Belvidere Woolen Manufacturing Company Foot of Howe Street and 645 Lawrence Street Incorporated 1853

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Inventory Forms: Site of Mill No. 1

Site of Mill No. 1 Storehouse
Mill No. 2 (645 Lawrence Street)
Mill No. 2 Storehouse

Mill No. 2 Boiler House Mill No. 2 Second Storehouse

Research Report Belvidere Woolen Manufacturing Company Incorporated 1853

Site of Mill No. 1 Foot of Howe Street Woolen manufacturing site by 1821

Mill No. 2 645 Lawrence Street Established 1862

The Belvidere Woolen Manufacturing Company operated two mills on the Concord River in the second half of the nineteenth century. The company's original millyard stood on the east bank of the river, opposite the Middlesex Manufacturing Company and not far from the mouth of the river. The second mill was constructed in 1862 on the west bank of the river, a considerable distance upstream (to the south). The first millyard has been razed and is now a parking lot, only a portion of which is within the LHPD. Mill No. 2 is intact, but the LHPD boundaries exclude the main mill building, while including secondary components within the district.

Site of Mill No. 1: Hurd, Howe, and other early owners

A single building related to the Belvidere Mill No. 1 complex still stands at 229 Fayette Street. This location is atop a high bank above the millyard, and the vacant brick structure appears to have been built (ca. 1890) as a residential structure. [See Inventory Form on 229 Fayette Street.] The last remaining industrial structure of that millyard, a brick storehouse at the foot of Chestnut Street, was demolished after 1975 (1).

Thomas Hurd owned the site which became the Belvidere Mill No. 1 yard by ca. 1818. A sawmill stood on the land at that date. The property was essential to Hurd's plan to control Concord River waterpower at the final falls of the river by owning land and water rights on both banks. Hurd constructed a dam across the river between his two parcels, and on the west bank, dug a canal and operated woolen mills. That west bank site was later the millyard of the Middlesex Manufacturing Company. [See Research Report on Middlesex Manufacturing Company.]

In May of 1821, Hurd sold land, buildings, and water privileges on the east bank of the Concord River to Winthrop Howe in two separate transactions. (Hurd retained ownership of the parcel at the immediate east end of his dam, and the Middlesex Company continued to hold that lot and its buildings well into the twentieth century.) Winthrop Howe, like Hurd, was originally from Albany, New York. Encouraged by his own success in East Chelmsford, Hurd convinced his fellow townsmen to start a flannel mill nearby (1A). On May 1, 1821 Hurd conveyed "a certain tract of land with the buildings thereon situate in Tewksbury, containing about ten acres" to Howe for \$2500. This conveyance included a water privilege, although Hurd reserved for himself both the right to erect and maintain a dam across the river above the sawmill and the right to draw and use water sufficient for his own purposes at his mill on the west side of the dam (2). May 31st, Hurd conveyed additional land and water rights to Howe for \$1000. By the terms of this second deed, Howe acquired:

a right to build any mill or mills on the east side of Concord River below the mill dam running from said Hurd's factory on the west side of said river to the easterly side thereof; also a privilege to draw and use the water from the mill pond above said dam for the purpose of carrying said mill or mills; the said Hurd reserving to himself, his heirs and assigns the first and exclusive right to the use of sufficient water from said pond to carry a fulling mill and thress bust-wheels. (3)

Howe immediately razed Hurd's sawmill and erected the first woolen mill in Belvidere, then still a section of Tewksbury. Flannels were its product, manufactured on hand looms (Fig. 1). He continued in this business until 1828, rebuilding after a June 30, 1826 fire which destroyed the flannel mill and much of the machinery (4).

In October, 1828 Winthrop Howe sold his mill, water rights, and a small portion of his land to Harrison G. Howe of Tewksbury. The second Howe introduced power looms into the manufacture of flannels, continuing in the business until January, 1832. Then, he sold land, mill, and water privileges to Richard Warren, Samuel F. Barry, and Thomas B. Parke who also acquired additional portions of the land purchased by Winthrop Howe from Thomas Hurd in 1821. The 1832 Mather map shows several sizeable buildings on the site (Fig.2).

Warren, Barry, and Park in turn sold the flannel mill to Samuel Whitewell, George Bond, Benjamin Seaver, and William Bond in 1834 for \$25,000. That transaction included the

following property:

The flannel factory of us the said Warren, Barry & Park, with the water wheels and gearing thereof. Also a two-story red building, lying southerly of said factory; also a small bleaching house lying northerly of said factory; also a drying and dye house on Mechanic Street, lying westerly of the factory, together with all the land under and belonging to said factory, and other buildings, intending to include the land between Concord Street and Mechanic Street, southerly of a lot of land formerly sold by us to William Eager, together with a right to draw and use the water of Concord River for the purpose of carrying the works of said factory; but this right is to be excercised only when there is sufficient water for the Middlesex Company's rights. Also a two-story wooden dwelling-house, and the land under and belonging to the same, situated on or near Concord Street. (5)

Belvidere Flannel Manufacturing Company: 1835-1851

The following year (1835) Parks et al. sold the property to Eliphalet Barber, Walter Farnsworth, and George Hill of Boston. That group first applied the name of the area to their manufacturing enterprise, loperating as the Belvidere Flannel Manufacturing Company until 1851 (6). Barber, Farnsworth, and Hill expanded their plant by purchasing more land and a stone mill on Howe Street which John Nesmith had conveyed to the Whitney Mills in 1839 for \$2000.21. John Nesmith and others had been incorporated as Whitney Mills for the manufacture of blankets. When this enterprise failed in the 1840s, their mill was acquired by the Belvidere Company (7). The Whitney Mill is shown on Beard & Hoar's 1841 "Map of Lowell" as No. 45, at the foot of Howe Street.

Charles Stott (1799-1881) became agent of the Belvidere Flannel Manufacturing Company in 1835 while it was owned by Farnsworth, Barber, and Hill. Stott had emigrated from England in 1826, having worked since the age of seven in a mill. Landing in Boston, he made his way first to Andover, where he found work in a factory. Then in 1828, with three

associates he began to operate the Merrimack Mills in Dracut. He left that flannel manufactory after seven years to come to Belvidere (8).

