

## **Factories of Patten's Pond & Mechanics Row**

**Mike Harrold**  
**Industrial Survey Volunteer**

Amesbury Carriage Museum  
Amesbury, MA

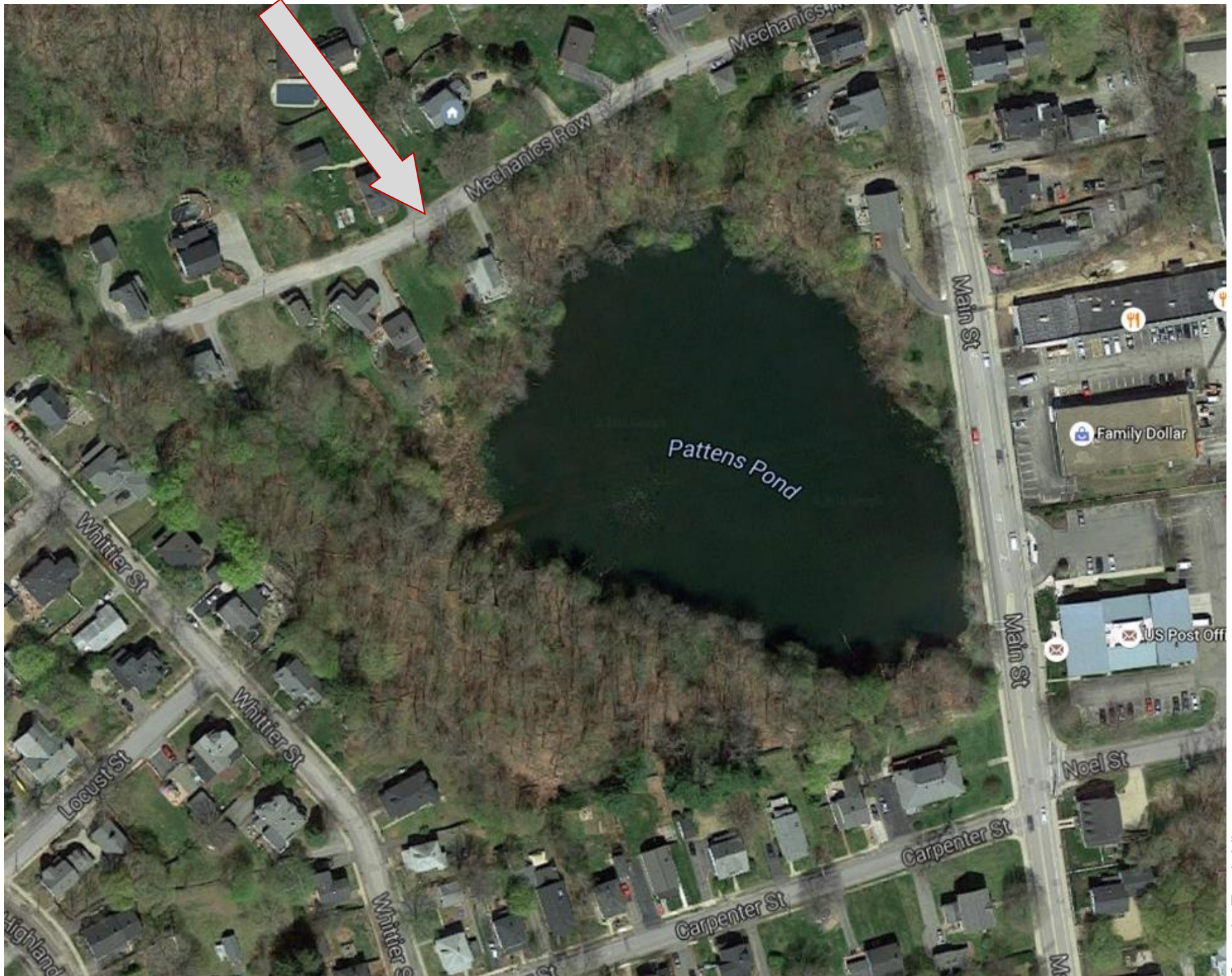
May 2023

# Introduction

Amesbury carriage making was begun by Jacob R. Huntington in 1853, perhaps an opportune time to access labor made available by the textile strike of 1852. But, the young business soon met hard times from the Panic of 1857 and then from major Civil War disruption. Water powered textile mills along the Powow River were then Amesbury's main employment, while the carriage making shops were small unpowered businesses of two to four buildings scattered through various neighborhoods. While many of these neighborhoods seem to be central downtown today, they were then sparsely populated, leaving ample room for carriage making sheds. As carriage making declined during the 1890s neighborhood growth rapidly overran these carriage complexes, which consequently disappeared without a trace, and with few remaining photos of them.

The Civil War did stimulate business in areas that might see war provisioning, mainly in textiles for uniforms, after which returning normalcy at war's end boosted pent-up domestic demand that benefitted carriage making. Post-war influences shaped activity around Patten's Pond on Main Street and specifically on Robert Patten's direct land holdings, which began breaking up after his 1858 death. An industrial park developed on a small dead-end lane by the pond having the industrious-sounding name of Mechanics Row. As is typical with many such neighborhood complexes, there remain virtually no signs of its former existence, including even photos of what was there.

