

A History of the Cape Cod Canal

By GEORGE EVERETT BURBANK

The Cape Cod Canal is a subject both old and new, and has been talked about since the days of the Pilgrims nearly 300 years ago; but not until the year 1914 did the canal become a reality with the waters actually flowing across the Cape from Bay to Bay. We know that this almost natural water course was used by the Indians and early Pilgrims, Myles Standish being the first one to propose a canal in 1625. In 1736 the isthmus was spoken of as the place where a canal had been talked about for 40 years.

The first survey was made in Washington's time, 1776, and so reported to the Continental Congress. The canal was talked of in 1791, also 1798; and in 1818, the Massachusetts Legislature gave a company permission to survey. In 1824 the United Senate gave permission to survey and it was thoroughly done between Buzzards and Barnstable Bays. In the years 1825, 1826 and 1830, canal matters were again taken up.

But the most hopeful outlook for canal building in our day and generation was in 1860, just previous to the opening of our Civil War, when a committee appointed by the Legislature (in accordance with the Governor's message) caused a very careful and minute survey to be made to determine the best location, rise and fall of tides, locks and water sluices, with a breakwater on the Barnstable end. They reported an estimated cost of from five to ten million. The survey cost \$50,000.

In 1870 a charter was granted to Alpheus Hardy and others, that was five times extended. A little digging was done at North Sandwich and Scussett Beach. In the summer of 1880 work apparently began in earnest near Town Neck in Sandwich. A gang of 500 Italian laborers, with wheelbarrows and

shovels, worked steadily for a month, piling huge mounds of soil on either side of an excavation; but, upon the contractors failing to furnish money on pay day, work was suspended, and a riot among the workmen barely averted, the State being called upon to remove the Italians out of town.

In 1883, the privilege of the Whitney charter was granted to Frederick A. Lockwood under the name of the Cape Cod Ship Canal Co. They caused to be built an enormous



SECTION OF BREAKWATER

dredge costing \$75,000, and undertook the enterprise at \$1,000,000 per mile, the canal to be completed in one and one-half years.

This mammoth dredge was brought in through the beach bank in March, 1884. By the terms of this charter the company were obliged to spend \$25,000 in actual construction before a given time; and, in order to do so, vigorous methods had to be inaugurated. Although the big Lockwood dredge was eating her way into Scussett marshes, it was not using up money fast enough, so the company decided wharfage might, and, accordingly, hundreds of huge oak piles were shipped to Sandwich and a huge wharf built on the marsh where there was no harbor and no traffic.

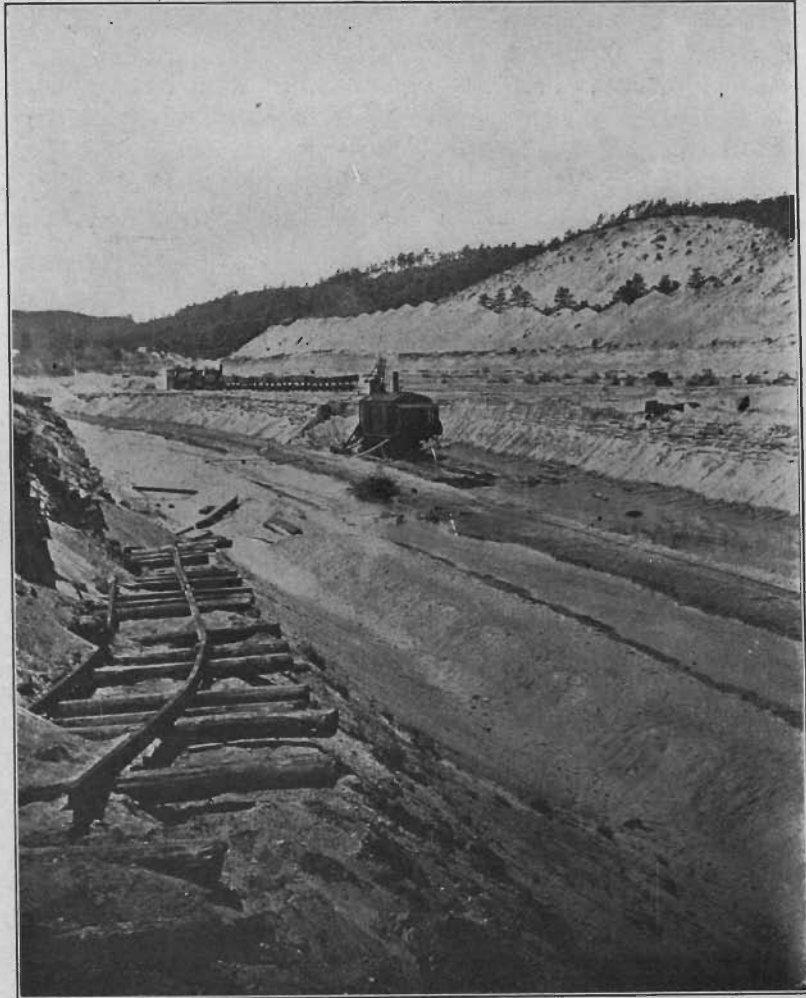
Towards the end of three weeks they were shipping these half-ton piles by express, so