Belvidere Woolen Manufacturing Company: Mill No. 1

By 1850, Belvidere Flannel had gone bankrupt. In that year Stott formed a partnership with Walter Farnsworth and they carried on the reorganized business under the firm name of Farnsworth and Stott. In the space of a year, however, both the stone mill (in December, 1851) and the old flannel mill (in 1852) were destroyed by fire. After these disasters a new company was formed in 1853, called the Belvidere Woolen Manufacturing Company. Farnsworth and Stott sold to the new company one-third of their right, title and interest in the old business. Stott became a director and the agent of the new company, which was incorporated with a capital of \$200,000. The other officers were Marshall P. Wilder, President; Ezra Farnsworth, Treasurer; and Francis J. Parker, Clerk. Wilder, Stott, and Walter Fransworth were the Directors (9). Stott remained with the company for the rest of his life, holding the positions of president and agent when he died in 1881, and having also been treasurer for a period of time. To many of his fellow citizens he apparently was the company.

In 1854, almost two years after the old flannel mill had burned, the Belvidere Woolen Manufacturing Company built a new brick flannel mill, 51 feet wide by 90 feet long and three stories high. Skylights extended the length of the pitched roof. The appearance of the building and related structures is shown clearly in an 1878 fire insurance drawing, and in an early twentieth century photograph (Figs. 3, 3A, and 4).

The construction of the new mill was hailed in an article published September 9, 1854 in the Lowell Daily Journal and Courier:

The Belvidere Woolen Manufacturing Company have now completed the erection of a substantial brick mill, fifty-one feet broad inside, by ninety long, and three stories high, on the site of the mill consumed by fire some two years since, designed, like its predecessor, for the manufacture of woolen flannel. Charles Stott, Esq. one of the principal stockholders, continues in the position of superintendent—a position which he has filled with

much success during something like fifteen years. This mill will soon be in full operation, and will contain six new sets of carding machinery, twelve jacks, forty looms, with the usual proportionate amount of collateral machinery; all which will be entirely new, and constructed in the most modern style. When this mill has gone into full operation, this part of our city will resume that aspect of progress and industry which characterized it in years ago. (10)

Subsequent developments in the Belvidere No. 1 millyard can best be seen on the atlases (Figs. 5, 9) and on the Insurance Survey and photograph previously cited (Figs. 3, 4). The mill was by far the largest building in the yard. East of the mill was a wool sorting building (#3 on 1878 plan) built of stone and wood, with a clerestory roof. A Dry House stood on the bank of the river southeast of the mill (#5 in 1878). The 1878 Survey identifies the structure as one story and wood frame. By the turn of the century, that structure had been replaced by a two-story brick building (Fig. 4, left center).

Both the insurance plan and the ca. 1900 photograph show the mill's main storehouse (#6 in 1878) in fragmentary fashion (at lower left and far right, Figs. 3, 4 respectively). The storehouse stood until the mid-1970s, when the HAER survey recorded it as the second oldest industrial building in Lowell, dating it to ca. 1830 (10a). However, the storehouse appears on neither the 1841 nor 1850 maps. It is first outlined on the 1868 map, suggesting the storehouse was built in the 1850s along with the main mill structure. Both were built of brick with flat granite lintels.

The atlases also reflect changes in the use of the yard. By 1896, a large portion of the yard was leased to the White Bros. & Co. Tannery, later the American Hide and Leather Co. A 1911-12 illustration of the factories of the latter firm shows the Belvidere complex as a vignette beside the firm's larger tannery upstream on the Concord River on Perry Street (Fig. 7a). By 1924 the United States Worsted Corp., New England Bunting Company, and Wamesit Power Company each owned parts of the former Belvidere Mill No. 1.

Mill No. 2

In 1862, the Belvidere Woolen Manufacturing Company built a second mill, on the west side of the Concord River. The Lawrence Street site had been purchased by Stott from Oliver Whipple in 1860. According to one source, Belvidere built Mill No. 2 with the profits of a contract, completed in 1862, to set up a woolen mill for C. P. Talbot and Company of North Billerica (11).

Charles Stott paid Whipple \$11,000 for the mill site in November 1860 (12). In December, 1862, Stott conveyed the property, apparently with the mill already upon it, to the Belvidere Woolen Manufacturing Company for \$7,000. Along with the mill site went certain rights which Whipple had conveyed to Stott. These included the right to use Concord River water via Whipple's (later Wamesit) Canal and to discharge water into River Meadow Brook. The water rights entitled Belvidere to use 27 cubic feet per second for 11-1/4 hours per day, six days a week, or 3/32 of the total supply afforded when the available water was insufficient to provide 27 cubic feet a second. Belvidere also obtained the right to pass with cars over the railroad leading from the Boston and Lowell and Lowell and Lawrence Railroads at Whipple's station (13).

The four original buildings of the Belvidere Mill No. 2 complex are still intact. The 100 by 75 foot main mill, despite its 1862 date, was constructed in a style that looked back as far as the 1820s with rock-faced granite sills and lintels. The original roof treatment was unusual as it combined a clerestory monitor in a gambrel roof with a trap door monitor [Fig. 10]. Later, another story and a pitched roof were added to make the building four stories high with an above-ground basement [Fig. 11]. Segmental arches cap the top floor windows and a corbelled brick cornice rises to the Italianate roof overhang supported by brackets. Belvidere Mill No. 2 as it now stands thus clearly embodies an earlier and a later style of mill building in Lowell. A 42 x 40 foot former storehouse is also intact, as is the dye house and boiler house.

The LHPD boundary line extends right through the Belvidere Mill No. 2 complex. The front storehouse, front stairtower,

boiler house, and chimney are all within the district. The mill itself, the engine house, dye house, and other buildings are excluded from the LHPD.

