

BRACKETT'S POND

PJ 24 Jan 74 -- Brackett's pond, the Sherburne pond at the Plains, and the pond in the Haven field in city limits, have been examined by the Board of Trade and City officials with the view of increasing the much needed water supply. The investigations will continue.



## FOUNTAIN HEAD

Once one of Portsmouth's major sources of water, Fountain Head has long since ceased playing that role.

The Fountain Head was a gaggle of springs set in the open country between Pannaway Manor and the former Pease Air Force Base. IN December, 1797, a local group was incorporated as the Portsmouth Aqueduct Company, and the firm laid a string of hollowed out, wooden logs into the town from the Fountain Head, and began supplying water to residents along the route. A series of articles ~~was published in the Portsmouth Herald in 19~~ on the Aqueduct, beginning, ~~There are many references to it in They Came to Fish; also in the Rambles, Vol. IXL, p. 239.~~

There was much dissatisfaction with the Aqueduct, almost from the beginning, at least after residents simmered down from the thrill of having running water in their yards. For example, the Journal, <sup>29</sup> July 1871, said:

(N) . . . . The scarcity of water is severely felt in some parts of our city. A visit to Fountain Head Tuesday showed the water in the spring there to be about nine inches lower than last year at this time. Water from the Sherburne spring has for several weeks been pumped in the Company's stand pipe at the rate of nearly 25,000 gallons a day and still there is need of more water. We are informed that a hot-air engine is speedily to be put in operation which will be capable of forcing 350,000 gallons in a day, enough to more than supply the general demand.

14  
The Mayor in reporting for the committee appointed to examine into the question of obtaining a supply of water for the city, said the committee were satisfied there was an abundant supply of water at the Fountain Head of the Aqueduct Company.—

And the committee unanimously recommend that the city purchase all the property of said Aqueduct Company, and put in water works that will bring a full supply to all parts of the city; The committee find that the present facilities for conducting water from Fountain Head to the city are totally inadequate, and that in order to utilize the supply of water as should be done, it will be necessary to build a reservoir at some point near the Fountain Head. The committee were instructed to ascertain at what price the property of the Aqueduct Company can be purchased.

At a special meeting of the Board of Mayor and Aldermen, Tuesday afternoon, it was unanimously voted not to lay out a new highway from Squirrel Hill to Rye Centre, asked for by the petitioners.

11 Sep September, 1883  
PJ Sept 83

The Aqueduct Company has employed the driving well men, who have been operating at the Custom House, to try their method at Fountain Head. Good success has thus far followed their work.

PJ 29 Sep 83 — It is stated that the Aqueduct Company, through the driven-well process has struck an abundance of water on the Haven Scott Farm, Gosling Road, at a dept of 47 feet.

(These wells probably became the Haven wells, which were lost to the city when Pease AFB was built. — Check Boynton's water thesis.

Should be under #56

Haven Spring

~~PJ 28 June 90~~

*See June, 1890, the*

*Journal*

Does anyone believe that if the syndicate's engineers were selecting a water-source for that corporation instead of one to be recommended to the city for purchase, they would pass by the Fountain-Head system, with its thirty-five feet of head at high water mark at Great Bay, and fix upon a brook filled with miscellaneous vegetation running twenty-five feet lower? How about the cost of raising this brook water for high-service, and when you have done it, what have you got for your money?

PJ 3 October 1891 --

—It is interesting to know that the water commissioners have found out there is plenty of water at Fountain Head for the needs of a much larger city than our own. Since this is so, we suppose that we shall hear no more of the project of acquiring great swamp for an additional supply. ✓

*Ed. Charles Hammond, com.*

*See March 17*

~~PJ 43 March 1894~~

*the Journal*

During the past ten days the drinking water supplied our citizens, has been an unclean-looking liquid, sometimes looking like dirty brook-water, but for the most part appearing something like soap-suds of varying strength. This fact has awakened much comment, and it is said a physician claims the water is unfit to drink, being loaded with mineral matter that will infallibly produce calculi in various organs of the body if its use is continued. It has also been charged, and the truth of the charge is believed by many people, that while the citizens are obliged to use this fluid, the breweries at the west end have been supplied with the pure, sparkling and colored water which the city had formerly enjoyed

for many years, or ever since the Portsmouth Aqueduct company had first utilized the springs at Fountain Head. The Journal has endeavored to get at the truth of the matter and is now prepared to say:

(First:—The cause of the color of the water is due to the suspension in it of earthy matter from two sources; one from surface drainage through a cave-in of the walls of the gallery connecting the various wells at and about Fountain Head and the new driven wells; the other is the clay washed from the rock with which the galleries are made, and also from the clay substratum tapped by the new wells. The surface drainage forms by far the larger source of the supply of the coloring matter.