# Mechanics Row – Off Main Street across Top of Patten’s Pond



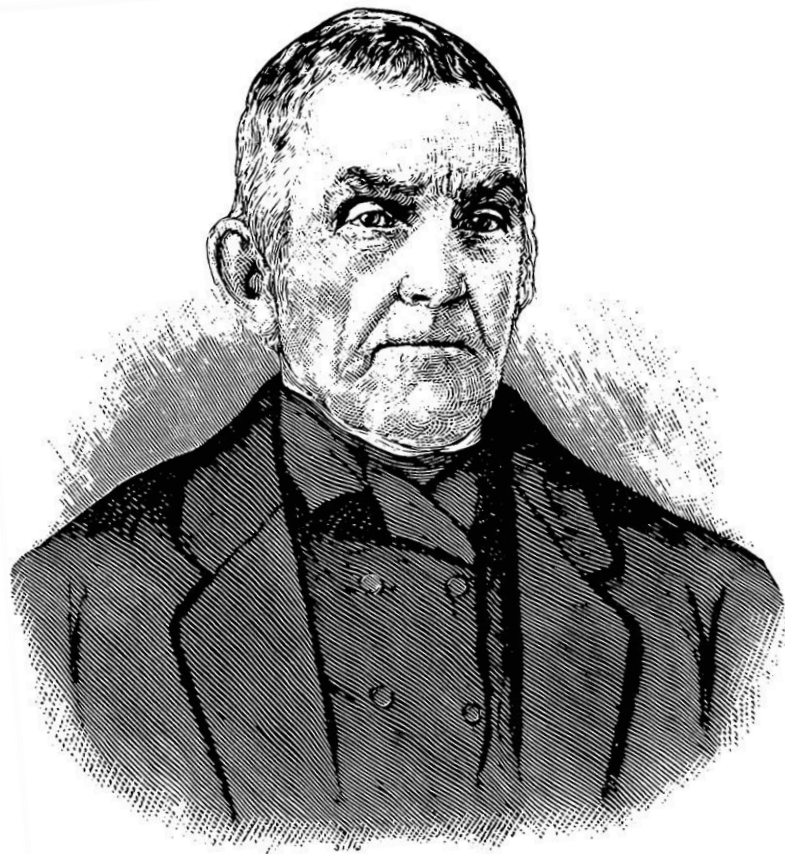
Google Earth View

## Robert Patten, 1776-1858

Robert Patten (no middle name found) was born in South Amesbury (now Merrimacport) coming to Amesbury in about 1807 when he purchased his tract on Main Street from the previous estate of John Hoyt Sr.. It is believed that all businesses described herein were within that tract, parts of which were being sold off after his death. Patten owned from the Powow River up to beyond Whittier Street, and up the hill toward St. Joseph's church. His primary occupations were farming and brickmaking, the latter from clay deposits along the Powow River. He provided a million bricks for the 1825-7 construction of Mill #2, today the home of Amesbury Industrial Supply.

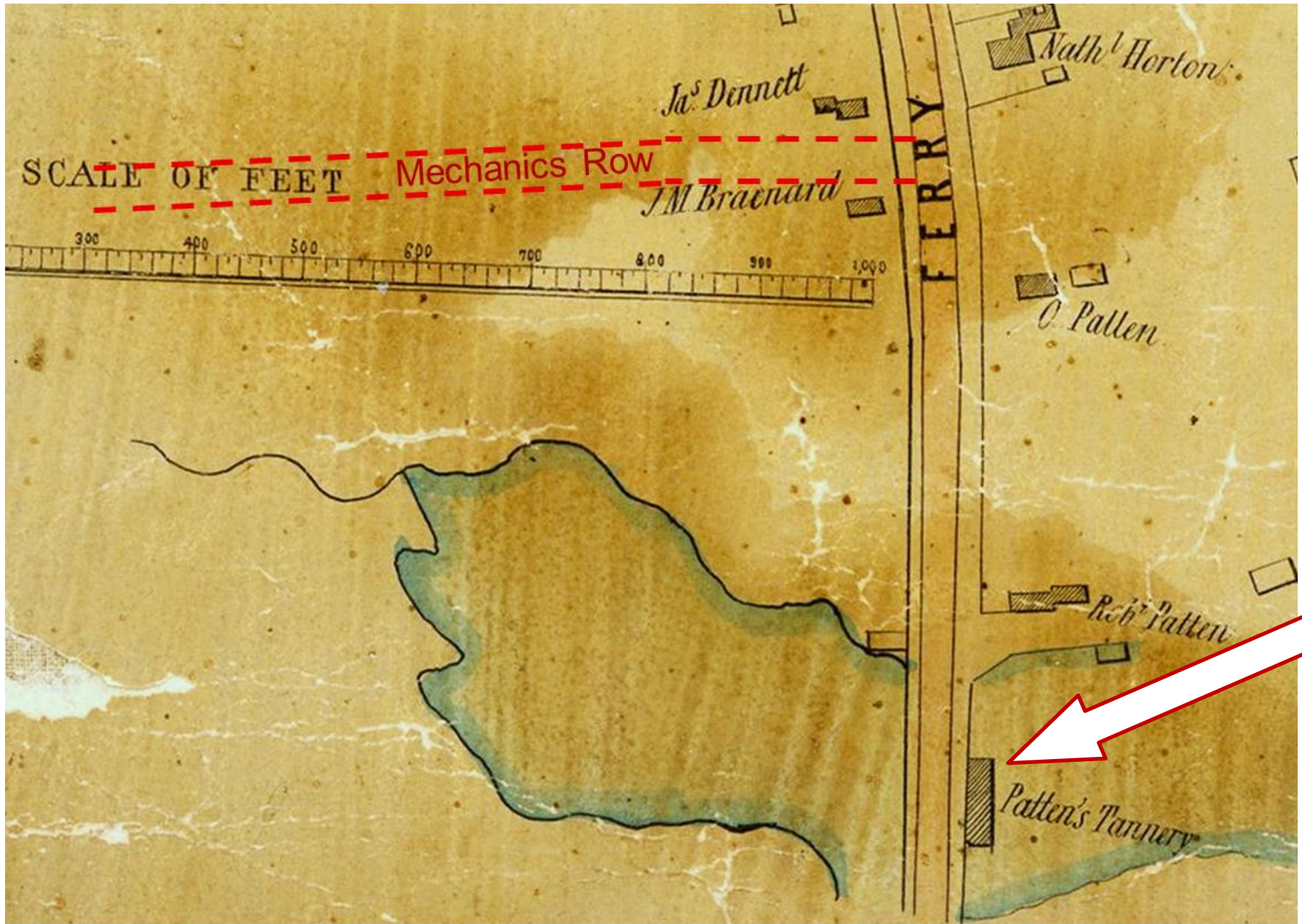
Patten was a prominent town supporter, being a founding officer of the Savings Bank and later president of the Powow River Bank. He was at various times a town selectman, county commissioner, and state representative for multiple terms. He was among the influencers as the economic center of Amesbury shifted from old Salisbury Point money to waterpower at the mills district.

