



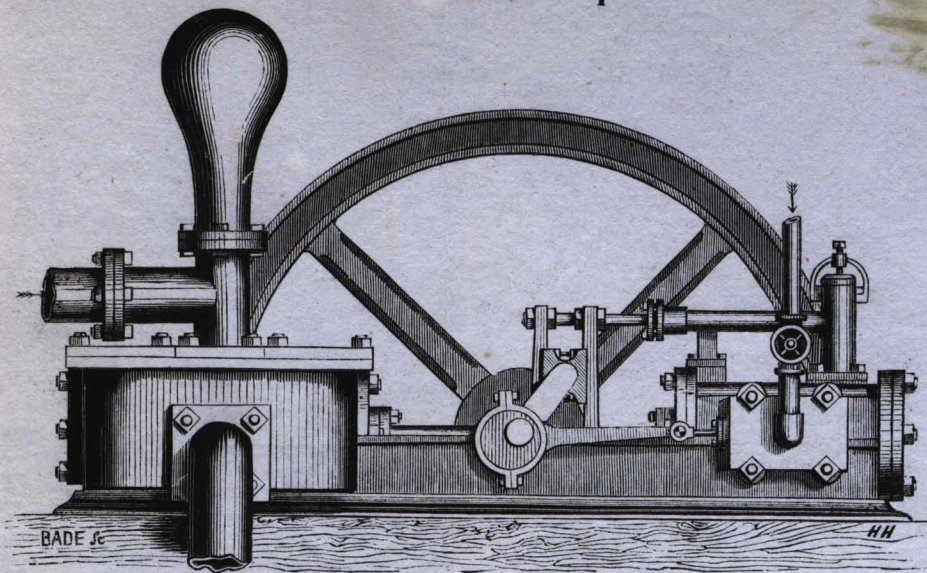
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Frederic Graff Jr. Scrapbook, 1854-1857**

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DIRECT ACTING STEAM PUMP.

Throws 2000 Gallons per hour.



MANUFACTURED BY
GARTLEY & MATLACK,
HYDRAULIC MACHINISTS,
No. 16 Arch Street, Philadelphia.

Water for Brooklyn.

The Brooklynites are to have water at last. The ceremony of breaking ground preparatory to the job is to take place to-day at 4 P. M. The President of the Nassau Water Company, Mr. JOHN H. PRENTISS, presides, and addresses are expected from Rev. Drs. BETHUNE, STORRS and KENNEDY. The use of the shovel is reserved for the Mayor of the city. Conveyances for invited guests leave the City Hall at 2 1/2 o'clock.

Nobody seems to doubt that this project is feasible enough, and that the work will be completed in two years. All agree that the water we are to have is excellent. The Nassau Water Company is chartered by the State Legislature, with a capital stock of \$3,000,000, with the privilege of increasing it to \$6,000,000, the city being authorized to subscribe \$1,300,000. This Company have contracted with H. S. WELLS & Co. to prepare the reservoirs and aqueducts, build engine-houses, lay down 120 miles of pipe through the city, set 800 hydrants, &c., in consideration of the payment of \$4,200,000. The contract guarantees the delivery, for consumption, of 10,000,000 gallons of water per day within two years, and 10,000,000 additional one year after. The capacity of the works now to be commenced is equal to 40,000,000 gallons, with the exception of the steam power, which is designed for the delivery of just one-half that amount, which is probably as much as will be required for the next twenty years. The plan is to construct works on a scale amply sufficient for the present time, yet capable of being enlarged to any desired extent, as the demands of the city shall increase. The supplies of water available for this purpose are said to be abundant. The present sources of supply are four ponds, all located within a distance of nineteen miles from Brooklyn, supplied by springs, and capable of furnishing 25,000,000 gallons daily. It is only necessary to extend the canal, or means of conducting the water, to procure additional quantities. The quantity necessary for the supply of New York is only 17,000,000 per day. The principal reservoir, of a capacity equal to 150,000,000 gallons, will be about six miles from Brooklyn, near the Cypress Hill Cemetery, where there is already a natural basin, covering 48 acres of ground, elevated 150 feet above the level of the sea. From this point to Botsley's Pond, six miles further from the city, the water will be conveyed in a covered aqueduct; and beyond the pond, by means of an open canal. From the reservoir to the city, iron pipe will be used. A second reservoir, holding 20,000,000 gallons, will be located on Flatbush Hill, 175 feet above tide-water, for the supply of the high ground in that neighborhood. The most important feature in the whole work is the steam apparatus employed in raising the water to the great reservoir on Cypress Hill. The power will be furnished by a large Cornish engine, similar to those employed in the English mines, and which will be capable of raising 10,000,000 gallons every sixteen hours. The engine-house will be located directly under the hill.

