITY:

Martha's Vineyard.

1888.

CHIEF OF PARTY:

W. Irving Vinal.
U. S. Coast and Geodetic Survey,

Ellington, Connecticut.

Ellington, Conn.,

May 31st, 1888.

Mr. F. M. Thorne,
Superintendent U. S. Coast G. Survey,
Washington, D. C.

Sir:

The following descriptive report is intended to accompany the two original Plane-table sheets of the portion of Martha's Vineyard Island, Mass., surveyed by me July - November 1887.

A similar report was made by me December 9th, 1887 while the sheets were still in hand. The sheets have since been added to and deposited at the Office bearing the Register Numbers 1703 and 1803.

One of these sheets, No. 1703, was partly filled by Assistant H. L. Whiting in the field during the season of 1886. The work done by myself includes the shore line of Chappaquiddick Bay, the north-east and north shores of Martha's Vineyard Island to the entrance of Chappaquiddick or Tashumco Pond and includes Vineyard Haven Harbor and Lagoon Pond.
The portion of the Island included in this survey is flat and sandy, mainly glacial drift, except west of Lagoon (Waquataqua or Vickataqua) Pond, where the surface is undulating and tertiary strata are apparent.

The shore line is generally bold, high bluffs closely approaching the water's edge in many places. In bays and quiet localities the beach is of silicious sand, loosely packed, often with drift boulders of considerable size on the low water edge. Where more exposed the beach is of shingle and shell; this applies particularly to the north side of the island and the beach between Cottage City and Edgartown. My observation of the north shore was limited to the immediate vicinity of Coney Bay Entrance, where the sandy beach, exposed to the full force of the sea, is beaten quite hard. Here the coast recedes rapidly as is shown by a comparison of the surveys of the "Cliffs" made by Mr. Whiting in July 1886 and again by myself in October 1887. Several surveys of this locality have been made at widely different intervals of time by Mr. Whiting for four years of Co"
Published as "Appendix No. 9—Report for 1886."

While the general appearance of the "Chesot" remains the same, they are steadily changing their position eastward.

The salt marshes shown on the two sheets are small in extent and are usually immediately adjacent to the shore line. They are being reclaimed by ditching in many places for the cultivation of cranberries.

The island is largely covered with a dwarfed growth of wood, chiefly oak. Pine is often found cultivated for the purpose of wind break. In the western portion of the island the trees attain more nearly a forest growth. The plains are covered with a heath-like plant. The soil is easily worked, makes good return for cultivation, but the proportion of grassland is small.

The main roads on the island are very wide because of the sandy soil and liability to form deep ruts. Along the shores and in eastern ends is much driving.

The roads have been greatly improved by a covering of gravel. In the neighborhood of Cottage City and Vineyard Haven, and between the two places, the roads are laid in concrete.

Communication with the main land is easy by boat.
of the Old Colony Steamboat Company make frequent trips. A narrow-gauge railroad extends from Cottage City to the South Beach by way of Edgartown and Cotuit (incorrectly spelled by the Company "Kataum"). Trains are run over this road only in the summer months.

Buildings are substantially built of wood; these are only two of any importance included in the survey. Streams and ponds have, in many places, been dammed and culverted with stone. Fences throughout the country are of wood or wire; extensive fields are often enclosed as ship's ranges.

Since the original survey of this portion of Martha's Vineyard Island was made changes of an extensive and permanent character have taken place; the most notable being the settlement and growth of Cottage City.

Of the towns and villages, coming within the scope of the survey, we learn that Edgartown, situated on a level plain, is the oldest permanent settlement on the island, dating back to 1643. It was incorporated as a town in 1671. Having a well protected harbor with deep water it was formerly a place of large importance in the whaling business. The industry is
still pursued to a limited extent by one or two individual owners. Shore fishing affords employment to a large proportion of the inhabitants. There is no manufacturing done. Being the shieltown of the County the Court House, County Office and Jail are located here as well as the U.S. Custom House and the only Bank on the island.

Edgartown and Catamar, two miles southward, are largely devoted to by summer visitors.

Vineyard Haven, formerly known as Holmes' Hole, is a village in the township of Tisbury. It is situated on a gentle ascent at the head of the harbor, bearing the same name, and on its western side. With its background of cultivated fields and wooded hills, it presents an attractive appearance. The harbor is one of the most noted roadsteads for coasting vessels in the country and offers perfect protection for large fleets, even in north-east gales. The United States government has established a Marine Hospital and a Weather Signal Office here. There is also a "Sailor's Free Reading Room, Library and Chapel" supported mainly by Unitarian Societies in Massachusetts and Rhode Island, which is largely patronized.
A good marine railway and a large manufactury of
sharpened is located here. Many improvements are
in progress and properties are rapidly changing hands
with the view of making this a place of summer re-
port.

Cottage City is the name given to the whole of the
"East Cape," it includes Oak Bluffs, Camp
Grounds, Vineyard Highlands, Eastville and
Lagoon Heights.

This place was selected in 1835 as a Method-
ist Camps Meeting ground and until 1880 was
included in the town of Edgartown. It now
has a large resident population and is one of
the most popular places of seaside resort
in the New England states. The streets are
all paved with concrete, affording excellent
driving and walking.

The following statement is a summary of the statics
of the work in this vicinity:

<table>
<thead>
<tr>
<th>Miles of Shoreline</th>
<th>Surveyed</th>
<th>42 1/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>railroad, roads and streets</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Creeks, ponds, and ditches</td>
<td>11 3/4</td>
<td></td>
</tr>
<tr>
<td>Square, approximate Area</td>
<td>9 3/4</td>
<td></td>
</tr>
</tbody>
</table>

The entire expense of the survey was $1476.100.
The allotment for the work was $1500.

Most of the triangulation points shown on the sheet were easily identified being lighthouses, church spires, little flagstaffs and cupolas. Points marked with stars were all found excepting "Edgartown", the place where it stood is now covered by a dense growth of trees. New determinations of points were furnished in the field by Mr. R. A. Morr.

All topographical details are represented on the sheets as fully and precisely as possible.

Sheet No. 1804 was backed June 3rd, 1887 and the projection on it made the 21st of the same month. The uneven shrinking of so great a sheet is the inevitable source of error, but every effort was made in the field to harmonize the relations of positions to each other.

This unusual distortion of this sheet is more fully commented on by Mr. Whiting in his report to the Superintendent. The work was inspected in the field during its progress by Assistant H. L. Whiting.

Yours respectfully,

W. Irving Vaceal,
Assistant U.S. Coast G. Survey.

February 1888.