great was their haste to spend money. They had acquired such momentum, that, before they could stop, \$40,000 had been spent instead of \$25,000.

The charter was saved for a time, but the company died of over exertion, leaving as a monument, a ditch (a mile long), the charred remains of the dredge (which the boys burnt Fourth of July night, 1896), and the rotting piles of an unfinished wharf.

Canal bills were presented and among them, one that favored the Government furnishing the material and the State "Convict Labor from the State's Prisons," but this was strongly opposed.

We next hear of the canal when the bill to incorporate the present company, The Boston, Cape Cod and New York Canal Company was petitioned for, March 23, 1899. A hearing was given May 12th. Senator Post,



EXCAVATING WITH STEAM SHOVELS

In 1896, the Maritime Canal Company obtained a charter, but nothing came of it.

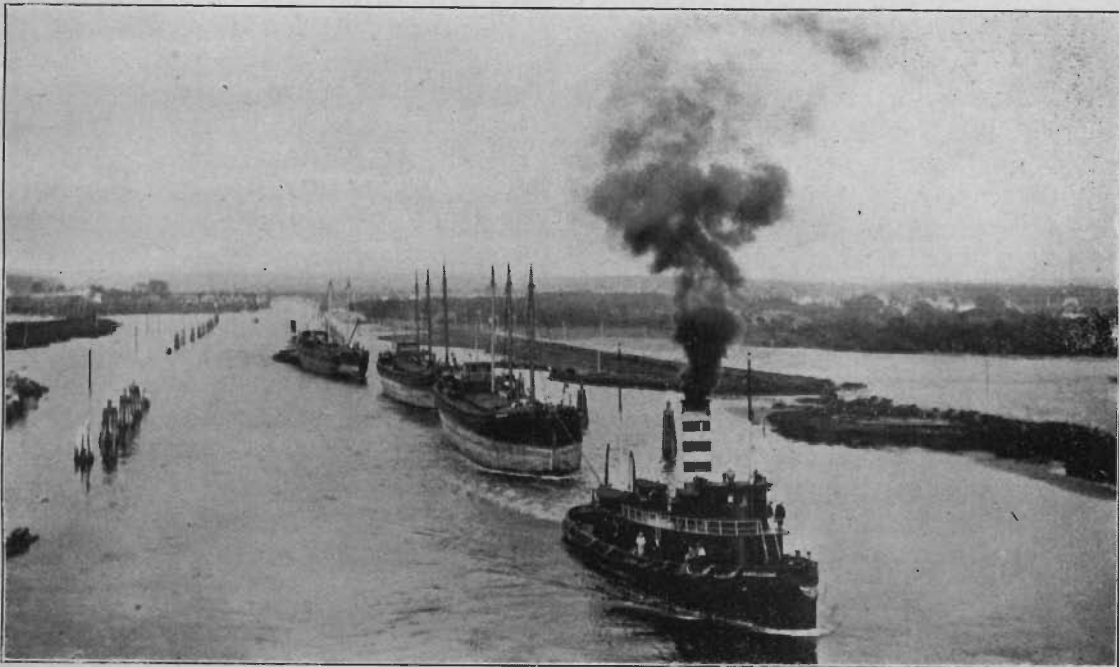
January, 1897, the Cape Cod Canal Company petitioned for a charter, but nothing ever came of it. In 1898, seven Cape Cod

of Berkshire, gave a luminous lecture on the history of efforts to build Cape Cod canals from 1676 until now. Many other senators favored the bill, but of no avail, for it was refused a third reading and rejected. May 16,

Senator Post again made a plea, moving for reconsideration. The heart of the Senate softened, and the matter was tabled. Tuesday morning, after a long debate, the Senate ordered the Bill to a third reading by a vote of 15 to 10. On May 26, the Bill reached the House, and after a lively discussion by a dozen or more members, was passed to be engrossed by a vote of 120 yeas and 29 nays. On June 1, 1899, Governor Walcott affixed his signature to the Bill, which gave the Boston, Cape Cod and New York Canal Company their charter.

proved and accepted by the commissioners until a year later, May 8, 1907.