Second—The report and statement that the breweries are furnished water from an independent supply, or that they get a different quality of water from that furnished the general public, are false. Commissioner Broughton states, and his statement has been verified without his knowledge, that all the aqueduct water brought into the city, by whomsoever used, is taken from the same source and is supplied through the same general mains.

Third—The old water system was wholly discontinued, and the supply of water through its pipes and logs was entirely shut off, at midnight on the 25th day of September, 1893, and Mr. George M. Ayers and his assistants afterward took up the gates and several sections of the old pipe. They then filled in the trench and since that day no one in Portsmouth has been able to drink or use any water that did not come into the city through the general main or go

through the stand pipe on Powder House Hill.

Of the truth of the above there can be no possible doubt, but the commissioners owe it to themselves and the people to make public a similar statement over their signatures, for if this is not done there will still remain in the minds of some people a suspicion that the commissioners must have some patent reason for maintaining silence, and neglecting or refusing to put themselves on record in the matter.

Whether the water is healthy, or the reverse, we know not, but there is not the slightest doubt that the source of its contamination will be found, and the trouble remedied, as soon as the work can be done to advantage, but that should be very soon. So long as the people know that the condition is only temporary and will cease in a short time, there seems to be no need for any further anxiety in the matter.

Aug 13 August 1898 - While Dover people complain about their drinking water, the water supplied this city from the Fountain Head is highly commended by traveling men, who say that no better quality is furnished in any other N.E. cities they visit.

Herald 7 July 1905 Severe drought in Portsmouth. On 6 July, the water commissioners voted to drive additional wells at the Fountain Head

# HAVEN SPRING

Now buried under the concrete apron of the former Pease AFB, the Haven Spring was prime source of water for Portsmouth for many years. See Wyman P. Boynton's thesis on Portsmouth water supplies on the shelves of Portsmouth Athenaeum.

PJ 30 Jan 75 --

**THE WATER QUESTION.**—The first intimation (given through the Portsmouth *Journal* last week) that our long suffering community was to have an increase in its water supply, created much talk, and many congratulations were extended on all sides. But let housekeepers remember that as we are yet a good many weeks from that promised millenium, when the excellent and abundant water from the Haven spring will be ready to let on, it behooves them to guage their daily uses of aqua to the strictest limits of economy; allow none to go to waste, utilize rain water and snow for home uses as far as possible, avoid everything which may make the present supply lower than it is. The Aqueduct Company— and they ought to know—say, that there is no possible danger of exhaustion as long as retrenchment is the watchword; so it rests with our people (if we may parody a little).

To have or not to have !—that is the question:  
Whether 'tis better to suffer  
The pangs and torments of a giving out,  
Or to take measures against a host of troubles,  
And by economy prevent?

We appeal then to all users of water to lend a helping voice and hand in this vital matter. Will you heed the appeal? or do you prefer the terrible experiences which come through a water famine.

We as a community are brought to that pass where the waste of water will certainly create the want of it, but with care on the part of each inhabitant there need not be felt the slightest alarm.

Regarding the Haven spring, which as soon as the ground will permit, is to be utilized for local use, there is this to say further : that it is of the coolest quality, free from extraneous matter, being so clear that scarcely a speck is discernable as one looks down to the bottom, which is composed of sand, gravel and stones, through which the water is continually boiling up. The Aqueduct Company opened in November a spring measuring about 80x50, and a basin about 60x30, and at that time even though the spring was affected by the drought it required two 6-inch pipes, each 12 feet long, in order to keep the water down sufficiently to permit the men to work, the water running at a tremendous rate all the time. Since then there has been no perceptible decrease in the amount of water though there has been a fall of less than three inches of rain during the two intervening months, and this, too, notwithstanding the water from the spring has an almost uninterrupted run into Great Bay.

No doubt exists in the minds of those who have examined or are in any way acquainted with the Haven spring, as to the quantity which it will yield, for it is believed to be inexhaustible ; and when the two mains are united that there will be a great sufficiency of the sparkling beverage. At any rate such is the anticipation. The spring, according to the boundary, lies in Portsmouth, (not Newington as stated last week) a few rods off what is called Sherburne Road. The farm on which the spring is located contains twenty acres.

Herald &amp; December 1904 -

Henceforth it will no longer be written "Peverly Brook" on the books of the Portsmouth Water Company; instead the designation "Peverly Springs" will be adopted.