Company History: Late nineteenth century

The Lowell Directory for 1864-65, eleven years after the company's reorganization, gives the following information for the Belvidere Woolen Manufacturing Company on Howe and on Lawrence Streets:

Organized, 1853. Capital, \$200,000. Mills, 2. Woolen Machinery, 15 sets. Females employed, 50; Males, 125. Number of yards of domestic flannels made per week, 30,000. Ezra Farnsworth, 4 Winthrop Square, Boston, Treasurer. Charles Stott, Agent. Charles A. Stott, Paymaster. (14)

Charles A. Stott, Charles Stott's son, also ran Stott's Mill, which his father built on the east side of Lawrence Street in about 1863, on a site between the American Bolt Company (Whipple's Mill) and the Concord River. After eight years of operation, Stott's Mill (later Stirling Mills), a woolen manufacturing company, was sold to Parker, Wilder and Company of Boston, a corporation of which Belvidere officers Marshall Wilder and Francis J. Parker were also officers. [See Research Report on Stirling Mills.] In addition, they were the selling agents for Belvidere. Charles Stott died in 1881, and Charles A. succeeded his father as president of Belvidere.

In 1880, the Belvidere Woolen Manufacturing Company was equipped with 5,600 spindles and 86 looms and employed 150 hands, according to the annual Statistics of Manufactures in Lowell (15). The Statistics for 1885 also note the use of 16 sets of cards and "Water, 120 horsepower; 3 engines, 130 horsepower" (16). In 1890, the following somewhat more complete information was given for Belvidere:

...Capital, \$200,000; Chas. A. Stott, pres. and agt.; Ezra Farnsworth, treas., Boston. Manufacture flannels and dress goods. Two Mills: No. 1 Mill, Howe Street; No. 2 Mill on Lawrence Street; 16 sets cards, 6,000 spindles, 90 looms, 200 hands employed, 2 water-wheels, 120 h.p.; 2 engines, 120 h.p; Messrs. Parker, Wilder & Co., selling agts., Boston and New York. (17)

By 1897 the annual product of the two Belvidere Mills was 1,000,000 yards of woolen dress goods and 800,000 yards of flannels.

Corporate History: Twentieth century

In 1914, there was a company reorganization which resulted in Mill No. 2 being sold by the Belvidere Woolen Manufacturing Company to the Belvidere Woolen Company (18). During the same period of time the Howe Street property, including Mill No. 1, was sold off. The complex stood through the 1920s. The exact dates of its razing have not been determined.

In 1928, the Lawrence Street real estate and other assets of the Belvidere Woolen Company were sold at public auction (19). The highest bidder was one Samuel Rindge of Wellesley, Massachusetts, presumably the brother of Wellington Rindge, the company's treasurer. The Rindge venture failed and after five years of tax problems the City of Lowell foreclosed a tax lien on the Lawrence Street property on March 30, 1939 (20). On May 15, 1943 the property was sold by the city at public auction and the Wamesit Power Company, Incorporated, of Lowell was the highest bidder (21). After several years of being leased for warehousing purposes, Belvidere Mill No. 2 was leased by Wamesit Power Company to Commodore Foods, Incorporated, of Lowell in 1959 on a long-term basis. Finally, on October 20, 1976, Commodore Realty Company acquired the Belvidere Mill No. 2 property from the Wamesit Power Company (22).

Archeological Comment

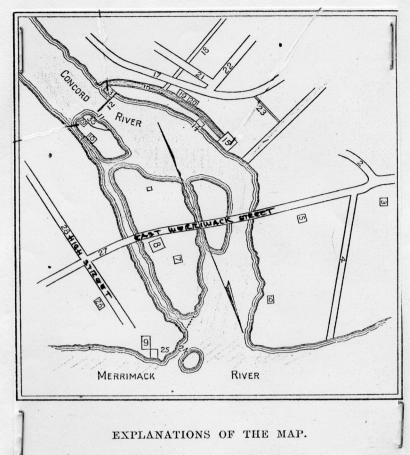
The Mill No. 1 site presently contains stone and brick foundation remnants of the storehouse (#6 on 1878 insurance survey, Fig. 3) at the foot of Chestnut Street.

The Mill No. 1 site is now paved over as a parking lot, except for the storehouse site at the foot of Chestnut Street (#6 on 1878 insurance survey, Fig. 3), where brick and stone foundation remnants are visible. [See Inventory Form and photograph of the storehouse site.] Remnants of the Middlesex Company dam across the Concord also survive, as do elements of the dam-side site on the east bank that Middlesex Company owned. Thus, the property can be regarded as a multicomponent archeological district, containing remains of waterpower systems from the Concord River and mill remains.

The Concord River was a significant, secondary power source in Lowell, and the Belvidere and Middlesex sites represent a linked exploitation of this source on opposite banks of the river--a unique circumstance in Lowell. The remains of the system on the Belvidere side include an island just off the eastern bank, dam traces, and probable subsurface raceway remains.

This district affords the opportunity to evaluate archeologically a mill complex dependent upon the Concord River. The adaptation of waterpower here provides a counterpoint to the main developments in Lowell and would add to an understanding of other Concord River mill enterprises, Additionally, the mill remains would provide comparative data with similar properties. These remains should not differ significantly from those found elsewhere in Lowell, but the opportunity to examine a total complex which is less disturbed than those in the commercial districts of Lowell may result in significant finds in their original context.

The Mill No. 2 complex is almost completely intact, a rarity among the Wamesit Canal factories. It certainly warrants full inclusion within the LHPD, as does the segment of Wamesit Canal behind it.



The following corresponding numbers to those on the map, are the explanations of the objects there represented, to which are added some historical facts.

- 1. Pawtucket Canal where it enters Concord River, at the Lower Locks.
 - 2. Central Street.
 - 3. The Fletcher House, now the site of the Hildreth Building.
- 4. The lane leading to the ferry landing on Merrimack River, now Bridge Street.
- 5. The Tyler Mansion, subsequently enlarged, used as a hotel, and finally known as the Mansion House.

Figure 1

Map showing Concord River near its entrance into the Merrimack River in 1826. A. B. Wright, "Lowell in 1826," Contributions of the Old Residents' Historical Association, v. 3 (1887), p. 428.