*Brick in Mill #2, signed by Robert Patten in 1826*



*History of Essex County, Massachusetts, Vol II, compiled under D. Hamilton Hurd, J. W. Lewis & Co., Philadelphia, 1888, pg. 1531*

# “Moody’s Run” Creek Dammed in 1832, Creating Patten’s Pond originally powered a sunflower oil mill, which became a tannery in 1838



1854 Clark Map courtesy of ACM

# Patten's Pond, a Sunflower Oil Mill, and the Tannery

Patten's Pond was created in 1832 by raising Main Street as a dam. A likely source of fill would have been from below the dam to obtain more drop for more power. At the elevated southwest corner of the pond area is a rectangular excavation, seemingly another source of fill, which also could have been removed along the south side, creating a lane that once ran down to Main Street. Along there was a large walk-in brick-arch root cellar, having a wooden front facing the pond, known as "Squire Patten's tater hole", remnants of which could be seen until recent years<sup>1</sup>.

The pond's purpose was to power a sunflower seed oil mill, an enterprise of Joseph Mann and James Homer, the latter of Homer & Williams dry good store<sup>2</sup>. They reportedly obtained rights to a patented seed hulling process and produced oil from sunflowers grown in the highlands. The oil was used for both paint and culinary purposes but was apparently not fully satisfactory, so that the project was not long lasting.

Robert Patten's younger son, Robert Willis Patten (1817-1880) had learned tanning as a youth and at age twenty-one entered that business at the old oil mill, along with his older brother, Orlando<sup>3</sup> (1808-1880). They operated the tannery for two to three decades. Robert Willis resided in the family home and continued generally akin to his father as a farmer, brickmaker, selectman, and state representative.

Around the Civil War period a partnership of "Huntington & Bagley" purchased property along the north side of Patten's Pond from near Main St. up to Whittier Street. Both are old Amesbury surnames with numerous possible individuals these two people could have been. That plot became the origin of Mechanics Row, which was sometimes shown as extending up the hill to Whittier Street, where a deeded right-of-way still exists.

1) *Patten's Pond*, Amesbury Daily News, April 8, 1902, pg. 2

2) *Sunflowers and Tannery*, The Villager, November 11, 1880, pg. 2

3) *History of Essex County, Massachusetts*, Vol II, compiled under D. Hamilton Hurd, J. W. Lewis & Co., Philadelphia, 1888, pg. 1531

# The Main Street House of Robert Patten, mid-1870s

view up Patten's Hill from across Carpenter St. area and southeast corner of the pond

