U. S. COAST AND GEODETIC SURVEY.

F. M. Thron, Superintendent.

State: North Carolina.

DESCRIPTIVE REPORT.

Topographic Sheet No. 1757

LOCALITY:

Coast of North Carolina.

Federal Pt. to Smith's Ed.

&

Bald Head & Caswell Pt.

1857.

CHIEF OF PARTY:

D. W. Wainwright.
Report
Resurvey North Cape Fear River, N.C.

A report on the two surveys at the mouth of Cape Fear River can be well covered in one report. As the change since the last surveys were their origin to the same course, viz the Sluice or Breakwater from Federal Point to the salt marsh forming a part of Smith Island, practically closing New Inlet.

Before the Sluice existed the Cape Fear River reached the sea by two mouths forming an inverted or inclining the marshes in front of Smith Island a c. The bar at New Inlet was after heavy storms liable to change both as to its position and depth. The channel entrance did not have sufficient depth of water which the commerce of the Cape Fear River demanded. The larger class of vessels were unable to enter.
Wilmington the principal City on the river and long ago led all other ports in the amount of tar and resin and turpentine exported. Owing to various causes she has now retreated to second or third place.

It was determined upon in 186- to close New Inlet and turn the volume of the River into the mouth at Corwell. This Dam is now nearly completed. All that remains to be done is the facing. Rocks Island has been increased in length to the southwest by a line of rock.

The consequences of this engineering work has been to shut off nearly all the water which formerly passed through New Inlet, and the formation of a low strip of beach from Federal Point nearly nearly to the new southern end of Rocks Island, and on the line of what was formerly Carolina Shoal. This leaves a large lagoon between the beach and
the Breakwater. As the chinks between the
rock of the latter have not yet been closed
by the Rivers' silt, there is still a current
through the Lain, where the water is
close half tide.

To the westward of Rock Island
the beach, as shown in previous surveys
is still broken by several small Inlets.

But since that, the beach has largely
increased in length, and in some places
also in breadth. Consequently the inlets
are very much narrowed and at low
water the width of the stream passing
through is very small.

There are four of these inlets. But
the only one of importance is the "Corn
Coke" or the "Gold Leaf." The original
Corn Coke Inlet is farther to the westward
but is now nearly closed. It lost its
necessary area of drainage when the Gold
Leaf was opened during a storm, and
its name as well as its depth of water
has been transferred to the latter.
The value of the Inlet is that it has sufficient depth of water at high tide to allow the entrance of a small schooner from 5 to 7 tons, and thence go by the way of Muddy Slue to Wilmington—thus saving the trip around the Cape. Besides the increase of length of this broken beach it has been driven inward toward the north for quite a distance. At the same time the marsh, especially to the westward, is extending its limits.

Eventually the great shoals North-east of Bald Head will increase in size and height. Thereby cutting off the water from Oyster Bay and the Muddy Slue. The beach and marsh will continue to approach each other until they close and present a common front to the ocean.

Fort Caswell Point has been somewhat eroded by the increased outflow, but is protected by a rock ring dam. Further west at Oak Island High Light it is cutting
away at quite a large rate each year. Portions of the old Light can now be seen between high and low water.

At Bald Head, a large point has been entirely cut away, and the Light itself was threatened until a small breakwater was built in its vicinity. The sand is silicious, and beaten hard. Any vessel except of small size would survive several storms within the limits of this resurvey. There is no possibility of reclaiming the salt marshes in the vicinity.

W. B. Wainwright
Act. C. & O. Survey

To accompany plans taken that
"Federal Point to Smiths Is" and
"Bald Head & Caswell Points"

Survey'd in 1887 — When began? — finished?