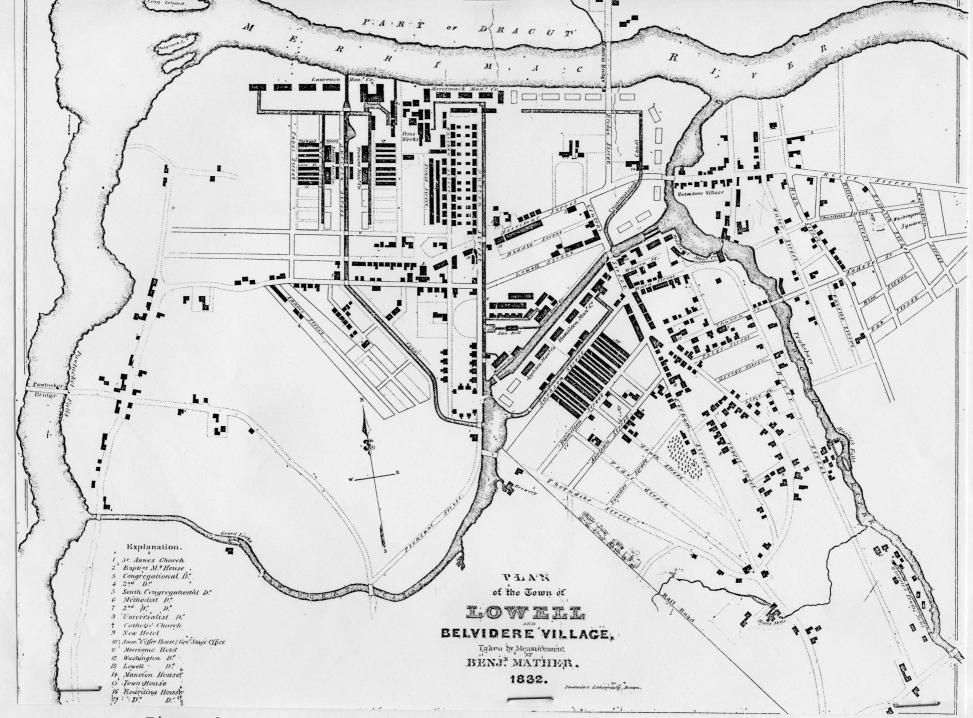


Figure 2

Benj. Mather, "Plan of Lowell," 1832 Belvidere Manufacturing Company site is circled at upper right.

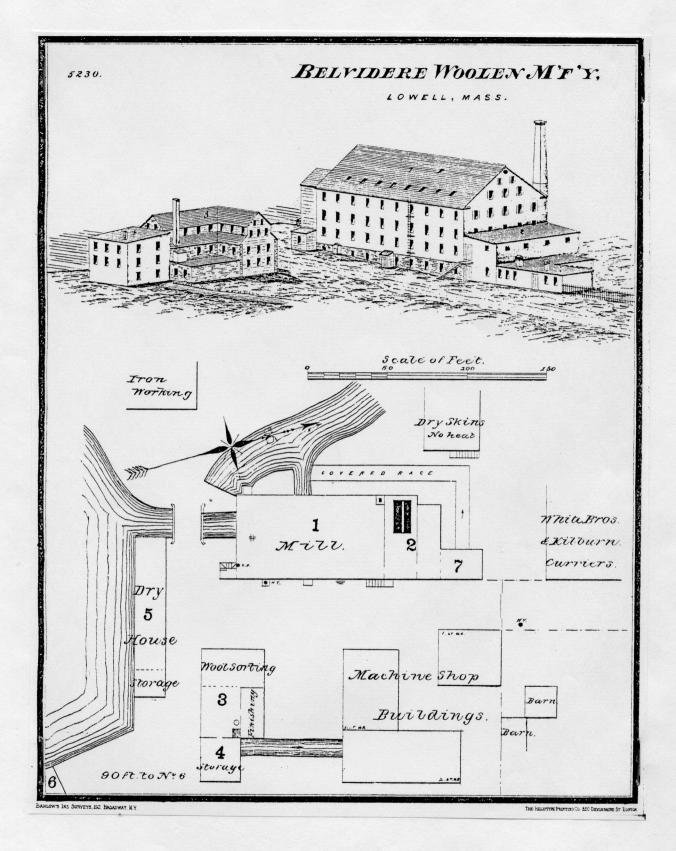


Figure 3

Belvidere Woolen M' F' Y, Lowell, Mass. Barlow Insurance Survey, no. 5230, May 24, 1878. Collection of the Merrimack Valley Textile Museum, North Andover, Mass.

No. 5230.

BELVIDERE MANUFACTURING CO.,

LOWELL, MASS.

OWNED by Company.
GOODS—Woolens: Table Cloths, &c.
STOCK—All Wool.
CAPACITY—Seven (7) sets.

POWER-Water and Steam; 70 H. P. engine.

EXPOSURE—See plan.

SURVEYED-May 24, 1878. A. H. T.

DESCRIPTION.

No. 1—MAIN BUILDING—HEIGHT-three stories, basement and attic. SIZE-93x53 feet. WALLS-brick; 20, 16 and 16 inches respectively. ROOF-slate. Cornice-brick. Scuttle-on roof. Ladders-fixed, iron. for flooding. Ceiling-open. Stairs-in frame tower, open. Elevator-none.

Occupation—Basement, dyeing and pressing, wheel and pump. First story, card room. Second story, mule spinning and dressing machine. Third story, weave room. Attic, mule spinning. Loft, wool drying. Iron shutters to windows over picker house.

No. 2—Boiler and Picker House—One and two stories, brick, gravel roof. First story, boilers and dye house. Second story, pickers.

No. 3--Three stories, stone and frame, shingle roof. First story, press room, assorting and pulling wool; furnace for heating press plates. Second story, print room, and wool storage. Third story, dry wool by spreading on floor.

No. 4-Storehouse-Three stories, brick, gravel roof; communicates with No. 3.

No. 5-Dry House-One story, frame, shingle roof.

No. 6-Wool Storehouse-Two stories, brick, gravel roof.

No. 7-Storehouse for Acids-One story, brick, gravel roof.

SPECIAL FEATURES.

Heating-Steam; coal stove in second story of No. 3.

Lighting-Gas.