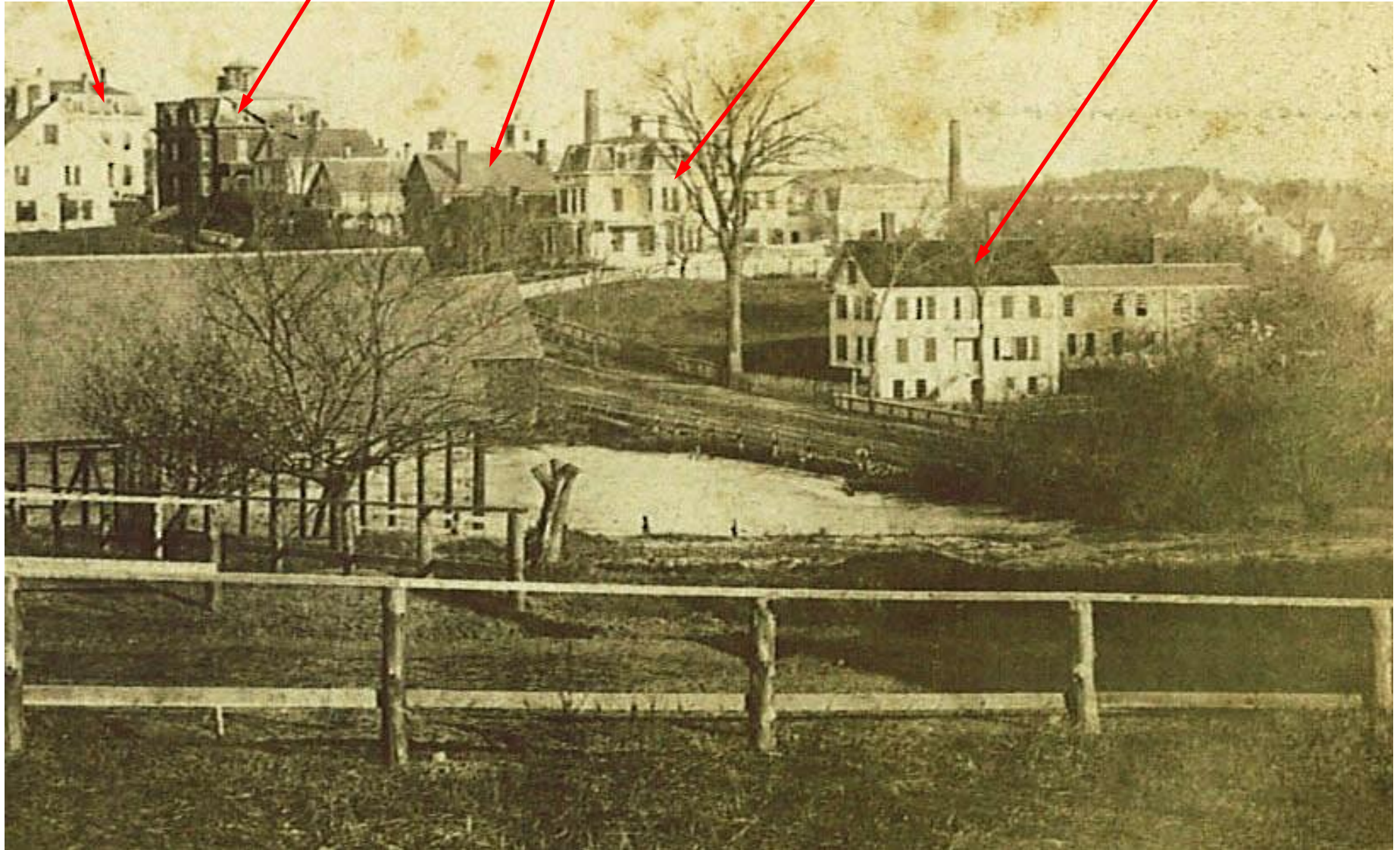
Jacob R. Huntington

William Biddle

Orlando S. Patten

Robert O. Patten

Robert Patten, then Robert Willis Patten



From Amesbury Public Library

# Amesbury Woolen Mill amid Early Amesbury Steam Engines

Five textile mills built between 1837 and 1845 were Newburyport's first real industry<sup>1</sup>, differing from Amesbury woolen mills in that they processed only cotton and were steam powered because there was no local drop in the Merrimack River. Steam power was being analyzed during this period for its economic competitiveness (waterpower not being free) and for how to improve engine efficiency. Civil War demand resulted in the new Amesbury Woolen Mill, Amesbury's first all-steam textile mill, built where the Post Office now resides on Main Street. Shortly thereafter, the Colchester Mill on Elm St. was built to use primarily steam and the small amount of waterpower available from Back River.

A primary use of Amesbury steam engines was to perform the brute force work of reducing raw logs to lumber, and then to sized boards and finished pieces. General carpentry was a universal demand, joined in Amesbury by carriage carpentry. The 1867 Locke & Jewell wheel factory on Mechanics Row had the first carriage-related engine, while William Biddle had converted Charles Cadieu's Water Street wood mill to carriage work by about 1872

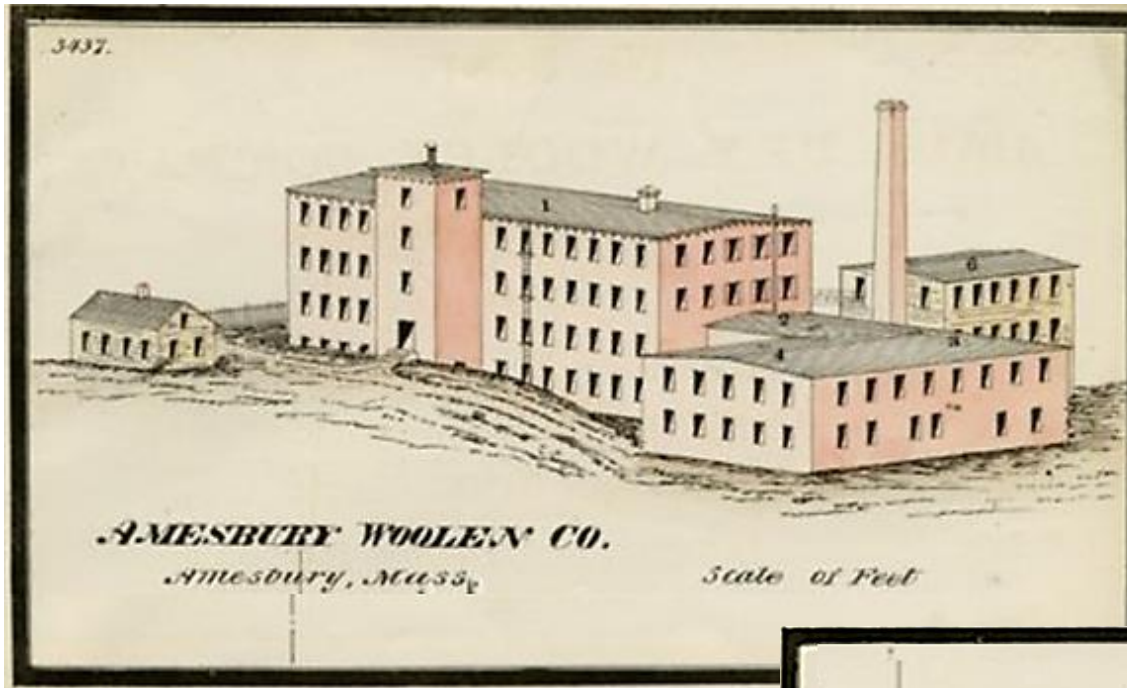
Year	Company	HP	Machinery	Textiles	Woodwork	Hats
1836	Salisbury Mills Steam Co.	7	X			
1850	Amesbury Flannel Mfg. Co.			X		
1852	Enoch W. Osgood	8	X			
1853	Robert Morrill	20			X	
1856	Abner Bailey	20				X
1856	Amos Pettingell				X	
1858-9	Salisbury Mills Co.	60		X		
1863	Amesbury Woolen Mills Co.	100		X		
1866	Colchester Mill	60		X		
1867	Charles H. Cadieu				X	
1867	Locke & Jewell	40			X	
1872	William W. Biddle				X	
1872	Cadieu & Clark				X	

