Interior of the Tide-Mill (1643), Hingham, Massachusetts
Tide-Mills in New England

By Alfred Elden

"The mill will never grind with the water that is past."

Undoubtedly the familiar quotation is true enough if such mill be located where it depends for its power upon the swiftly passing waters of brook, stream or river. Assailable assertion, however, if applied to tide-mills where the outpouring from a tidal basin on the ebb is followed by its return on the flood to do its work all over again.

The recent report of a joint American-Canadian commission, created to determine what effect the carrying out of the much-discussed Dexter P. Cooper dam project would have on the fisheries of Passamaquoddy Bay in eastern Maine and New Brunswick, serves to remind of New England's few remaining ancient tide-mills. Of much interest does the vacationist in New England find these primitive structures, now few and far between.

If eventually the original great engineering plan for harnessing the mighty tides of the eastern Maine and the western Canadian coastal waters does materialize, we shall even then have merely a colossal tide-mill!

To be sure such a super hydro-electric plant would generate between 500,000 and 700,000 horse power. The cost would approximate $100,000,000 and the estimated time for construction is four years. Yet, despite the stupendousness of the designer's statistics, no new principles are involved.

Twentieth-century civil engineers have simply elaborated upon the practices of their colonial forefathers. A century and more ago the tide-mills, and the picturesque grist-mills of the rural areas away from the line of sea and shore, ground the New England farmers' grain. Most of these have passed. Occasionally, the venturer along country highways and byways will come across some impressively aged mill that, despite changed milling methods, has managed to endure through the years, and continues to grind its rather negligible daily quota of corn or wheat.

As early as 1644 a tide-mill was in op-
operation at Manchester, Mass., "upon the river near the meeting house," a one-story building that was taken down in 1826. John Friend of Salem built in 1649 a tide grist mill on the westerly side of Bass River in what is now Beverly, which continued to operate until 1886. The Lummus tide-mill at Danversport, Mass., has ground corn for nearly two hundred years.

One may count on the fingers of his two hands the existent tide-mills of New England that are still in active operation. The oldest, so far as a fairly searching survey of the situation reveals, seems to be at Hingham, Massachusetts. There, in 1643, a grist-mill was located at the mouth of a natural tidal basin near the head of the harbor.

Now, after 287 years, and dignified by an historical background which antedates that of the town itself, its slowly whirling stones of buhr still crush the golden grain. A long grind indeed!

In any award of priority medals to tide-mills Massachusetts looms large. On the creek between Chelsea and Revere, adjoining the Revere Beach Parkway, stands the Slade Spice Mill after a genesis that turns back the pages of time to the year 1721.

Except for brief interruptions due to fire, this tide-mill has been in continuous operation for almost 200 years. By an ancient provision in the original charter, it must at all times hold itself ready to grind corn for any citizen of Chelsea, provided the corn is Chelsea raised! It is to be feared, however, that if the plant depended for its business upon the present-day corn crop of Chelsea its time-honored career would abruptly terminate!

Serenely it rests even as of yore on the edge of the marshes in the shadow of old Powder Horn Hill, steeped in the glamorous romance of pioneer days. Despite the fact that more than half the mill now

Opening the Sluiceway at the Slade Tide-Mill
The Perkins Tide-Mill, Kennebunkport, Maine

has modern electrical equipment, the tide-driven machinery is steadfastly retained and operated daily.

An old stone dam spans the tidewater creek and creates an ideal mill-pond for water storage. Great gates in the sluiceway are hinged with dowels of stout wood. On the flow the pressure of the insweeping tide opens these gates. At the ebb they close and the reservoir of imprisoned water holds them shut. From this head of eight to ten feet is obtained the tidal urge that turns the wheels.

Following up the coast into western Maine, milling traditions center at Kennebunkport and hover alluringly around the Perkins tide-mill. James C. Perkins—the miller himself—will greet you, ruddy of cheek, blue eyes a-twinkle with friendliness.