It is stated as one reason for the change that the other sources of the Portsmouth water supply are known as springs; for instance, Haven Springs, Fountain Head (Springs), and Sherburne Springs. Why not Peverly Springs, say the water commissioners.

In making the change, however, the principal reason considered was that, besides being a much more euphonious title, it is a more nearly correct one, since the main source of water for the pumping station at that point is two springs, these furnishing a constant flow.

It is, too, a quick water shed so that the only time when rainfalls augment the flow of spring water, is the two days or so immediately following the precipitation. It is believed that the new name of Peverly Springs will soon come into general use.

PH 10 Dec 1904

The use of Peverly Brook water for a short time caused many curious comments on the part of those who disliked it. Others, however, claimed that it was superior to the water of the Haven Springs and there were many who did not realize the difference. While this water was in use, a lady came into the office of one of the commissioners and in an excited manner asked, "What are you giving us that Peverly Brook water for? When are we going to have the other?" "Just as soon as we get our pumps repaired,"

answered the commissioner. "Well," said the lady, "I wish you would hurry it along. I won't drink it and while that water is being furnished by the department I will have to drink porter." "That's all right madam," exclaimed the member of the board, "You're in luck to have the Porter, but don't take too much of it." She was informed that she would soon see the crystal fluid from the Haven Springs coming into her house and she departed satisfied with the information received.



Herald 5 March 1906 -

The board of water commissioners at a meeting held on Saturday evening voted to purchase an air compressor and the necessary fittings and install a modern air lift at the Haven station.

On Feb. 22, Mayor Marvin, accompanied by the commissioners, visited the neighboring city of Newburyport and inspected the work of like nature now being operated by the water department of that city.

The water commissioners have had this matter under advisement for a number of weeks and the new machinery will be ready for use without

delay, after it is received from the company now placing this modern system for many water companies in the states.

A steel tank receives the compressed air from the engine and it is thence conveyed by one-fourth inch iron pipe to the bottom of the wells. The compressed air then lifts the water into two special standpipes, twenty-six feet high, which are connected to the main line leading to the Sherburne station.

The opinion has long been held that a great risk is involved in having only one pump at the Haven station. This pump has been in con-

Following item is out of order

PJ 5 July 1902 -

The following is the plan proposed by the water commission in relation to the new water supply that it desires to obtain:

The land that it is proposed to acquire includes about thirty acres, owned by several persons in the town of Newington. Through it runs what is known as Peverly brook, a trout brook fed by springs, and into which empty a dozen or more other brooks, all fed by springs. The flow of Peverly brook is estimated to be between 1,000,000 and 2,000,000 gallons a day the year around, and it runs through a natural basin which, by the erection of an easily constructed dam,

could be converted into a storage reservoir with an estimated capacity of from 100,000,000 to 200,000,000 gallons.

It is not the intention of the commission to turn this water into the supply pipes of the new system for general distribution through the city, but to utilize it for supplying the boilers of all the big industrial establishments, for which its softness of quality makes it much preferable to the present supply, although not so good for the manufacturers of beer.

The cost of bringing in the water of the brook would not be great as the old wooden ten-inch main from the

Haven springs to the Portsmouth brewery can be used as it is still in place, presumably as good as ever, and is of ample strength and capacity for carrying all the water required for boiler service in the city. From Peverly to the Haven springs is about a mile and that is all the main pipe that would have to be laid.

The line from the Haven springs is crossed on its way to the city by the pipe leading from the Jones pumping station in Newington to the Frank Jones company's brewery, and the one leading to the yard of the Boston & Maine railroad, so it would be a simple matter to connect with them.

From the railroad yard to the coal wharf of the railroad, where a good deal of water is used in the boilers of the numerous engines, and across the Noble's island bridge to the power house on the island is but a short distance, and the necessary piping could be laid at small expense.

The industrial establishments and the railroad would be glad to get this soft brook water for use in their boilers, and the Peverly brook scheme of the commission appears to be well considered and judicious and worthy the careful consideration of the city government and the taxpayers.



## LONG SWAMP - GREAT SWAMP

PJ 15 Sep 83 -- The watering place at Long Swamp, just beyond the Plains is dry for the first time in the memory of the oldest inhabitant.

PJ 12 July 1890

The audience of the petitioners before the Board of Aldermen, for municipal control of the Aqueduct plant, is ended. It embraced the hearings ~~given on the fifth and eighth of July.~~ These have been all, both in numbers and enthusiasm, that could be desired. Our citizens have thronged the council chamber, and manifested the greatest possible interest in the water question. Fully cognizant of the importance of the presentation of their views before the board, in the most forcible and cogent form, they have been represented by able counsel. Of the manner in which their wishes have been voiced, there can be but one opinion: Messrs. Frink and Emery have discharged the duty incumbent upon them with the greatest intelligence and acumen. Nor have their efforts lacked the fullest measure of public appreciation. They have not talked to empty benches, but have been always assured of a generous and sympathetic audience.