During all these later years, these canal schemes were sort of stock watering affairs, instead of being conducted along true business lines, and for that reason the Legislature lost confidence whenever a company made application for a charter; and the railroads, too, were always in opposition and against the building of a canal paralleling their lines of traffic. But when the name of August Belmont became a factor in the enterprise (in the year 1904), the Railroad



BARGE TRAFFIC IN THE CANAL

Photo by McIntire, Sandwich

September 29, 1899, the company deposited the \$200,000 with the State treasurer, also filed at the office of the Harbor and Land Commissioners, detailed "Plans of Location and Construction" (including specifications for bridges and approaches). Later on in the Fall, was deposited with the Treasurer of Barnstable County \$500 each for the towns of Sandwich and Bourne. July 17, 1900, their charter was amended; and after a lapse of nearly five years (May 18, 1906), a set of entirely new plans were filed, but were not ap-

proved and accepted by the commissioners until a year later, May 8, 1907. Commissioners and Harbor and Land Commissioners did all they could to aid this great work. But even after this company had deposited the money with the State, and with the towns of Sandwich and Bourne, and filed all plans and specifications in compliance with their charter, the officials of the State still doubted (with such restrictions upon their charter) if work ever would be done.

Just at this stage, too, Engineer William B. Parsons discovered the presence of quicksand, which caused him to shake his head in

a doubtful manner, and for the time being canal matters hung in the balance. The late Charles M. Thompson, engineer in charge, who had been in the canal business since Lockwood's time (1880) and who gave almost his whole life working for their interests, asked for one more meeting that he might explain his theory. Having surveyed and studied the canal zone for twenty years, his wish was granted, and he gave such a reasonable explanation that it seemed proof-positive that not enough quicksand existed to interfere with construction. And, accordingly, forthwith preliminary work began.

February 6, 1907, nearly eight years after the bill was signed, the Canal Company advertised for bids for construction, giving a time limit until the 28th day of March, at 12 o'clock noon, to receive proposals. On the last mentioned day, the contract for building the Cape Cod Canal was awarded to the Cape Cod Construction Company for \$11,990,000.

This company consisted of DeWitt C. Flanagan, backed by the Belmonts, Engineer William B. Parsons, a former member of the Panama Canal Commission, and John B. McDonald, contractor for the New York Subway. They in turn sub-let the contract to the Dignon Construction Company of New York for the stonework, and the dredging work to the Furst-Clark Construction Company of Baltimore.

The first stone began to arrive for the breakwater in June. But none was allowed to be dropped until the Secretary of War gave his approval of so doing, which was on June 17, 1909. On Saturday, June 19, at 3.30 p. m., the first stone, weighing one ton, was dropped overboard in 40 feet of water. From that time, work went steadily on, until 10,000,000 tons of stone had been used in the construction of the breakwater.

June 22, 1909, August P. Belmont officially dug the first earth midway of the canal zone, in the presence of a company of fifty or more men, representing more wealth than had ever before stepped upon Cape Cod soil at any one time. And in their presence, and in the pres-

ence of County and Town officials, said: "In digging this first shovelful of soil, I promise not to desert the task until the last shovelful has been removed."

A silver spade at Bournedale village
First stirred the ancestral soil.

"A certain pride I have," said August B.,
"In building this canal from sea to sea!

My highest aim in life

To see fulfilled—The Pilgrim's wish!

I stand on hallowed soil,

Through which they travelled, sailed and fished."

During this season the right of way was obtained, and negotiations made for the removal of the railroad tracks. The first work at the Buzzards Bay end was begun by the mammoth bucket dredge Kennedy, followed later on by others.

In October, the foundation for the big roll lift railroad bridge at Buzzards Bay was consummated. The next bridge constructed was the highway bridge in Bourne, followed later on by the bridge at Sagamore.

On the Sandwich end, the big suction dredge McKenzie began digging in from the sea, Oct. 16, 1909. She had worked one week when a terrible gale sprang up and she put for Provincetown, remaining there one week before returning. She did splendid work until November 9, when a gale sprang up from the north, and she was obliged to flee again for safety.

