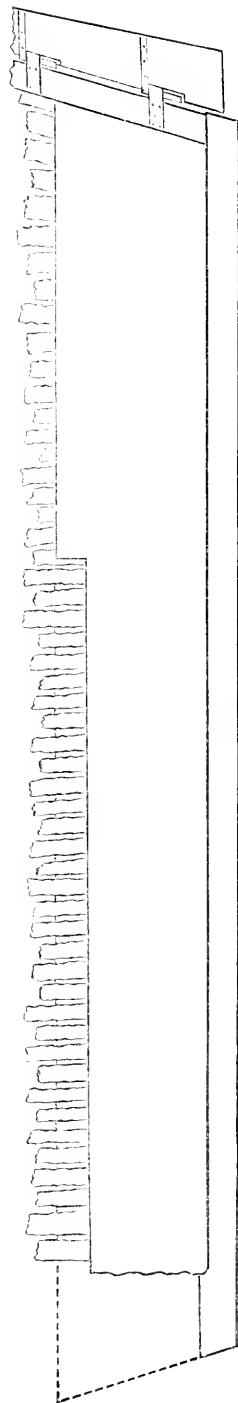
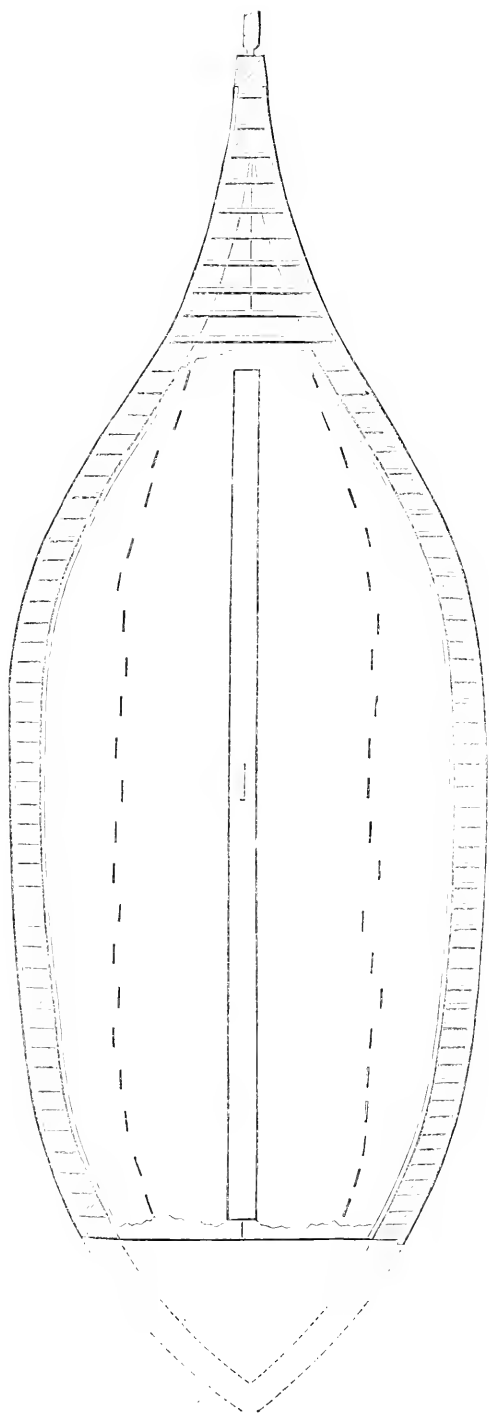
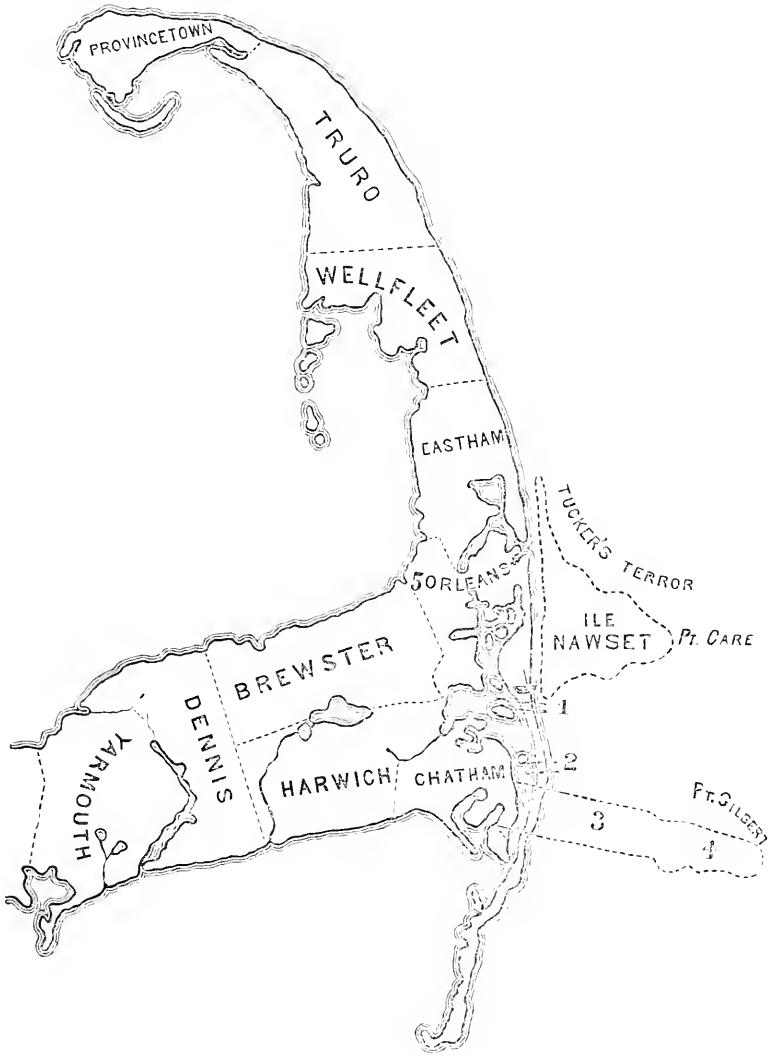