"An historic mill?" he repeated in answer to an interrogation. "Why, yes, I should say so. It was established in 1749. I figure that carries us 183 years into the
The Perkins Tide-Mill, Kennebunkport, Maine

annals of the past. Certainly New England history was then in the making.

"Rather odd but the mill was built by a Perkins who, so far as I can learn, was no relative of my family. And, too, it has never had other than a Perkins for its owner. It came to me through a line of inheritance. Frequently I have heard my father tell of taking toll out of the meal he ground for the neighboring farmers—perhaps a quart or two from each bushel.

"The foundation stones, the floor timbers down below where the turbine is, and overhead, as well as the framework and a lot of the planks and boards are still as they were placed by that first Perkins 183 years ago. But no longer do we get our grain from outlying farms. It all comes from the west by rail."

This Perkins tide-mill is located half a mile from the mouth of the Kennebunk River where it empties into the sea. As if designed purposely for a tidal basin, a long narrow estuary curves out and away from the river and extends inland. Near its head the mill-dam and gates were placed thus creating an ideal tidal reservoir.

Regardless of the addition of a modern cupola and some new shingles here and there, the mill is essentially the same ancient structure where natives of the "Port" once sought refuge from bloodthirsty savages. York County history records that in the early days of the Perkins tide-mill a small community of settlers living close by in log cabins was attacked by hostile Indians.

The harrassed families found sanctuary in the fortress-like basement of the mill, closed solidly on three sides and only partly open on the fourth facing across the basin to where the invaders had massed. Well armed, the men folk held the attackers at bay for three days and nights, while the women prepared such meals as were possible from hastily gathered stores. But supplies soon ran low and sensing this the invaders settled
Stephen Harding, a giant in strength, volunteered to bring aid from the garrison at Wells a few miles to the westward. With his wife and infant child, under cover of night’s dark pall, he stole away. Detected and hotly pursued, Harding, who must have been the Primo Carnera of his day, took his wife under one arm, his child under the other, and plunged madly through the dense forests, stubby fields and oozy marshes.

His extraordinary physical powers enabled him to lead the howling pursuers to Wells which he reached after a terrible night’s experience. A force from the garrison hastened with him back to the tide-mill and following a sharp battle routed the redskins and put them to flight. Both Booth Tarkington and Kenneth Roberts have incorporated the old mill in their writings.

Still further east at Boothbay one finds another notable tide-mill. This is the Hodgdon mill, a combination grist and lumber enterprise. It derives its power from one of the most beautiful natural tidal basins on the North Atlantic coast. For many years the mill-pond, it has more recently been christened Mirror Lake. Back in 1826, Caleb Hodgdon, of Westport, an adjoining town, saw cheap power potentialities in this forty-acre tidal basin.

At the narrowest point, the neck of the bottle, so to speak, just where the outpouring waters mingle with those of the Damariscotta River near its mouth, he placed his mill. It is said of old Caleb Hodgdon that he bought logs from adjacent forests, had them hauled and dumped into his tidal basin near the head of Linekin’s Bay, floated them to his mill, sawed them into dimension lumber, fashioned this into vessels, and furnished
their skippers with maiden cargoes of grain ground between the stones of his mill. A close little corporation indeed!

Through inheritance this tide-mill has always remained in the Hodgdon family. In fairly recent years it has sawed out the frames and furnished the planking for many notable craft, among them Commander Donald B. MacMillan's Arctic exploration schooner Bowdoin.

The mill-wheel has fallen to pieces, Ben Bolt,
The rafters have tumbled in,
And a quiet which crawls round the walls as you gaze,
Has followed the olden din.

True enough. At several points are silent and crumbling reminders of what were once busy tide-mills. In lower Casco Bay, at South Harpswell, has stood for many years a striking example—the old Basin Cove tide-mill. Hundreds of summer vacationists from widely scattered sections of the country have rowed around the silent “House on Stilts” as it was known. They have snapshotted it from all angles.