Watchman-Nights; watch; sperm oil in lantern.

Pickers are in second story of No. 2, which communicates with No. 1 by tinned doors. Power from mill by shaft. Floor of gauze room tinned. Sprinkler pipe in gauze room, supplied by pressure from city pipe; hydrants in yard, near; buckets in adjoining room of mill. No heat nor light.

Drying—Wool is dried in loft of main mill, by spreading upon floor; heat by steam; pipes about three (3) inches from floor, on iron supports. Pipes have nothing to keep the wool off. Drying in upper story of No. 3 is done without heat.

Oils-Lard oil on stock.

Waste-Removed daily.

Hours of Work-Sixty (60) per week.

Boilers—Two tubular, well set; space of three feet to floor above.

FIRE APPLIANCES.

Fire Pump—Fales & Jenks pump in basement of No. 1, gears with main shaft by lever.

Vertical Pipe—In No. 1, short piece of hose attached each story, with nozzle.

Tank-In attic, to supply sinks; filled by city pipes.

Hydrants-Two in yard.

Hose--250 feet of linen and leather hose.

Sprinklers-In attics, water from city pipes.

Casks and Buckets-Buckets in card room; a few in tower.

Steam Jets-None.

Extinguishers-None.

Lightning Rods-None.

Ladders-One fixed iron.

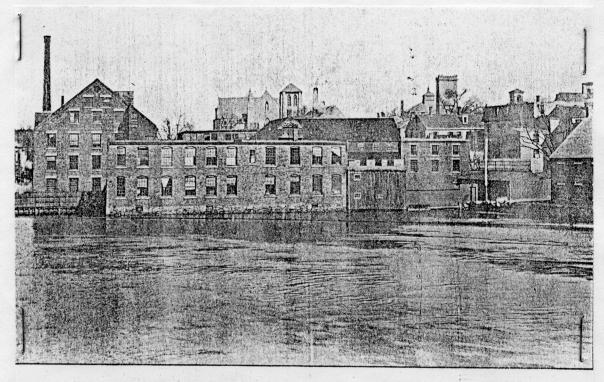
Auxiliary Aid—Steamer, 1,200 to 1,500 feet distant. Hose carriage within two minutes.

CHARACTER.

Buildings are in very fair condition; floors were not quite as clean as they should be. In weave room, third story of mill, was noticed in one corner, where steam pipe passes through floor and beneath a shelf with oil can, pieces of oily yarn; floor was also quite oily. A box for these, and like scraps should be provided.

Figure 3A

Belvidere Manufacturing Company, Lowell, Mass. Barlow Insurance Survey, no. 5230, May 24, 1878. Collection of the Merrimack Valley Textile Museum, North Andover, Mass.



BELVIDERE WOOLEN CO.

Figure 4

Belvidere Woolen Co., Mill No. 1 on Howe Street. <u>City of Lowell Board of Trade Publication</u>, 1902, opposite page 97.

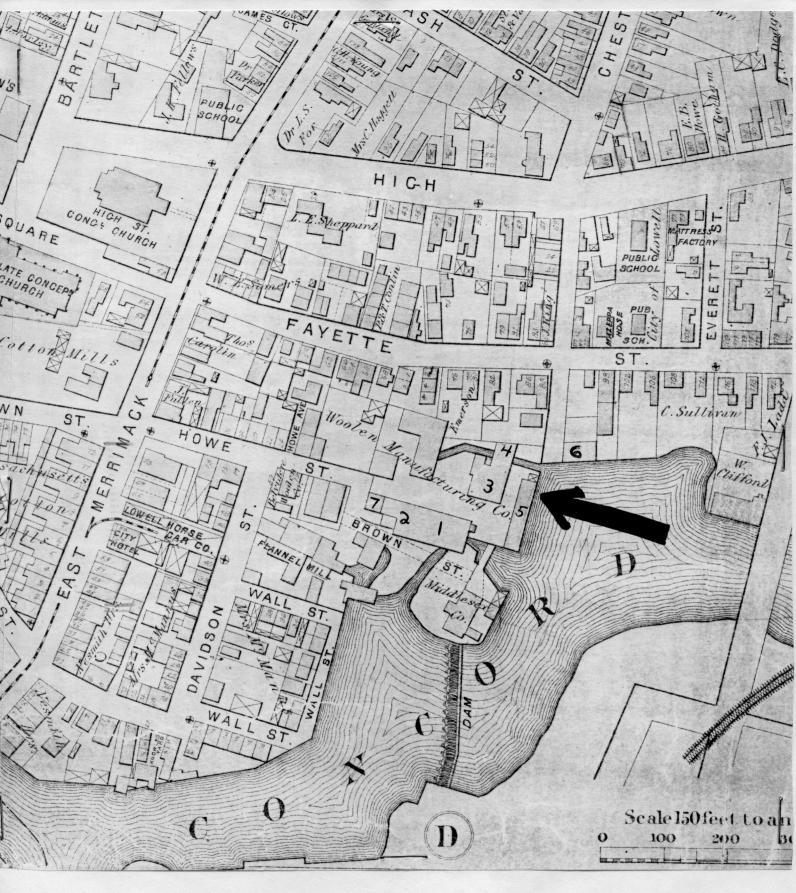


Figure 5

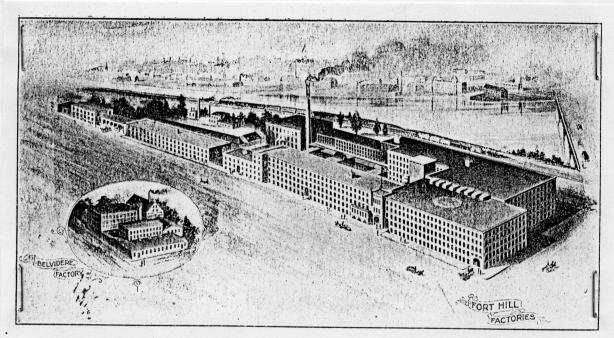
Atlas of Lowell, 1879. The Belvidere buildings have been numbered to correspond to the 1878 insurance plan [Fig. 3].



Figure 6
Atlas of Lowell, 1896.



