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general average of the same hill, is but 143 feet above. The most elevated parts having so small a surface, and being upon the edge of the hill, will make it necessary to construct the Reservoir mostly on the lowest part, a portion of the hillside, however, being used to form one side of the Reservoir; the greater part of the bank would have to be elevated about 17 feet, this, in connexion with the probable hardness of the soil, some of it being hard-pan, will make the construction of a Reservoir of a given capacity much more expensive than if it were built upon a higher hill, with a more extended surface, and with material of easier excavation.

SS-5
A Reservoir on this [Prospect] hill, of a size to contain 1,000,000 gallons of water, will cost \$12,507 exclusive of the land and earth of which the banks may be built; the highest water in it being 155 feet above the base, and water 10 feet deep. A Reservoir to contain 2,000,000 gallons, on the same hill, and built in the same manner, will cost \$25,516, with the top water 158 feet above the base, and 17 feet deep. In each case using two acres of land for it.

The hill belonging to Mr. Lansing, near lock No. 17, Erie canal, contains 7 or 8 acres, with a surface of a general average of 153 feet above the base. I have made an estimate for a Reservoir on this hill, to contain 3,000,000 gallons of water, and find that it will cost \$12,727, exclusive of the land; the surface water in it to be 158 feet above the base, and the water 10 feet deep.

This hill being of so much greater elevation than Prospect hill, the Reservoir can be constructed of sufficient height with the material taken from its centre, the material thus making capacity for water both by the excavation and embankment. The material is also of much easier excavation than on Prospect hill, and although the stone work will be more expensive, there being more of it, yet a reservoir of 3,000,000 gallons capacity on this hill, will cost but little more than one of 1,000,000 gallons capacity on Prospect hill.

The total cost of the whole introduction of water, with a Reservoir on Mr. Lansing's hill of 3,000,000 gallons capacity, will be about \$1,500 more than it will with a Reservoir of 1,000,000 gallons capacity on Prospect hill.

If, however, the Reservoir on Mr. Lansing's hill should be reduced to 2,000,000 gallons capacity, the total cost of introduction will be less than with that of 1,000,000 on Prospect hill. In either case, no estimate is made of the value of the land required for the Reservoirs.

"It is proposed to pump the water from the highest level of the Cohoes Co.'s canal by a Jonval Turbine wheel of 50 horse power, working a double acting pump of sufficient size and stroke to raise 500,000 gallons to the Reservoir in 12 hours, the wheel giving a large surplus of power, which may be used for any other purpose until required for the water works.

The rising main to be 10 inches internal diameter and 1278 feet long. The whole height to be pumped is 96 feet. It is proposed to use the present site of the old lock, just north of the Harmony Mills, for the

The Pennsylvania Academy of the Fine Arts, on Chestnut street, above Tenth, was organized in 1807, by joint stock subscription.

Among the charitable institutions of Philadelphia, we would name the following:—

The Pennsylvania Hospital was incorporated by an act of the Provincial Assembly in the year 1751. The institution occupies the square of ground bounded by Spruce and Pine and Eighth and Ninth streets. The corner stone of the east wing was laid May 28th, 1755, by John Key, and was finished and opened for the reception of patients in the following year. The west wing was erected in 1796, and the centre in 1805. There are numerous out-buildings. On the beautiful lawn, facing Pine street, stands a well-executed statue of William Penn, presented by his grandson, John Penn. The whole revenue of this noble charity is devoted to the support of the sick poor.

Pennsylvania Hospital for the Insane, located on a fine farm of 111 acres, in the Twenty-fourth Ward, was opened in 1811. The principal building and main wings present an eastern front of 436 feet. The interior arrangements are unsurpassed for convenience and perfect adaptation to the purpose designed.

Friends' Asylum for the Insane, in the Twenty-third Ward, was founded in 1815, by contributions from members of the Society of Friends, and is now supported by the pay received from patients, donations, &c.

The United States Naval Asylum, founded in the year 1835, as a naval school and a hospital for pensioners, is well worthy of a visit. It is situated on the banks of the Schuylkill, fronting on the Gray's Ferry Road. The principal edifice is three stories in height, and built of Pennsylvania marble.

Pennsylvania Institution for the Deaf and Dumb, situated on the corner of Broad and Pine streets, was founded in the year 1820, and removed to the present building in 1825. The system of education adopted in this establishment is that of the Abbe de l'Epée and Sicard, which has been so successfully practised in Europe. Strangers are admitted to inspect the institution on application to the Principal.