1) Bartlett Mills 1837, James Steam Mill 1842, Essex Steam Mill 1843, Globe Mill 1845, Ocean Mills 1845

Red arrows indicate instances in which the same engine and facility were used by a subsequent firm.



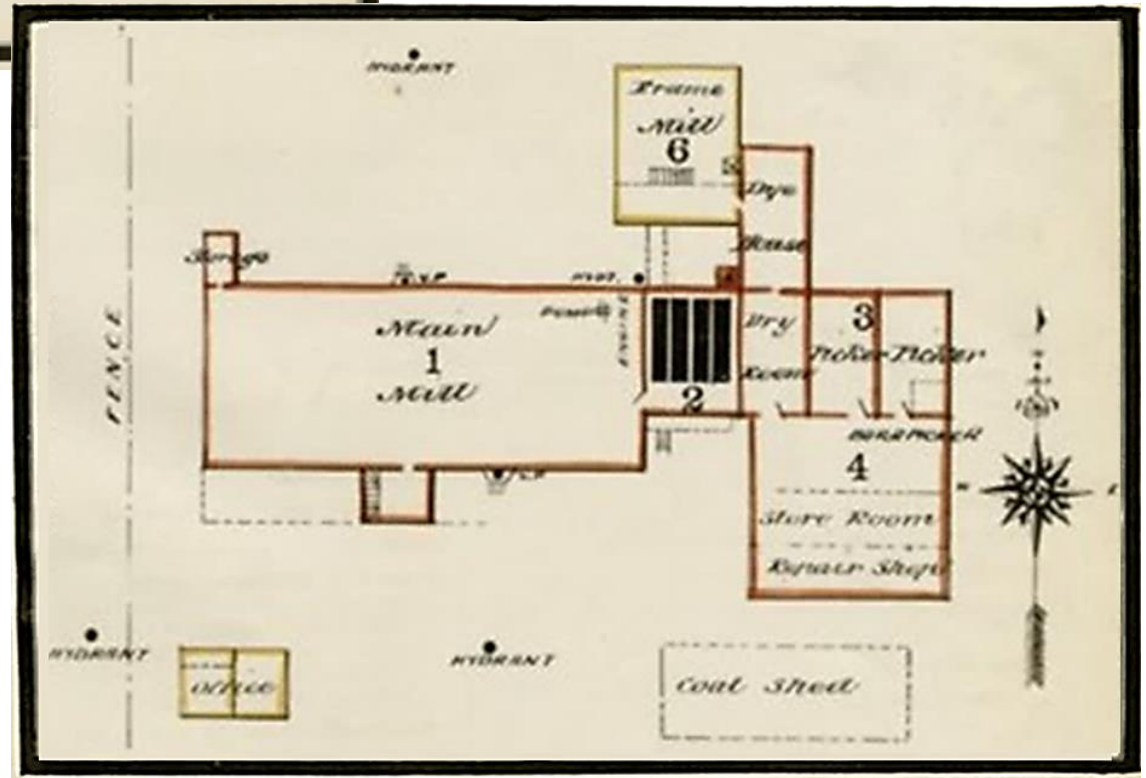
# Amesbury Woolen Mill Company, 1874 Barlow Insurance Map



Orlando S. Patten was among the company creators and directors, likely providing the needed land. The business generally failed to thrive, being sold ca. 1870 to a “Snider & Co.” of Boston, which also found little success. They muddled on for several years, being essentially doomed after the Panic of 1873.

Based on unpublished research by Robert Morris.

The main mill was of brick, with a small wooden office and larger wooden frame mill (#6) for spinning frames, and a wooden coal bunker. Drying was done by blowing air over hot steam pipes and up through the wool. The factory was lit by gas from a coal gasification plant located about 75 feet out back for safety reasons.