Up to quite recent years native youth delighted in exploring its dark chambers behind the gray boarded windows. Dust lay inches thick over everything. Rats scampered willy-nilly with squealing protest at the interruptions. Barn swallows streamed in and out of the upper loft through the openings which year by year grew larger and larger as the wintry winds tore away shingles and dozy boards.

It was an every place and parents rather encouraged the belief among their youngsters that it was haunted. A dangerous playground with the water all around and the rotting timbers giving away when stepped on. Now parental fears from such sources are ended. The ravages of the past winters have completed the long-impending dissolution. The tottering structure has crashed and naught remains of the mill but traditions and a
few barnacle-incrusted pilings which were a part of its foundation.

This tide-mill was built in 1867. It was owned by a Portland wholesale grain concern. At that time large shipments of corn were brought in bulk by schooners from New York and Baltimore. They discharged at Portland because all but native Casco Bay pilots disliked to take their vessels in from the sea through the poorly marked channels that led to the Basin Cove tide-mill although there was plenty of water. Thus the corn was transshipped in smaller local hulls down Casco Bay to the mill.

It is said that the discussions and criticisms by navigators over those uncharted perils, created an agitation which resulted in the establishment of Half Way Rock Lighthouse. This is now one of the most valuable aids to navigation in lower Casco Bay.

Basin Cove tide-mill ground much grain up to 1885 when a combination of circumstances made its further operation unprofitable. It cost too much to get corn to the mill, while steam plants and modern machinery set too fast a pace for the antiquated tidal mechanism to follow.

At the sleepy little village of Phippsburg near the mouth of the Kennebec River, the few remaining inhabitants are living largely in the reflected glories of the past. During those days when the sailing vessel was supreme on "the Seven Seas," more than two hundred beautiful, full-rigged ships, brigs, barks, and later, four- and five-masted schooners, were launched from Phippsburg yards.

Ruins, history and traditions characterize the present-day Phippsburg. Outstanding among the former is a gray old tide-mill resting on piles, said to be the first mill for the grinding of grain along the lower reaches of the Kennebec Valley. The present highway through this part of the town is only a stone's throw from the mill and passes over what was once the dam which held the waters of the tidal basin.
Basin Cove, South Harpswell, Maine

The Basin Cove Tide-Mill, South Harpswell, Maine
Typical Tidal Basin, Phippsburg, Maine
A TIDE-MILL ONCE STOOD WHERE THE WATER NOW RUSHES THROUGH

Tide-Mill at Phippsburg, Me., built in 1795
The action of the tides of years has created new channels so at high water the old mill which originally stood on the mainland is now segregated on a diminutive grassy islet. This mill was built in 1795. James McCobb came to Phippsburg from Ireland in 1730 living in a log cabin hewn from the forests close by. Other settlers joined him, but it was he and his sons who conceived and carried through the tide-mill enterprise. Soon this section became an important shipping and trading point and from the shores of the Kennebec and the New Meadows, and far up and down the coast, the fishermen-farmers brought corn in their boats to be ground.

After the mill was discontinued about half a century ago, the sluiceway was closed and the dam rebuilt into a solid retaining wall over which the highway to Popham Beach is routed, so that marked changes took place in the tidal basin. Formerly, when the salt sea water filled it, the youngsters of the neighborhood fished out smelts, cunners and alewives. Gradually, however, with the shutting out of the tidal flow, the basin lost its salinity. Fed by innumerable bottom springs and several little brooks that tumble down from the hills, it is now a fresh water pond.

There is a summer camp for boys on the shores of the erstwhile tidal basin, the water is pure and drinkable, and the youngsters instead of fishing for sea denizens, bait their hooks with angle worms and catch white perch, pickerel and squirming eels! Just across the roadway—the former dam—looms the mill against a background of broad river and distant shore. An interesting reminder and survivor of what for Phippsburg were truly the “good old days.”

Western View of East Bridgewater, Mass.

Printed from the original block engraved in 1838 for Barber’s Historical Collections of Massachusetts