During this storm the two lighters at work on the breakwater were cast ashore and destroyed, the crews having a narrow escape. The several vessels lying at anchor loaded with stone were in imminent peril. Our old town of Sandwich was all excitement. The new motor-power lifeboat from Provincetown was sent for and came across the bay through the mountainous seas; also the Manomet lifeboat and crew came overland with horses. The U. S. Cutter "Gresham" was telephoned for. She came and "stood by" until all danger was over, the vessels holding to their anchor and not a man lost.

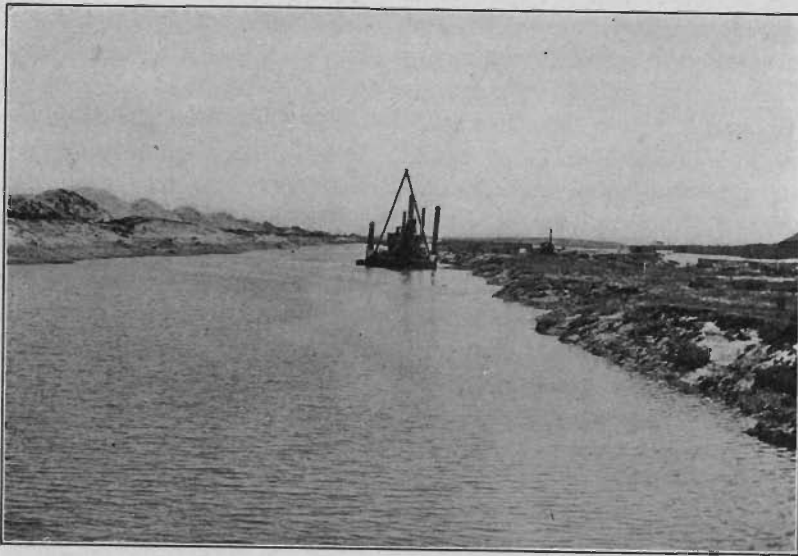
The McKenzie sailed again from Provincetown on the night of November 28, arriving

off Sandwich at 4 a. m. the following morning, the bay being as calm as a mill pond. In an hour's time, without any warning, the wind suddenly changed from south to north-east, assuming hurricane proportions. Captain Cromwell of the tug *Buccaneer* (70 years o'd) set about the task of again pulling the *McKenzie* to Provincetown in the face of a 70-mile gale.

During this storm I thought of things present; I thought of things past; I thought

tically struggling to reach Provincetown's harbored shore.

The waters from the old canal inside the Sandwich marshes were brought through the beach bank by means of a small orange-peel dredge. The following spring, on the morning of April 6, 1910, a channel was made with shovels through the narrow strip of sand, letting the water into the sea. At 11 a. m. it started on its course, cutting out the sand so rapidly, that, at 3 p. m. (four hours after-



SUCTION DREDGE AT WORK

of the Bradford storm of 1635, winding oaks and pines during the height of that twenty-foot tide. I thought of the storm of '51, when Minot's Light and its keepers went down to death with their duty well done. I thought of the "Portland" storm of '98, I thought of all those souls who met with such an awful fate.

I thought of this present storm of 1909; I thought of what might have happened beneath the waves of that salt sea brine. I thought of the dredge *McKenzie*; I thought of the tug *Buccaneer*. I thought of Jimmie, our Sandwich boy; I thought of his father, too; I thought of all the crew somewhere out on the waters deep and blue—but where! No one knew! Fifty souls or more were fran-

ward) a channel fifty feet wide had been made, with a depth of twelve feet at high water. The *McKenzie*, which was in Plymouth Harbor, was at once notified, and was towed, on April 8, across the Bay to Sandwich, where she passed through the opening into safe anchorage. The second big suction dredge, the No. 9, came May 2, 1910.

During the winter of 1911, two land excavators were built, which were used to take the top soil down to water level ahead of the dredges. After awhile these two suction dredges encountered so many rocks that they were unable to continue in the work, compelling the company to install dipper dredges, and to carry the spoil out to sea in large

scows. Accordingly, two large dredges were built, one at each end of the canal, the Governor Herrick, at Sagamore, and the Governor Warfield, at Buzzards Bay, being launched in due time. These were followed by the dredges Capitol, National and International on the Sandwich end; and on the Buzzards Bay end, the mammoth dredge Kennedy and the huge dredge Onondaga, the latter said to remove sixteen cubic yards of earth at a scoop.