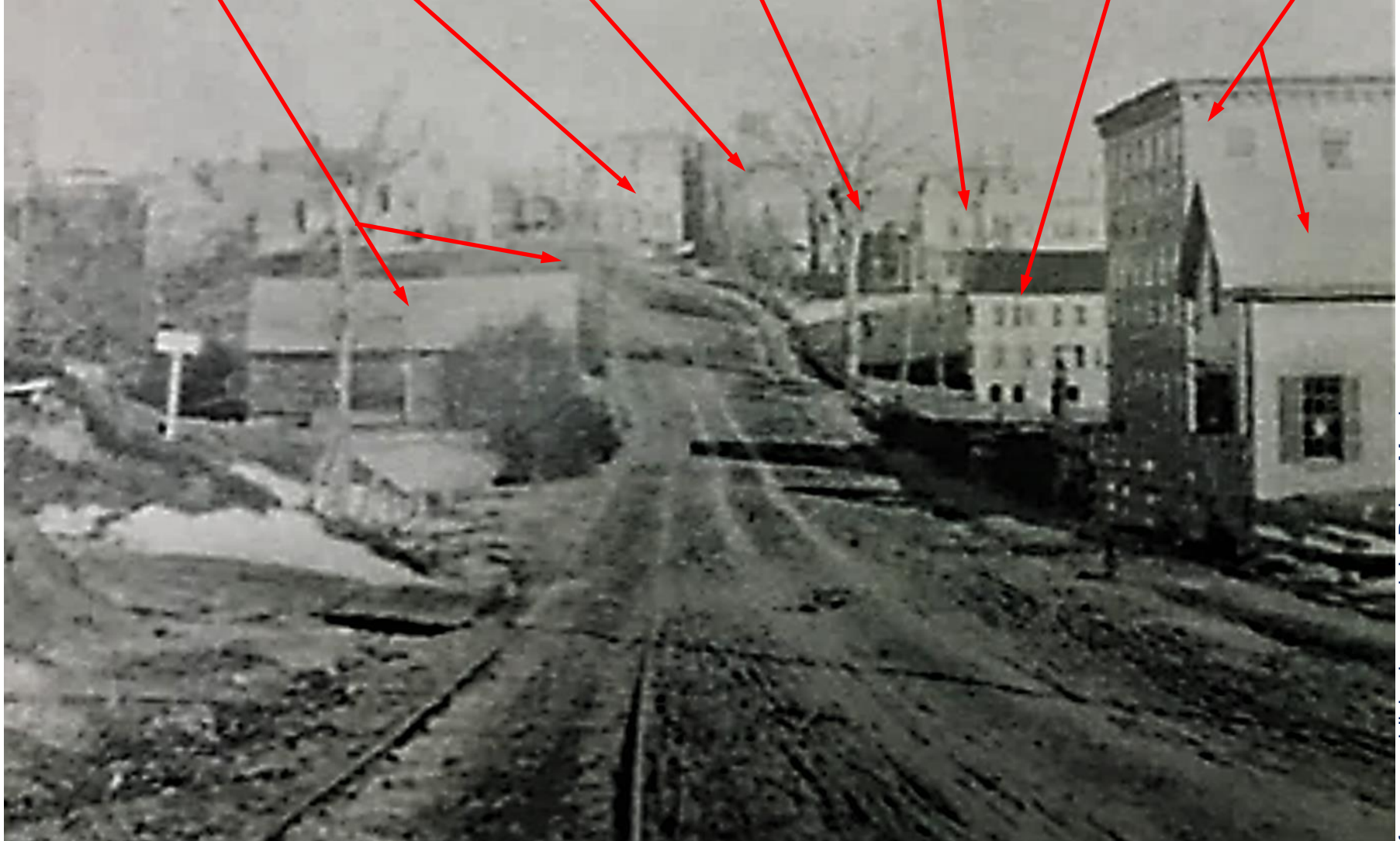


Courtesy of Lowell Textile Museum, see Appendix for associated mill details

# Amesbury Woolen Mill, House of Robert Patten, mid/late-1870s

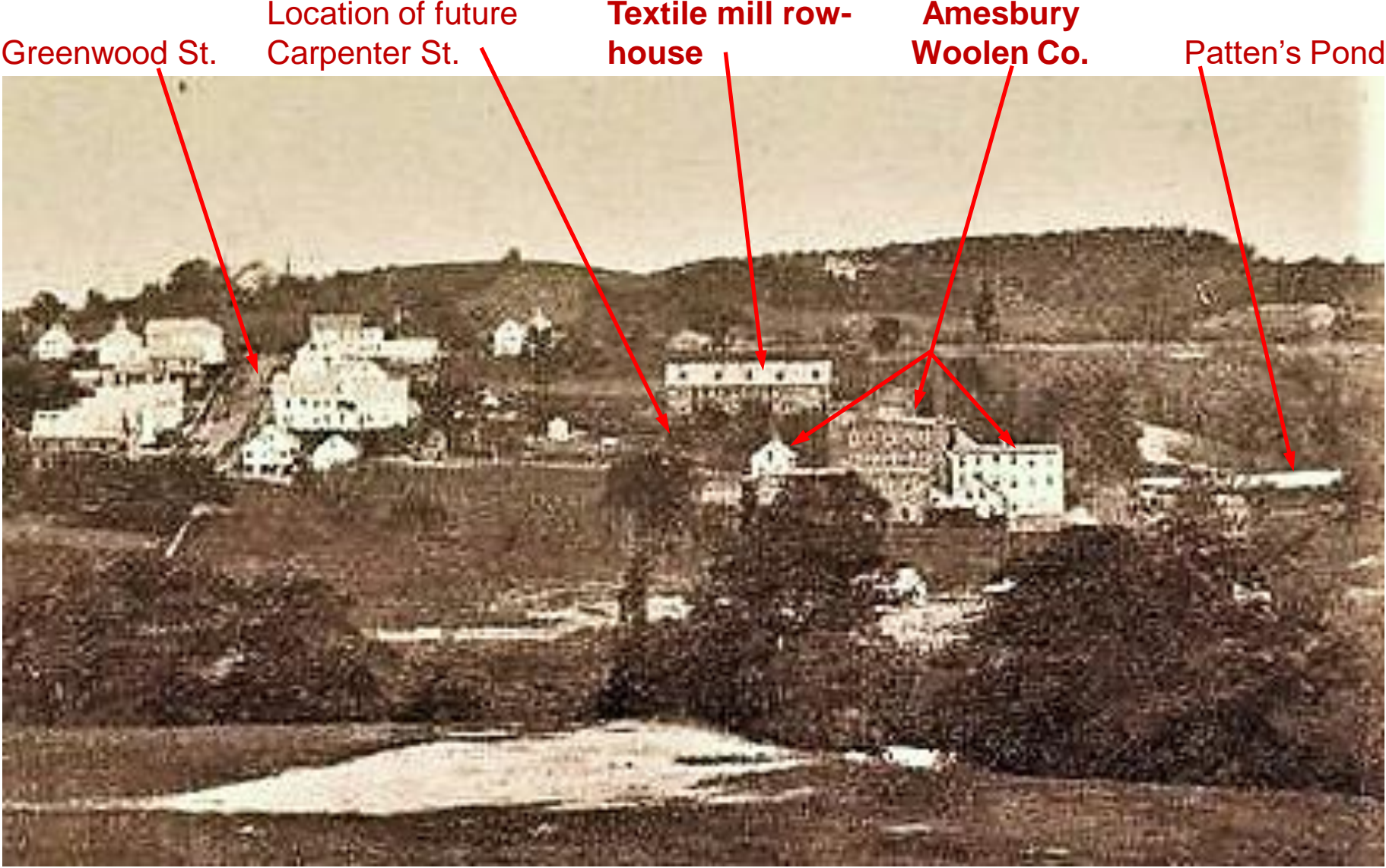
view up Patten's Hill from in front of the woolen mill agent's house, 207 Main St. (at Carpenter)  
Orlando is a son of Robert Patten, Robert O. is a son of Orlando