By the British schooner *Rover*, at Baltimore, from the Bahamas, we are in the receipt of the Nassau *Royal Gazette* to the 5th inst. The weather continued good for salt-making, both at

New Cornish Pumping Engines.—Messrs. I. P. Morris & Co. have lately completed a Cornish pump similar in principle to the one at Spring Garden water-works, recently fully described in the Ledger, from a report made to Councils by Mr. Graeff. This new pump, now being constructed, is for the Camden water-works, to be erected as soon as the foundation for its support is completed. The work has been delayed by a defect in the masonry that will soon be remedied. This engine has a cylinder of 40 inches and a pump of 22 inches, the stroke being 8 feet. The boilers used in connection with these engines are of novel construction here, though much used in France. They consist of a horizontal boiler, extending over the furnace in the usual manner; the bridge wall at the back of the grate bars is built up so as to throw the main body of the heat against the boiler, but allowing a portion to be carried over this wall to rest upon a second boiler or heater suspended behind it, and connected by pipes with the main boiler above it. The water is introduced into the lower boiler, and consequently does not enter the upper one until so heated that its conversion into steam is greatly facilitated. This preserves the upper boiler from any sediment, all extraneous matter being deposited in the lower boiler, where no damage can ensue, the heat not being intense, and from which it can be easily removed. The economy peculiar to the system is that the heat which is usually carried off by the draft and wasted, is made to act upon the lower boiler, so that the heating of both requires no more fuel than for one of ordinary construction.

WHAT THE AMERICAN NAVY HAS DONE.—As it is deemed an easy matter in England to crush the American navy from the ocean at one fell swoop, it seems to be proper to show how difficult that task was in 1812. The following is a list of ships of war and British merchant vessels captured by Americans during the war of 1812:

English Ships.	Guns.	Captured by.
Guerrier, frigate.....	43	Constitution, frigate.
Macedonian, do.....	49	United States, do.
Java, do.....	49	Constitution, do.
A new frigate.....	40	Destroyed in Canada.
Frolic, sloop.....	20	Wasp, sloop.
Alert.....	23	Essex.....
Boxer.....	18	Essex.....
Peacock.....	20	Essex.....
Pervier.....	20	Peacock.....
Remdear.....	20	Wasp.....
Avon.....	19	Wasp.....
Hermes.....	18	Destroyed in Mobile.
Cyane.....	18	Constitution.....
Levant.....	21	Do.....
Penguin.....	20	Hornet.....
Dominica.....	16	Decatur.....
Highlyer.....	4	President.....
Lears.....	15	President.....
St. Lawrence.....	12	Diligent, privateer.
Pecton.....	10	Chasseur, do.
Pecton.....	10	Constitution.....
Towshend.....	9	Ferry, privateer.
Enma.....	10	Tom, do.
Landra.....	10	Halker, do.
Morgiana.....	4	Syren, do.
Lapping.....	10	Saratoga, do.
Confidence.....	38	Tox, do.
Line.....	16	Taken by Com. McDonough on Lake Champlain.
Cruff.....	11	Do.....
Emoh.....	34	Do.....
Detroit.....	19	Do.....
Queen Charlotte.....	17	Do.....
Lady Prevost.....	13	Do.....
Hunter.....	10	Taken by Com. Perry on Lake Erie.
Little Belt.....	3	Do.....
Chippewa.....	3	Do.....
Caledonia.....	1	Do.....
Duke of Gloucester.....	14	Do.....
Melville.....	14	Taken by Com. Chauncey on Lake Ontario.
Julia.....	3	Do.....
Growler.....	8	Do.....
Nancy.....	3	Taken on Lake Huron.

The following British packets carried about ten guns each.

Prince Adolphus.....	Gov. McKean.
Princess Amelia.....	Rossie.
Empress.....	Amoconda.
Mary Ann.....	Gov. Tompkins.
ALL.....	Yorktown.
Manchester.....	Harold.
Little Catharine.....	Harley.
Princess Elizabeth.....	Harpy.
Lo.....	America.
Lady Mary Pelham.....	Kemp.
Windsor Castle.....	Roger.
Seaflow.....	President.
Luke of Montrose.....	Do.
Nocton.....	Essex, frigate.

In all 56 vessels, 383 guns.
Merchant ships, 354; brigs, 610; schooners, 520; sloops, 135; various classes, 76 capture, 750—making 2369 vessels, carrying 8869 guns.
To this is to be added 29 vessels of war lost by wreck or otherwise, carrying about 809 guns, and we have an aggregate of 2398 vessels, carrying 9677 guns.