While the suction dredge Federal was working her way up Monument River, steam shovels and trains of cars were daily carrying thousands of tons of soil off on spur tracks either side of the canal. And, thus the work went steadily on till August Belmont sailed through his monumental canal on June 22, 1914, five-years to a day from the day he removed the first shovelful of earth.

Two months previous to this, April 21, and only a few hundred yards from the identical spot where the first shovelful was removed, the barrier across the canal at Bournedale was broken, and the waters of Barnstable and Buzzards Bay met for the first time. Mr. Belmont, taking a glass in each hand, mingled the waters from Barnstable Bay (which he held in his left hand) with the waters from Buzzards Bay (which he held in his right) saying as he did so: "May the meeting of these waters bring happiness and prosperity to our country and save some of the misery which the waters of the Cape have caused in the past!" Mr. Belmont and Mr. Parsons, in the presence of canal officials, shook hands across the narrow stream of water which made Cape Cod an island.

The first cargo into the canal was 2,000 tons of coal brought in by the barge Cassie, December 14, 1910.

The first passenger boat in the canal was the steamer King Philip, April 15, 1911, from Boston, bringing in as excursionists over 300 Technology students.

The next passenger boat was the Dorothy Bradford, on June 9, 1914, bringing in 1,340 passengers. As the gangplank was put out,

Selectman George S. McLaughlin said: "I welcome you all to our city of Sandwich!"

The first passenger boat to sail through the entire length of the canal (from Sandwich to Buzzards Bay) was the Rose Standish, from Boston to New Bedford, on July 28, 1914.

The following day, July 29, the canal was officially opened, and those who were on the spot to witness the passing of the vessels to mingle with the thousands of people and enjoy the exhilarating breezes from old ocean, under a clear, blue sky and a bright sunshine, felt as though nature herself was wholly in accord with this grand celebration!

Furthermore, on this same day, our old town of Sandwich was celebrating her 275th birthday, and to do her honor, August Belmont, in person, left his own fleet of vessels (for a brief half-hour) to join with us in helping make the occasion one that will always be remembered and pass into a life-time history. His speech was short and to the point. He alluded to his ancestral past, the age of present development, and the future prosperity which he hoped the old town would derive from the building of this new waterway. At the close of his speech, in the presence of the Governor, State officials, invited guests, townspeople and multitude assembled, William L. Nye, chairman of the reception committee, and president of our Sandwich Historical Society, had the honor to present to August P. Belmont, in behalf of the town of Sandwich, a loving cup as a token of love and respect, for the courage and perseverance he had in undertaking the largest enterprise in New England; also, to extend to him the good will and fellowship of our community. He being a life member of our Sandwich Historical Society, we, as members, feel proud to have his name enrolled upon our books.

The first vessel to pass through the canal after it was officially opened, was the yacht of Dr. Samuel Crowell, of Dorchester and Dennis, on July 30. He was the first man to pay toll for a passage through the new water

way, paying \$8.00 to go through and \$12 to return.

The first tow through the canal was on August 12, 1914, an ocean tug and three barges.

The first sailing vessel that went through was a three-masted schooner, on September 5, 1914; and the first ocean steamer, the Dutch steamer Terbergen, November 17, 1914, being 350 feet long and 3,826 tons burden. She was the largest vessel up to date that had passed through.

During the first six months, it is said 2,000 crafts of all kinds had availed themselves of the privilege of passing through the new waterway.

In length the canal is eight miles long, 25 feet deep at low tide, 300 feet wide on the bottom at each end, 100 feet wide on the bottom at the narrowest part, spanned by two highway bridges and one railroad bridge, which, when opened, has a width of 160 feet. Both sides of the banks are riprapped with stone. Also, on posts five hundred feet apart, electric lights show the way by night over the entire course from Wings Neck Light to the end of the Sandwich Breakwater, a distance of twelve miles.

A saving of some sixty miles or more is made by sailing through the new waterway.

The toll for passing through varies according to size and tonnage of the vessel. During one day last year (July, 1915) nearly \$2,000 was taken in, the largest toll ever yet taken in one day.

Seventeen million cubic yards of material have been removed in cutting the channel across the Cape, and ten million tons of stone used in erecting the three thousand feet of breakwater at the eastern entrance.

In the five years only six men have lost their lives in the building of this \$12,000,000 canal.

In conclusion, I will say that there are five men whose names will always be remembered as most influential in the carrying out of this great project.

Through the efforts of DeWitt C. Flanna-

gan of New York, the \$200,000 was deposited with the State Treasurer in order that the charter might be held and maintained.