The gentlemen from abroad, who had been called upon for professional investigation of the possibilities of a new water system, by one of the aldermen, attended at these hearings. They were the contractor and the engineer. The first was Mr. John T. Langford; the second Mr. Frank L. Fuller, both of Boston. At the adjourned meeting, held on Tuesday evening last, the seventh instant, after some preliminary discussion had been had, respecting the construction to be

placed upon the several charters, they were introduced to the petitioners present, and asked to report the result at which they had arrived. They did so; and the views given showed that they were both of one mind.

Mr. Fuller, the civil engineer, stated that in course of the search for a supply of water which he deemed adequate for the wants of Portsmouth, his attention had been attracted to "the land south-west of the city," which he designated as "the Concord

that in course of the search for a supply of water which he deemed adequate for the wants of Portsmouth, his attention had been attracted to "the land south-west of the city," which he designated as "the Concord Meadows." This territory is well known to our citizens under its proper although not euphonious name of Great Swamp. We proceed to quote from Mr. Fuller's report as follows:

The extent of the basin is 3.4 square miles; its supply would be from rain fall, and include the water-shed that would be tributary. Twelve inches of the fall could be made available, which would amount to 370,000 gallons a day. The soil underneath this tract is gravelly, and of good quality for retaining water. The water could be utilized by collecting it in large wells, and then pumping it into a stand-pipe, a suitable place for which would be the hill on the South Road, off Wibird st. The dimensions of this pipe would be 110 feet in height and 31 feet in diameter, with a capacity of 700,000 gallons. This would give a pressure of 50 pounds on a level, at the base of the stand-pipe. As this is higher than the city generally, an effective pressure of 60 to 70 pounds could be obtained. \* \* \* \* It is estimated that it would take 2½ miles of 16 inch pipe to the stand-pipe, with 10, 8, and 6 inch pipes through the city. On the plans hydrants have been located, 325 in all, 400 feet apart. Estimated cost of the system complete, about \$246,000.

The above paragraph contains the salient points in the report of Mr. Fuller, as read to the petitioners (and others) assembled at the adjourned hearing. We know the character of Great Swamp; where are the sources from which he expects to draw the water for Portsmouth? The nature of this water may be with justice deemed open to criticism. He refers to it "as of good quality, cool and pure, and nothing around to contaminate it." How does he know this; how far, pray, has Mr. Fuller penetrated the recesses of Great Swamp, which is well known as being practically inaccessible at this season of the year? It is a great earth sponge, permeated with surface water, drained from a large tract of the surrounding country, which embraces meadow and pasture land. Such springs as originate in, or flow through this land, percolate naturally through a bog soil, saturated with brook drainage through various growths of swamp vegetation, common to land of this description. Mr Fuller says he has seen very little of this, it is true. But Portsmouth men know the ground, and they realize that if there is a place in this region to be named as furnishing such conditions it is Great Swamp.

There is no market in Portsmouth for this marsh drainage. The proposition to furnish such a service is viewed everywhere by our citizens with contempt. There is, in addition, a wholesome degree of indignation, and any representative of the public interest could for a moment entertain no such plan. There lies within our reach a pure water supply with which our citizens are perfectly familiar. The springs at Fountain Head have been a blessing to our community, and we are fully ready to recognize their debt to the water which has been such a faithful servant. It is recognized by them

See Fountain Head for 3 October 91.

PJ 3 May ~~1802~~<sup>1903</sup> Portsmouth, Greenland & Exeter Electric RR finis  
as far as the swamp across from the Country Club's grounds, Over-  
head work not finished but tracks laid and graded. Cross if B&M  
bridge will be difficult.

See Hayes Farm (82) for 28 Sept 1908 Swamp dried out

Gazette 30 June 1796- Downing's --about 60 acres- for sale  
with a piece of Cedar Swamp and Salt Marsh. Now occupied by John  
Hodgdon.



SHERBURNE POND

See Brackett's pond.

PJ - 12 Aug 82 -- (This item may not be related to Sherburne Pond) The pumping house and its contents belonging to the Aqueduct Company and located at Sherburne Spring, were burned on Sunday. The engine, pumps and connections were ruined, and a rep of the company went to Boston on Monday to purchase new apparatus.