Atlas of Lowell, 1906.



AMERICAN HIDE AND LEATHER CO.

Figure 7A

American Hide and Leather Company. Vignette shows Belvidere Woolen's Howe Street complex (including Mill No. 1), which was then occupied by American Hide. Lowell Board of Trade Year Book, 1911-1912, p. 108.

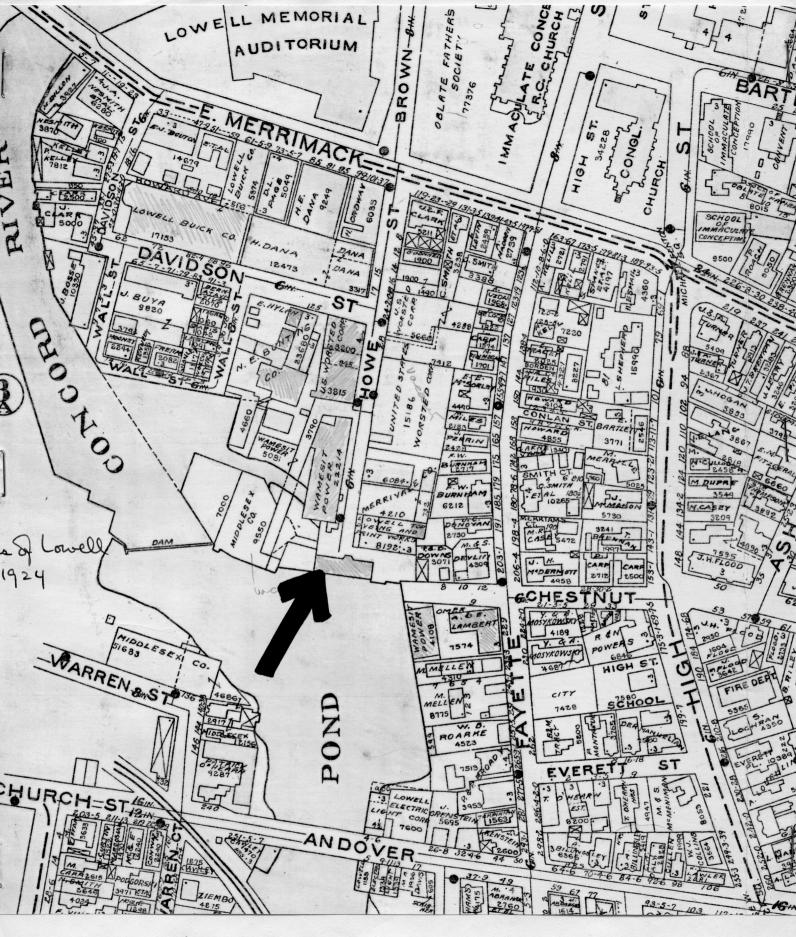


Figure 8
Atlas of Lowell, 1924.



Figure 9
Atlas of Lowell, 1936.

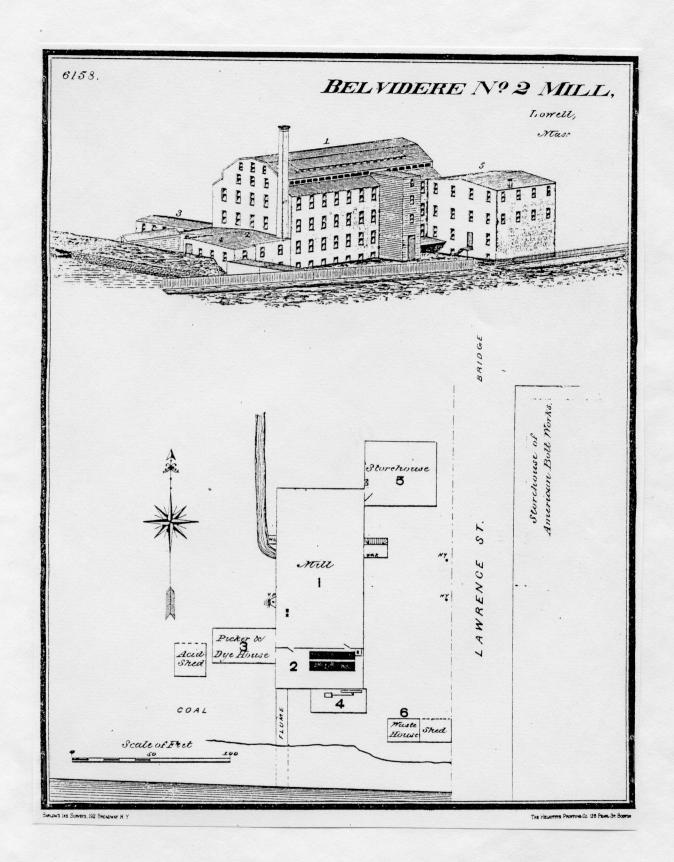


Figure 10

Belvidere No. 2 Mill, Lowell, Mass. Barlow Insurance Survey, no. 6158, April 16, 1880. Collection of the Merrimack Valley Textile Museum, North Andover, Mass.

No. 6158.

BELVIDERE No. 2 MILL,

Lowell, Mass.

OWNED-GOODS-Flannels. STOCK-All Wool. CAPACITY-Eight [8] sets.

POWER-Water and Steam; 100 H. P. engine. EXPOSURE—See Diagram. SURVEYED-April 16, 1880. A. H. T.

DESCRIPTION.

No. 1-MAIN BUILDING-HEIGHT-three stories, basement and attic. SIZE-about 55x100 feet. WALLS-brick; substantial. ROOF-slate. CORNICE-brick. SCUTTLE-roof accessible. LADDERS-one fixed. FLOORS-4-inch, double. CEILING-open. STAIRS-in frame tower. ELEVATOR-none in mill; small boxed elevator, or chute, in No. 5, for cloth. Occupation—Basement, cloth dryer, finishing, wool washing and duster. First story, carding. Second story, mule spin-

ning. Third story, weave room. Attic, mule spinning. Loft, vacant. No. 2-Boiler and Picker House-Two stories, brick, tin roof. First story, boilers; open stairs to picker room; tinned door to mill. Second story, pickers; tinned door to mill, wood door to dry room.