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AN ACCOUNT
OF THE
DISCOVERY OF AN ANCIENT SHIP
ON THE
EASTERN SHORE OF CAPE COD.
By AMOS OTIS.







1. Site of former entrance to Potamagutt or old ship harbor. The locality of the old ship is represented in black.
2. Present entrance to Chatham harbor.
3. Island ledge.
4. Webb's island.
5. Namskacht creek.

AN
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DISCOVERY OF AN ANCIENT SHIP
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FROM THE NEW ENGLAND HISTORICAL AND GENEALOGICAL REGISTER.



ALBANY:
J. MUNSELL, 78 STATE STREET.
1864.

DISCOVERY OF AN ANCIENT SHIP.

Our earliest historians record that in 1626 a ship entered a harbor on the eastern coast of Cape Cod, and that while therein, a violent storm arose, closed its entrance, and prevented her departure. This harbor was known to the first settlers as "The Old Ship Harbor;" but the memory of its location has faded from the minds of the men of the present generation, and exists only in the form of an uncertain tradition. I have made many inquiries of the aged respecting its location, but could obtain no certain information. There is another tradition, more uncertain and unreliable, that the name of the Old Ship was Sparrow Hawk.

In this article I propose to give an account of the discovery, and a description of the remains of the wreck of an old ship recently uncovered by the waves and currents of the ocean at Orleans; to state with some particularity, the evidence, which seems to prove beyond a reasonable doubt, that those remains belong to the ship which Gov. Bradford informs us was lost in Potanumaquut harbor in the winter of 1626-7, (or to some still more ancient ship). This evidence is principally based on the history of the remarkable geological changes that have occurred on the coast, since its discovery. Archer's account of Gosnold's voyage around the cape, in 1602, and of the appearance of the coast, is so unlike anything seen by the modern mariner, that his relation has been considered a myth, or traveler's tale, unreliable and unworthy of credence. Geological inquiries may seem out of place in a historical and genealogical journal; but if they do nothing more, they will verify the accuracy of Archer's descriptions, and thus aid us in our investigations of the truths of history.