Ice Houses    Jacob R. Huntington    William Biddle    Orlando S. Patten    Robert O. Patten    Robert Patten    Amesbury Woolen Mill



from unpublished research by Robert Morris

# Main Street, Patten's Pond, & Amesbury Woolen Mill, early 1870s viewed across the Powow River from the back of Mt. Prospect Cemetery



Today's Noel St. runs down to the Powow River where the small white woolen company office building is located. Mechanics Row entrepreneurs, Locke, Jewell, Carr, Allen and Marston developed Greenwood St. and had their residences there when they opened shop in 1867.

# Locke & Jewell, the Anchor of Mechanics Row

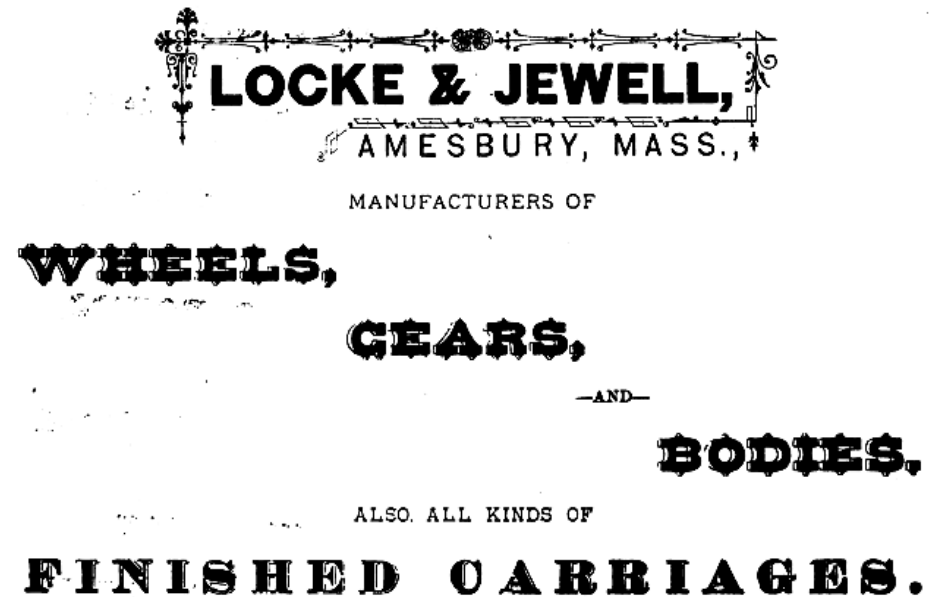
In 1867 Joseph Locke & Hiram Jewell purchased pond-side land from Huntington & Bagley, bringing both Dudley Marston and the first steam engine to Amesbury carriage making. Their initial product was wheels, which had many duplicate parts, such as spokes, that were ideal for mass-manufacture and for which they invented some of their own machinery. Prior to that, Amesbury makers had obtained most of their wheels from Merrimac shops. Locke & Jewell initially purchased rough spokes and hubs from outside suppliers<sup>1</sup>. Also in that period, David True was making wheel hubs in his water-powered shop on Rocky Hill Road<sup>2</sup>. Axels and springs were being purchased from sources in Maine and Connecticut<sup>3</sup>. Amesbury makers had thus been making primarily carriage bodies.

Locke & Jewell was accompanied on Mechanics Row by the carriage shop of Carr & Allen, which all operated as one company. As seen in the 1879 advert, Locke & Jewell was offering to other carriage makers the three main sub-assemblies of wheels, gears (undercarriages), and bodies, all of which started with heavy carpentry work suited to their powered machinery.