No. 3-Dye and Dry House-Two stories, brick, tin roof; communicates with mill each floor by tinned doors. First story, dyeing. Second story, dryers.

No. 4-Engine House-One story, brick, tin roof.

No. 5-Storehouse-Three stories and basement, brick, tin roof. Communicates with mill each story by tinned doors.

No. 6-Waste House-One story, brick, tin roof.

SPECIAL FEATURES.

Heating-Steam; pipes generally well hung,-in contact with | Drying-Wool is dried in second story of No. 3; one old-style floor in places.

Lighting-Gas.

Watchman-Nights and Sundays, with watch; lard oil in

Pickers-Burr and wool picker in second story of No. 2; room communicates with mill by tin-covered door, and with dry room by wood door. Power from mill by shaft. Ceiling is box-plastered, and broken. Room is protected by sprinkler pipe, valve in boiler room. No cask or buckets Light by gas; jet enclosed. No heat in room.

dryer, with pipes beneath, and one dryer with pipes at side Rice & Barton cloth dryer in basement of mill. No protection against fire in dry room.

Oils-Lard oil on stock; lubricating on machinery.

Waste-Taken up daily. Dusted every afternoon in basement.

Hours of Work-Sixty [60] per week.

Boilers-Two tubular boilers in No. 2, well set; space of four feet above.

FIRE APPLIANCES.

Fire Pump-Fales & Jenks pump, well located in basement. Gears by lever with main shaft.

Vertical Pipe-One in tower and one outside of mill; supplied by pump or by city water.

Hydrants-Two outside hydrants, one from pump and one from city pipes.

Hose-Have a supply of leather and linen hose; lengths attached each story, except second, to vertical pipe.

Sprinklers-In picker room only.

Casks and Buckets-Each story in tower.

Steam Jets-None.

Extinguishers-None.

Lightning Rods-None.

Ladders-Fixed.

Auxiliary Aid-Steamer 1/3 to 1/2 mile distant.

CHARACTER.

The Mill has been idle for the past four or five years, and was thoroughly overhauled previous to starting up some five months since. It is now in good order and looking neat. Dry room has no protection against fire, and picker room has only one sprinkler pipe. Windows of mill above picker room have no shutters.

Figure 10A

Belvidere No. 2 Mill, Lowell, Mass. Barlow Insurance Survey, no. 6158, April 16, 1880. Collection of the Merrimack Valley Textile Museum, North Andover, Mass.

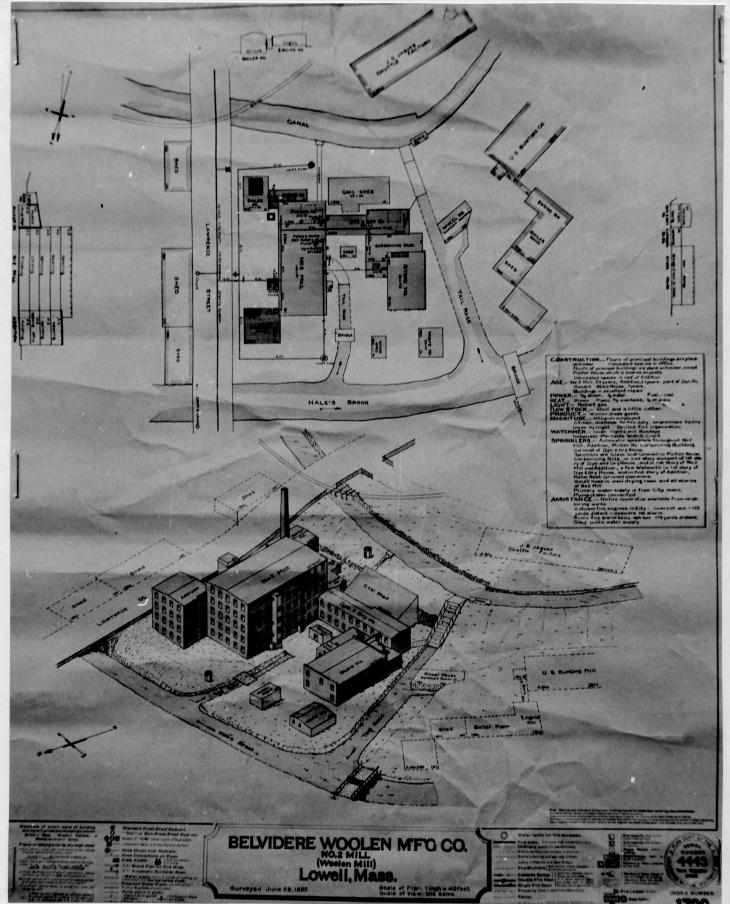
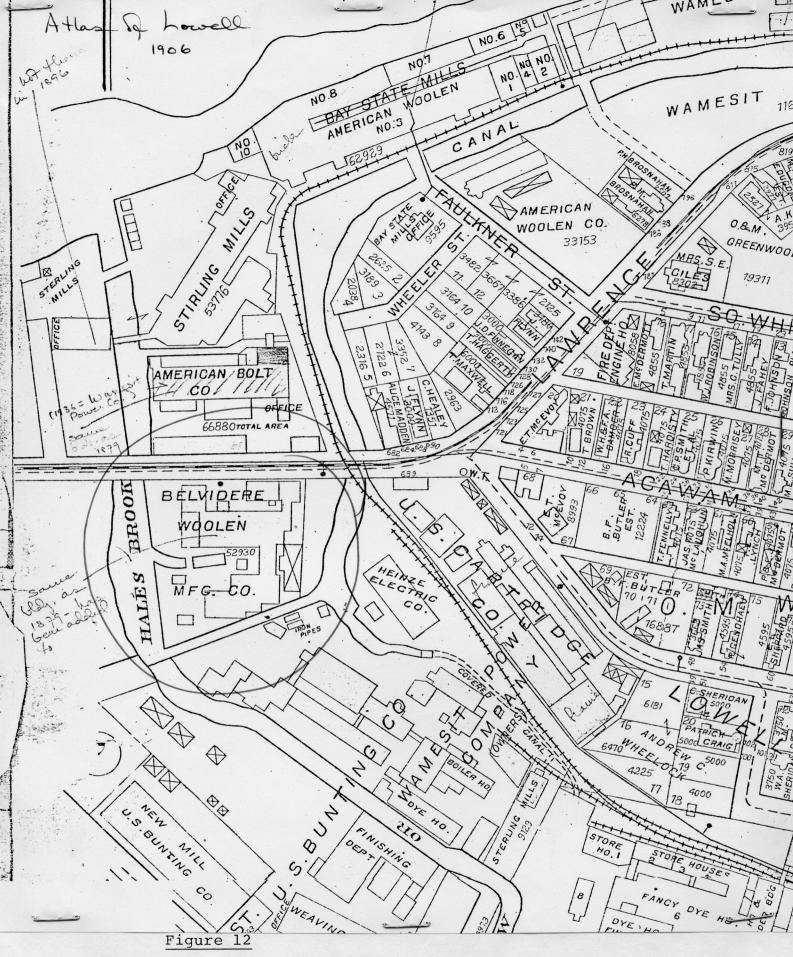