The accounts of the wrecked ship in Morton and Prince are copied from Bradford. Morton is not careful in his dates, but he informs us that the master was a Scotchman named Johnston, a fact not stated by Bradford. Mr. Prince, with his accustomed accuracy, states that a ship was lost in the beginning of the winter [December], 1626. Gov. Bradford's description of the place where the ship was lost, would be perfectly clear and distinct, if the configuration of the coast was the same now as it was when he wrote. Namaskachet creek remains, but Isle Nanset, Points Care and Gilbert, have been swept away by the waves and currents of the ocean. Where Monamoick bay was, there is a straight line of sea coast; where an open sea then was, now long beaches meet the eye; and where were navigable waters, now we see sandy wastes and salt meadows.

Such remarkable changes having been made in the configuration of this coast since its discovery by Gosnold, and its examination by Smith in 1614, is it surprising that the knowledge of the location of "Old Ship Harbor" should have been lost, or that the readers of Bradford should have been unable to determine where Monamoick bay was?

Prof. Agassiz, of Cambridge, in company with the writer and others, has recently made a careful geological examination of the eastern coast of the towns of Eastham, Orleans and Chatham. An account of this examination will hereafter be given. For my present purpose it is sufficient to state, that the result was a verification of the accuracy of Archer's description of the coast.

This examination enables me to draw an outline map of the coast as it was in 1602, and in 1626. I have also a map of the harbors, beaches and salt meadows as they were, and as they now are.

Gov. Bradford, in his history, page 217 and following, states, that in the beginning of the winter of 1626-7, a ship with many passengers, and sundry goods, bound to Virginia, "came so neare y^e shoulds of Cap—Codd, or else ran stumbling over them in y^e night, they knew not how, they came right before a small blind harbore, that lyes aboute y^e midle of Manamoyake Bay, to y^e southward of Cap—Codd, with a small gale of wind ; and about high water toucht upon a barr of sand that lyes before it, but had no hurte, y^e sea being smoth ; so they laid out an anchore. But towards the evēing the wind sprunge up at sea, and was so rough, as broake their cable, and beat them over the barr into y^e harbor, wher they saved their lives and goods, though much were hurte with salt water; for wth beating they had sprung y^e but end of a planke or too, and beat out ther occome ; but they were soone over, and ran on a drie flate within the harbor, close by a beach ; so at low water they gatt out their goods on drie shore, and dried those that were wette, and saved most of their things without any great loss; neither was ye ship much hurt, but shee might be mended, and made servisable againe." Gov. Bradford adds that the shipwrecked mariners were visited by Indians who could speak English, and who offered to carry letters, or conduct them to Plymouth. Two men were sent with a letter to Gov. Bradford. He ordered a boat to be made ready, and went himself to their assistance, carrying pitch, oakum, spikes, &c. for the repairs of the ship. He landed at "Naumskachett" creek, on the bay or inside of the cape, about two miles from the place where the ship then was. Indians were procured, the materials were carried over, the ship was repaired, got off, and her cargo put on board. A few days after another violent storm arose, the ship was again driven on shore, "and so beatten and shaken as she was now wholly unfitte to goe to sea;" consequently the ship was abandoned, her cargo transported to Plymouth, and her mariners and passengers remained at that town till "the latter part of the following summer, when they took passage for Virginia."

Naumskachett, or Na-mas-ka-ket creek is a part of the boundary line between the present towns of Brewster and Orleans. From the boat landing on that creek to the navigable waters of Pot-a-numa-quut, it is about two miles; to Nauset harbor the distance is greater. This fact, taken in connection with Gov. Bradford's statement, proves beyond any controversy that Potanumaquut was the harbor into which the ship "stumbled."