Through the intelligent foresightedness of William B. Parsons was made possible the feasibility of removing 17,000,000 cubic yards of material that the waters might flow across the isthmus.

When the finding of quicksand was about to halt the proceedings, and almost caused the company to entirely abandon the project, the late Charles M. Thompson came to the rescue, by giving such practical reasons from an engineer's standpoint, that all dangers arising from quicksand could be entirely overcome.

And, last and greatest of all, August P. Belmont, the only living man who has dared in the face and eyes of the State and Nation to finance to a completion the building of the Cape Cod Canal.

TO MY FATHER

MARO BEATH JONES

Whence sprightly step and raven locks
As three-score-ten is passed?
Why year by year at each birthday
Seem'st younger than the last?

Why foldless brow and sparkling eye?
Whence vigor unimpaired?
What the secret thou hast with thee—
Shall it with others remain unshared?

Ah no—the answer is plain at hand,
Nor magic lies therein:
The strenuous life exemplified,
A frame uncursed by sin.

No dissipation's baneful blight
Hath marred the form God gave to thee;
No vice hath seared thy character,
From habits foul art ever free.

And with all this, as do the years
Their course relentless roll,
Thou hast that grace all-requisite:
Thou hast a youthful soul.

FREEDOM'S BIRTH

ALBERT EDWIN NICKERSON

Roll back your waves, old Ocean blue,
That beat on Cape Cod's peaceful shore,
And tell the people of the earth
That Freedom's spire stands there secure.
That little band of Heaven-born souls
That floated o'er your foaming crest,
Found here a shelter for their bark
Secure at last from tyrant's quest.

Within your rugged, outstretched arm,
Where white man ne'er had slept before,
These Pilgrims rested for a space
And thanked their God upon your shore,
That they, at last, had found a land
Where troubled hearts could find relief
From haughty monarch's stern commands,
That made their land a home of grief.

At anchor safe the Mayflower lay,
One hundred souls comprised her band,
And in her cabin wrote the scroll
That marked the birth of Freedom's land.
Where, graven on that granite spire
That lifts its head to Heaven on high,
Will tell the ages yet to come
The "Compact" was not made to die.

Lift up your head, Oh! Pilgrim tower,
On Cape Cod's naked, outer rim,
Above the early mists of morn
And gleam across the Ocean's brim,
A beacon light to troubled minds
That seek our shores for Freedom's air,
And burn the message in their breasts,
A welcome to this land so fair.

Long may your granite walls defy
The Ocean's storms and Winter's gale,
And tell the stranger at your feet
That you are firm, what e'er assail!
'Twas in the shadows of your dome
These martyrs knelt in humble prayer,
And broke allegiance to thy Throne
And signed the sacred "Compact" there.

Jonathan Bates, last surviving member of the celebrated firm of fur dealers, died recently in Boston at the age of 84. He had a summer home on the Cape.

FARMERS' INSTITUTE

A Farmers' Institute was held at Eastham on Wednesday, Feb. 9, under the joint auspices of the Barnstable County Agricultural Society and Cape Cod Pomona Grange.

President Thomas C. Thacher of the B. C. A. S. presided.

Dr. Twitchell of Maine spoke on "The Soil and the Man," a good, practical talk on farming, showing where improvements could be made in some of the farming methods of Cape Cod.

After his address he answered a number of questions asked by persons present.

Hon. Thomas C. Thacher spoke on the Y. M. C. A., Boy Scouts, Society for the Prevention of Cruelty to Children, Cape Cod Farm Bureau and Rural Credits.

There were about 75 present.

After the Institute a meeting of Cape Cod Pomona Grange was held. There were 91 present at the evening session.

CHATHAM ON THE BOOM

Chatham is one of the busiest towns on the Cape in the way of annexing new enterprises. The town's latest is a cold storage factory, capital for which is now being raised at this and adjoining villages.

Chatham's first venture was the Chatham Bars Inn, built about three years ago by Charles W. Hardy, a summer resident. Next came the mammoth Marconi wireless station at North Chatham, constructed two years ago at a cost of \$2,000,000. A few months ago the Weld Manufacturing Company built a big factory and has received large orders. Now the cold storage plant, headed by a resident of Boston, it is said, will be capitalized at \$125,000, and work will start at once.

Frederick Tudor of Bay End Farm, Buzards Bay, again possesses the license plate No. 1 for his automobile. Mr. Tudor has received the same number for the past several years.