Pennsylvania Institution for the Instruction of the Blind, is situated in Race street, between Twentieth and Twenty-first streets, was founded in the year 1833. The Institution is open to strangers every day except Sunday, but to citizens only every Wednesday afternoon.

Blockley Almshouse, in the Twenty-fourth ward, consists of four edifices, each 500 feet front. The average weekly population in this Home, is about 1800.

The Wills' Hospital, for the diseases of the eye, was opened in 1834. It is situated opposite Logan Square.

The St. Joseph's Hospital, near Girard College, is capable of accommodating 60 patients. It is under the control of the Sisters of St. Joseph.

Among the other charitable institutions worthy of Philadelphia and her people we might name the Philadelphia, Northern, and Movamensing Dispensaries, Preston Retreat, House of Industry, Widows' Asylum, Philadelphia Lying-in Asylum, St. Ann's Widows' Asylum, Roman Catholic Benevolent Society, the Orphans' Society, in Race street, St. John's Orphans' Asylum in the Twenty-fourth ward, St. John's Female Orphan Asylum, the Magdalen Asylum, instituted in 1800, the House of the Good Shepherd, the Rosine Asylum, Colored Orphans' Asylum, Provident Society, the Union Benevolent Society, and numerous others established to relieve the sick and assist the poor.

Locomotive Statistics.—The number of locomotives built in Philadelphia in 1851 was not so large as was anticipated at the commencement of the year, owing, in a great measure, to the financial troubles among nearly all the new railroad companies. The estimate made for the past year was over 240 locomotives, but the actual number has fallen short nearly 100. In Norris & Son's works, on Bush Hill, the most extensive in the country, 63 were built and forwarded to their destinations prior to July 1st. Since that period only 22 have been constructed, making only 85 for the year—17 less than in 1850. For the reason above stated, 550 workmen were discharged from these works in May and June last, leaving a force of only 335 to manufacture the locomotives finished since that time—of which number 120 are apprentices. Since the 1st of September Messrs. Norris' works have operated but 7½ hours per day, instead of 10 as was the usual custom. During the whole year, as in former years, the operatives were promptly paid every week, so that by the adoption of the cash system, an immense saving results to the firm annually. The locomotives built at these works are upon order only, and as a better time is manifesting itself among railroad companies, a large number of workmen will soon be added to the force now employed.

Extracts from the Report of James Slade, Chief Engineer of the Water Works.

SS-4 COHOES, Aug. 14th, 1855.
"To A. Wild, Esq., President; and to the Directors of the Cohoes Water Works Co."

GENTLEMEN:—By your request I have made surveys and estimates, with reference to an additional supply of water for this village. The heights of the different points are given in feet above the water table of the Cohoes Co.'s office, that point being about as low as the general level of Mohawk St., and it was therefore taken as the base.

The surface water in the present water works reservoir, is, at its highest, 62 feet above the base, and is the highest water that can be supplied to the village, except by pumping.

The highest part of Prospect Hill is 174 feet above the base, and is that portion of the hill nearest the Erie canal, whilst the

LOCAL AFFAIRS.

The Public Buildings of Philadelphia.—For the information of strangers, and for future reference, we compile the following notices of the public buildings in Philadelphia, worthy of special attention.

SS-1
The State House, or Independence Hall, on Chestnut street, deserves especial notice. It was commenced in 1729, and completed in 1731. The architecture and plan of this edifice are from designs by J. Kearsley, the same who drew the plan for Christ Church. The original cost was £5800. The two wings were erected in 1740. In the east room of the first story, the immortal Declaration of Independence was passed by Congress, July 4th, 1776. In this room is placed the "Old Bell," cast purposely for this edifice when erected. It was imported from England in 1752. The room has been recently fitted up, and its walls decorated with portraits of the signers of the Declaration of Independence, and other eminent statesmen, warriors &c. The original steeple was taken down in 1774, and the present one erected in 1823.

The Custom House, formerly the United States Bank, on Chestnut street, above Fourth, is also an imposing building. The structure is built upon a platform 87 feet in front and 161 feet deep. It has two fronts, and each ornamented by eight fluted columns of the Doric order, 27 feet high, supporting a heavy entablature of the same order. It is constructed entirely of marble, and bears altogether the features of unassuming grandeur and chaste simplicity.