The following are the facts in relation to the discovery : On the 6th of May, 1863, Messrs. Solomon Linnell, 2d, and Alfred Rogers, of Orleans were on Nauset Beach, and discovered portions of a

wreck. Mr. Linnell was at the same place on the 4th, when no part of the wreck was visible. This proves that it was uncovered between the 4th and 6th of May, 1863. When first discovered it was partially covered with the marsh mud in which the wreck had been imbedded. On removing some of the mud they found a quantity of charcoal, and the appearance of the timbers and planks indicated that the vessel, of which these were the remains, had been burnt down to light water mark. On Saturday, May 9, Leander Crosby, Esq., visited the wreck, and collected a lot of beef and mutton bones, several soles of shoes, probably made for sandals, a smoking pipe, of the kind used by smokers of opium, and a metallic box. Afterwards, in company with Messrs. Linnell and Rogers, he took out the keelson of the wreck, and the remains of the stern post and rudder.

Soon after the discovery of the wreck, it was visited by John Doane, jr., Esq., and Doct. B. F. Seabury, who made an exact measurement of the portions of the wreck then remaining, for the drawing accompanying this article.

The peculiar model of the wreck excited the curiosity of the people, and although four miles from the village, it was visited by hundreds, and each one took a fragment as a memento of his visit. At the time the writer was there, the current had swept out a basin in the sand around the wreck, and, it being low tide, every part excepting the keel could be examined. One striking peculiarity was immediately noticed by every one,—the long, tail-like projection at the stern. The oldest sailor never saw a vessel built on that model. She must have had, to use a nautical expression, “a clean run,” and have been a good sailer, and a good sea boat. There are other peculiarities in her construction: her frames, midships, are perfect semi-circles. At the head of each timber, a piece of plank about seven inches wide and nine long was spiked to the timber, and to the ceiling. These pieces of plank, or *gluts*, were fitted to the adjoining timbers, and driven hard, the object being to prevent the timbers from moving or working in their places. The top of the glut was bevelled, and resembled a wedge with a very thick edge. On the top of this the next timber was placed, and fastened to the glut. A similar plan has recently been introduced in ship building, and considered a great improvement.

The ship was well and strongly built. The frame was of English oak, hewn six inches square, with square corners; there was not a wany-edged timber in the frame, showing that she had been most carefully built. The frames were placed side by side, and not an open place could be found, into which the hand could be thrust flatwise. A few of the stern timbers were of locust, or a wood that resembled it. The outer planks and the ceiling were of English oak, two inches or two and a quarter thick.

The drawing exhibits the form at light water mark, or at the head of the *futtock* or second timber-heads, most of which remain. If the plan had been taken at the head of the floor timbers, it would have exhibited her peculiar model in a stronger light. The length of her keel was about 35 feet, $12\frac{1}{2}$ feet breadth, at light water mark. A part of the timbers at the bow had been taken away; but por-

tions of the planking remained, showing the form. The stem was also gone. The ship builder can judge of the peculiarity of her form by the amount of dead wood at her stem, and the moulding of her frames. The stern post was six inches square, straight, and secured to the keel; the next timber was six inches at the bottom and seven at the top; the 3d about 8; the 4th about 9; the 5th about 10; and the sixth was a narrow knee, open a little at the top. The length of the portions of these timbers remaining, I omitted to take; they were about four feet; a little higher than the heads of the floor timbers. The seventh was a frame, though very narrow at the bottom. There were twenty-three regular frames remaining, or forty-six timbers, not counting the six at the stern. At the bow several frames were missing. The planks were fastened with spikes and treenails, in the same manner as at the present time. Some of the treenails had been wedged after they were first driven, showing that some repairs had been made.

The timbers and planks of the old ship are very sound, there is no appearance of rot. There are no barnacles upon them, they are not eaten by worms, and there is no indication that they have been for any considerable length of time exposed to the action of the elements. The spikes, bolts and other fastenings of iron have entirely disappeared. Even the rudder braces, which are always made of thick bars, are gone. They had not been wrenched off, for the mortices in which they had been inserted, and the places where the spikes with which they had been fastened were driven, bore no marks that violence had been used—rust had gradually consumed them, and discolored sand indicated the places where the iron once was. The wreck was imbedded in marsh mud, and covered deeply in sand. Under such circumstances air was almost wholly excluded, and oxidation must have been slow.