Figure 11

Belvidere Woolen Mfg. Co. No. 2 Mill (Woolen Mill), Lowell, Mass. Associated Mutual Insurance Company survey, June 28, 1895. Collection of the Merrimack Valley Textile Museum, North Andover, Mass.



Atlas of Lowell, 1906.

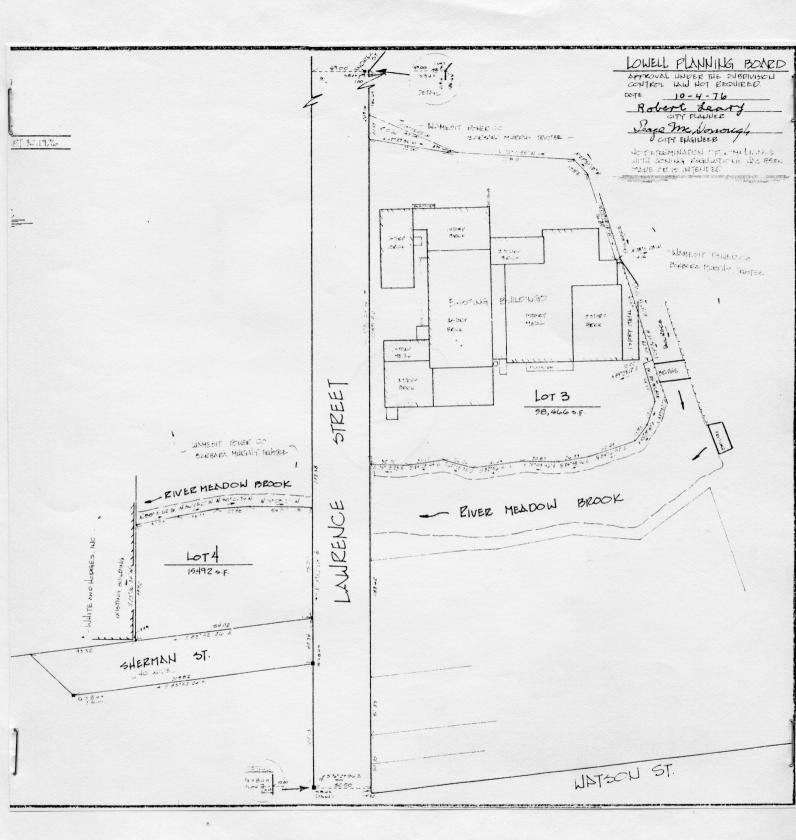


Figure 13

Plan of Belvidere Mill No. 2. Lowell Planning Board, October 4, 1976. North Middlesex Registry.

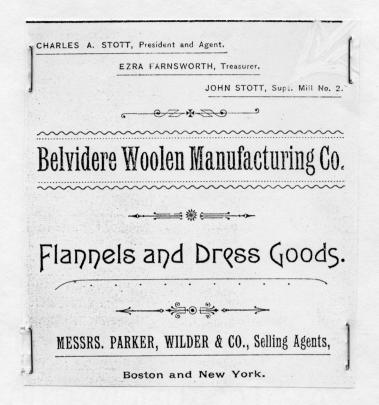


Figure 14

Belvidere Woolen Manufacturing Co. Advertisement, from The Morning Mail Souvenir of the City of Lowell, 1890, p. 21.

Footnotes

- 1) Molloy, Lower Merrimack, p. 58.
- 1A) Cowley, Handbook and History (1856), p. 50.
- 2) Illustrated History of Lowell, Mass., p. 290.
- 3) Idem.
- 4) Ibid., p. 291.
- 5) Ibid., p. 290.
- 6) Cowley, History (1868), p. 56.
- 7) Cowley, <u>History</u> (1868), pp. 56-57. <u>Illustrated History</u> of Lowell, Mass., pp. 290-291.
- 8) Z. E. Stone, "Before the Power-Loom," <u>Contributions/Old Residents</u>, v. VI, p. 64. <u>Illustrated History of Lowell</u>, Mass., p. 291.
- 9) Illustrated History of Lowell, Mass., p. 291.
- 10) Lowell Daily Journal and Courier, Saturday Evening, September 9, 1854, p. 2.
- 10A) Molloy, Lower Merrimack, p. 58.
- 11) Ibid., p. 53.
- 12) North Middlesex Registry, Record Book 26, p. 216.
- 13) Ibid., 32, p. 541.
- 14) Lowell Directory, 1864-65, p. 228.
- 15) Statistics of Manufactures in Lowell, January, 1880, p. 10.
- 16) Statistics..., January, 1885, p. 9.
- 17) Statistics..., January, 1890, p. 16.
- 18) North Middlesex Registry, Record Book 520, p. 538.
- 19) Ibid., Book 771, p. 81.

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- 20) <u>Ibid</u>., Book 886, p. 188. Record Book 930, pp. 103 and 104.
- 21) Ibid., Book 996, p. 87.
- 22) Ibid., Book 1430, p. 238.

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