The United States Mint, on Chestnut street, near Broad, is constructed in the Ionic order, taken from a Grecian temple at Athens. It has a front of 122 feet, divided into a portico 63 feet long, and two wings 30 feet each. The portico is supported by six pillars, 25 feet high. The steam engine and mechanical contrivances used in the milling, stamping, &c. are very beautiful, and attract much attention from visitors, who are admitted from 9 to 12 o'clock.

The Merchants' Exchange, fronting on Walnut, Dock and Third streets, is constructed of the purest Pennsylvania marble. It forms a parallelogram, the eastern front being circular, embellished with a portico, recessed, supported by Corinthian columns. The merchants' reading room is in the splendid rotunda on the second-story. The post-office is located in the first.

The University of Pennsylvania, Ninth street, below Market, was established in 1750 as a charity school, but through the exertions of Dr. Franklin and others, was chartered and endowed in 1750, erected into a college in 1755, and into a university in 1779.

Girard College went into operation January 1st, 1848, the corner stone of the edifice was laid on the 4th of July, 1833. The general design of the main building is that of a Greek temple. The whole cost of this magnificent college, including improvements of the grounds, was \$1,933,521 78.

Academy of the Protestant Episcopal Church, established in 1755, under the auspices of the late Bishop White, is located in Locust street, near Broad. The building is constructed of red stone, in the Elizabethan style.

Theological Seminary of St. Charles Borromeo, at Eighteenth and Race streets, was incorporated in 1848, and is under the direction of Lazarists, or Priests of the Congregation of Missions. Number of students about 30.

Jefferson Medical College, established in 1825, is located in Tenth street, below Chestnut.

Pennsylvania College, Ninth street, below Locust, was erected in 1849. It is a commodious and imposing edifice. The building contains three lecture rooms and a museum, containing a great variety of wet and dry preparations, models, casts, &c., &c.

Philadelphia College of Medicine, chartered in 1827, is located in Fifth street, near Walnut.

Homoeopathic Medical College, instituted in 1846, is in Filbert street, between Eleventh and Twelfth streets. There is a large museum connected with this institution.

American Philosophical Society, Fifth, below Chestnut, owes its origin to Benjamin Franklin. The first meeting of the Society was held January 2d, 1769. The site of the present hall was given to the Society by the State, in 1785, and the building was erected in 1789. The library contains about 20,000 volumes, in various languages. The Society also possesses an extensive cabinet of medals, coins, &c.

The Philadelphia Library Company, was instituted in 1731, principally through the influence of Dr. Franklin. The first importation of books was received from London in 1732. The present edifice on Fifth street, below Chestnut, was commenced in 1789. The front entrance is surmounted by a well executed statue, in marble of Frank in. The library contains over 10,000 well selected works. The Philadelphia and Loganian Libraries contain united about 65,000 volumes. The income of the Institution is \$6,300. The library is open every week day, from 10 A. M. until sunset, during which time strangers have free admission.

The Athenaeum, situated on the corner of Sixth and Adelphi streets, was organized in 1814, and the present building was opened on the 15th of October, 1847. It is of the Italian order of architecture, and is at once bold and imposing. The library is a large and convenient room, and contains over 63,000 volumes.

The Historical Society of Pennsylvania, is located in the third-story of the Athenaeum. The library contains 1,725 volumes, including 47 volumes of manuscript. The Society have also a choice collection of coins, &c.

The Academy of Natural Sciences, located at the N. W. corner of Broad and George streets, was founded in January, 1812, and incorporated in 1817. The library contains over 26,000 volumes, and over 500 maps, charts, &c. The department of ornithology is the most extensive in the United States, if not in the world. The museum is divided into three cabinets, viz.: Zoology, Botany, Geology and Mineralogy. The cabinet of botany contains over 30,000 specimens of plants. Visitors are admitted on Tuesday and Friday afternoons.

The Mercantile Library, on the corner of Fifth and Library streets, was opened in temporary rooms in 1821. The present building was erected in 1815, at a cost of \$23,199 42. The library contains over 14,000 volumes.

The Library of the German Society, in Seventh street, below Market, contains a collection of over 8,000 volumes, of both English and German works.

The Apprentices' Library, corner of Arch and Fifth streets, was founded by voluntary contribution, in 1819. It contains over 12,000 volumes. About 1200 boys and 600 girls now partake of its benefits.

The Friends' Library, Race street, below Fifth loans books to any person producing a certificate of character, from some one of the Society of Friends