Though called a ship, she had only one mast, and that, as shown by the mortice in the keelson, was nearly midship. Respecting her size, only an approximation to it can be obtained. A modern built vessel of her length of keel and breadth of beam would hardly exceed forty tons burthen. But in former times vessels had a greater depth of hold in proportion to their length than at the present time. This would increase her tonnage. Seventy tons is as large a burthen to assign to her as the known facts will warrant. The *Mayflower* was 200 tons burthen, and brought over 101 passengers. This ship did not probably have half that number.

In August last the wreck was again covered with sand, and is now buried several feet below the surface, where it may remain undiscovered for ages. Centuries hence some plodding antiquarian may labor to prove it to be the same I have described in this article.

One point more remains to be considered. Is the wreck recently discovered a part of Capt. Johnston's ship, lost in 1626? The reader will look at his map. "He Nawset" was of the drift formation, hilly, and in some parts rocky. No part of it now remains. About fifty years ago, a small portion of it called Slut's Bush, had not washed away. The sand on its shores, and most of which has been washed by the currents from the north, has blown inward by the winds, covering the meadows within, and in some places filling the

navigable channels and harbors on the west. In some places the waves of the ocean have swept across the beach, and transported immense quantities of sand to the meadows in a single tide. The salt meadows, which were on the west side of Ile Nauset, for years, have been cropping out on the east side of the beach. Some of the marked bound stakes, of the eight great lots into which the Potanumaquut meadows were divided in 1750, have been found on the east side. The meadows have not moved, the beach has.

The wreck of the Old Ship is on the second lot of the Potanumaquut meadows. This was always known as the Old Ship lot, but why it was so called no one could explain. Now the reason is apparent. The position of the wreck has not probably changed since it sunk in the place where it now lies. At low tide, there are about two feet of water around it, showing that at high water there was a sufficient depth to have floated a vessel of seventy tons burthen. Every portion of the wreck is below the line of the surface of the meadows. These two facts prove that this vessel was not cast away upon a beach, nor on the meadows.

At the present time a wreck sunk in such a situation would be covered with sand and mud in the course of a month. Similar causes existed then, and it is safe to assume that Capt. Johnston's vessel was covered up very soon after she was lost.

Salt meadows do not form on a shore where a surf beats, or where a strong current exists. While the ancient entrance to the harbor was open there was such a current on the west, or inside of Isle Nauset, which prevented the formation of salt meadow near the wreck. After the closing of the old entrance, the current turned west of Pochett and Sampson's islands, and found an outlet through Pleasant bay to Chatham harbor, thus leaving a body of still water favorable to the rapid formation of salt meadows. This view is confirmed by the Eastham records. That town was settled in 1646, and in the early division of meadows the Potanumaquut are not named. As salt meadows were considered more valuable then, than at the present time, it is surprising that they are not named till 1750 if they had then existed.

Records cannot be quoted to prove the antiquity of this wreck, neither can it be proved by living witnesses; we necessarily have to rely on other testimony. That the rust had entirely consumed all the iron used in its construction is evidence of antiquity. The position of the wreck in reference to navigable waters, to the salt meadows, and to the beaches is reliable testimony.

Now *it is perfectly certain* that this wreck must have been in its present position since the year 1750, or 113 years, for since that date there have been no navigable waters within a quarter of a mile of the spot where it lies. *It is also certain* that it must have been in its present position during all that period, prior to 1750, while the meadows were forming around it, and on the west. If it is admitted that those meadows are of recent formation, one hundred years would be a low estimate, making the whole time 213 years.

If it be said that the Potanumaquut meadows belong to the *older* and not to the recent formation, it proves too much; it proves that the wreck has been in its present position many centuries—that it is

the remains of an old ship in which the Northmen, or other ancient navigators, sailed.

The position of this wreck in reference to the salt meadows and to the beach is the best possible evidence of its antiquity. If driven there it must have been by a westerly wind, which would cause a low tide. Admitting that the vessel, of which this wreck is the remains, was by some unknown cause forced on to the meadows, how was the wreck buried below the line of the surface? To suppose that she was so buried on hard meadows by natural causes is an impossibility. That the wreck was there first, and the meadows formed over it, seems a self evident truth, and judging from the rate at which similar meadows have formed, *two hundred and thirty-seven* years is not an unreasonable length of time to assign for the formation of the Potanumaquut meadows, and consequently the length of time that the wreck of the "Old Ship" at Orleans has remained in its present position.

Those who are not aware of the remarkable geological changes that have occurred on the eastern coast of Cape Cod since its discovery doubt the truthfulness of Archer, who was the historian of Gosnold's voyages. I have in this article assumed that he was a careful and an accurate observer, and faithfully recorded what he saw. Great geological changes make their own records; they leave in the strata and in the various deposits the footprints which the scientific student of nature can trace and follow.

Cape Cod was discovered by Bartholomew Gosnold, May 15, 1602 O. S. He anchored at first near the end of the cape, which he called Shoal Hope, but afterwards changed to the name it has since retained. Afterwards he anchored in the harbor, in latitude 42°. On the 16th he sailed round the cape. After proceeding 12 leagues in this circuitous course he descried a point of land "a good distance off" with shoals near it. He "kept his luff" to double it, and after passing it "bore up again with the land," and at night anchored, where he remained that night and the following day, May 17.

He saw many shoals in that vicinity, and "another point that lay in his course." On the 18th he sent a boat to sound around the point, and on the 19th passed around it "in four or five fathoms and anchored a league, or somewhat more beyond it," in latitude 41° 40'.

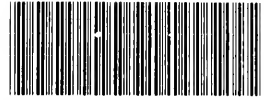
Nothing is named in this account that the most careless observer would not have seen and noted. When he discovered the first point he was off Eastham, a little north of the beach where the "Three Lights" are now located. He saw the danger, and like a prudent mariner kept his luff to avoid it. The shoal he called Tucker's Terror, the headland Point Care. After passing Point Care he bore up again to the mainland. This description of the coast is simple and truthful. To determine the exact position of Point Care is attended with some difficulty. That it was the north end headland of the island, named by Capt. John Smith "Ile Nawset," there appears to be no reason to doubt. The only difficulty is in determining precisely where the north end of that island was in 1602. The northern end of it, which persons living remember, was opposite the present entrance to Nauset harbor. In 1602 it probably extended half a mile further north, that is, as far north as the low beach extended. That

persons now living remember. John Doane, Esq., now seventy years of age, was born in the immediate vicinity of Point Care. His father and grandfather, in fact all his ancestors from the first settlement, owned the land and the meadows between Ile Nawset and the main. He says that within his recollection Point Care has worn away about half a mile. When his grandfather was a boy, Point Care extended much further into the ocean than it did when he was young. These are not vague and uncertain recollections. Mr. Doane points to monuments, and the exact distance that the ocean has encroached on the land within his recollection can be ascertained. He states that fifty years ago a beach extended from the present entrance of Nauset harbor half a mile north, where the entrance then was. Within this beach his father owned ten acres of salt meadows, on which he for several years assisted him in cutting and raking the hay. Now where that beach was there are three or four fathoms of water, and where the meadows were is a sand bar on which the waves continually break, and make Nauset harbor difficult of access. Within his memory the north beach, connected with the Eastham shore, has extended south one mile, and the whole beach has moved inward about its width, say one-fourth of a mile. Formerly there were navigable waters between Nauset and Potanumaquut harbors. It is about a century since vessels have passed through, and about fifty years since the passage was entirely closed. This was caused by the moving of Nauset beach inwards. Dunes always travel inward, never outward, let the direction be what it may.

Mr. Doane says that his grandfather informed him, that when he was young a rocky swampy piece of land, known as Slut's Bush, was about in the middle of Isle Nauset; that many berries grew there, and that he had repeatedly been there to pick them. When the present John Doane, Esq., was a lad, only the western edge of this swamp remained. The roots of the trees and bushes that grew there ran under and between the rocks and stones, and when the waves undermined the rocks, the whole, rocks, stumps and roots settled together. Slut's Bush is now some distance from the shore, in deep water; vessels pass over it, and on a calm day the stumps and roots may be seen at the bottom. The fisherman sometimes gets his line entangled with them and pulls them up. During violent gales of wind they are sometimes loosened and driven to the shore.

Beyond Slut's Bush, about three miles from the shore, there is a similar ledge called Beriah's ledge, probably formed in precisely the same manner as Slut's Bush ledge is known to have been formed.

Six nautical miles south of Point Care, Gosnold discovered another headland which he named Point Gilbert. Archer furnishes us with all the particulars respecting the soundings, the straits, his passing round it, and anchoring a league or more beyond in latitude $41^{\circ} 40'$. We have historical and circumstantial evidence, that Point Gilbert existed in 1602; it united with the main land at James head, near Chatham lights. From James head, on its south shore, it extended nine miles on an east by south course to its eastern terminus, afterwards known as Webb's island, situate where Crabb's ledge now is. Cape Care was worn away by the gradual abrasion of the waves; over



Point Gilbert the sea, during a violent gale, swept, carrying away long sections in a single day.

The inner ledge on the line of Point Gilbert is known as Island ledge, and the name indicates that the sea broke over the point at two places about the same time. Rev. Dr. Morse states that Webb's island at one time, contained fifteen acres of rocky land covered with wood from which the early inhabitants of Nantucket procured fuel.* The process which has been described as having occurred at Slut's Bush ledge also occurred at Crabb and Island ledges; the stumps and roots of the trees were carried down by the superincumbent rocks. Mr. Joshua Y. Bearnse, who resided many years at Monamoit point, and has all his life been familiar with the shoals and ledges near Chatham, informs me that it is very difficult to obtain an anchor lost near either of these ledges; the sweeps used, catch against the rocks and stumps at the bottom; that in repeated instances he has pulled up stumps of trees from the bottom where the water is four fathoms deep. He also states that after the violent gale in 1851, during which the sea broke over Nauset Beach where the ancient entrance to Potanmaqunt harbor was, and where the entrance to Chatham harbor was in 1775, with a force which seems almost incredible, sweeping away banks of earth 20 feet high, cutting channels therein five fathoms deep, moving the sea around to its very bottom, and tearing up the old stumps which had been there more than a century. Mr. Bearnse states that more than one hundred of these drifted during that gale to the shore at Monamoit beach; and that he picked them up for fuel. A part of these were stumps that bore the marks of the axe, but the greater part, were broken or rotted off.

These old stumps did not grow under the water; they did not float to the positions from which they were dragged up; they grew in a compact rocky soil overlying a loose sand. The waves and the currents removed the loose substratum, and the rocks and the stumps went down together into the deep water where they are now found.

From the place where Gosnold anchored, a league or more from Point Gilbert, there was an open sea to the south-west. Monamoit beach, which projects out eight miles south from Morris island, did not then exist; there was nothing there to impede navigation.

[Prof. Agassiz, who is the author of the geological theory which the accompanying map delineates, furnishes us with the following note dated Cambridge, December 17, 1863:

"Surprising and perhaps incredible as the statements of Mr. Amos Otis may appear they are nevertheless the direct and natural inference of observations which may easily be made along the eastern coast of Cape Cod. Having of late felt a special interest in the geological structure of that remarkable region, I have repeatedly visited it during the past summer, and, in company with Mr. Otis, examined on one occasion, with the most minute care, the evidence of the former existence of Isle Nauset and Point Gilbert. I found it as satisfactory as any geological evidence can be. Besides its scientific interest, this result has some historical importance. At all events it fully vindicates Archer's account of the aspect of Cape Cod at the time of its discovery, in 1602, and shows him to have been a truthful and accurate observer."—EDITOR.]

*See Morse's *Universal Geography*, i 357, ed. 1793.