1) *Carriage Business*, Amesbury & Salisbury Villager, July 20, 1871, pg. 2

2) 1870 U. S. Census data

3) *Carriage Business*, Amesbury & Salisbury Villager, July 20, 1871, pg. 2



**LOCKE & JEWELL,**  
AMESBURY, MASS.,

MANUFACTURERS OF

**WHEELS,**

**GEARS,**

—AND—

**BODIES.**

ALSO, ALL KINDS OF

**FINISHED CARRIAGES.**

**Two and Three Spring Phætons,**

**Dexter Spring Top Buggies,**

**Side Bar** “ “

**Piano Box** “ “

**Extension Top Carryalls,**

**Jump Seat** “

**Ivers and Concord Wagons.**

SEND FOR ILLUSTRATED CATALOGUE AND PRICE LIST.

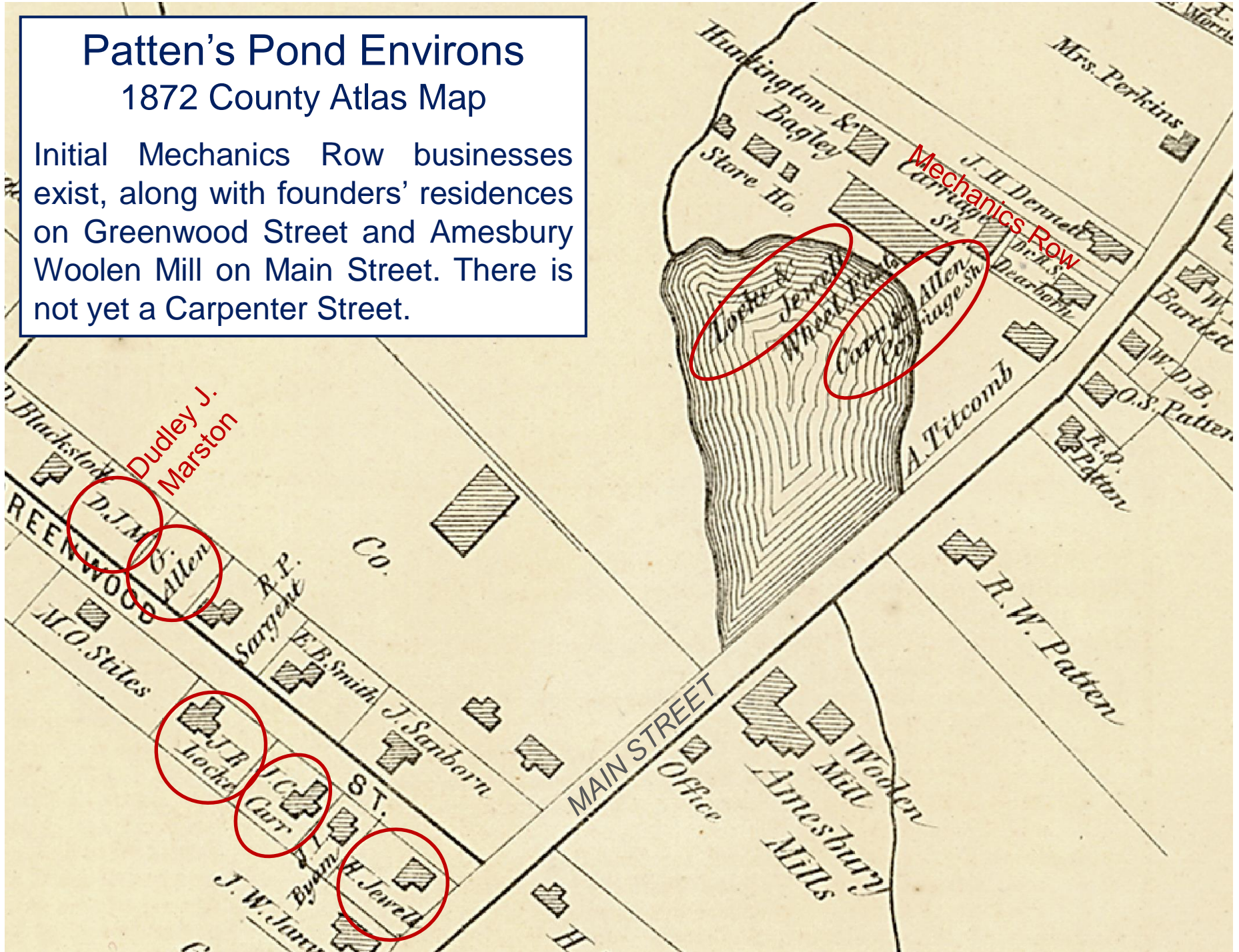
J. B. LOCKE

H. JEWELL

Various types of carriages include several spring suspension types. Folding leather tops are available. Jump seats can be folded away to leave cargo space.

# Patten's Pond Environs 1872 County Atlas Map

Initial Mechanics Row businesses exist, along with founders' residences on Greenwood Street and Amesbury Woolen Mill on Main Street. There is not yet a Carpenter Street.



# Amos & Charles Pettingell, Steam Mills, and Woodworking

Amos Pettingell had run a steam powered wood mill for general carpentry at Salisbury Point during the 1850s, afterward joining a group operating in Jonathan Webster's "old machine shop" off Elm Street. The latter is the steam powered factory billed in the accompanying advert, which burned in 1866. Growing up in that environment, Amos's son, Charles Franklin Pettingell, began on his own during the early 1870s in the basement of the Locke & Jewell wheel factory on Mechanics Row.

1859-04-07, Villager, pg. 3

**STEAM MILL.**

**T**HE subscriber is prepared to attend to all descriptions of  
**TURNING and JIG-SAWING.**  
 Also, **STAIR BANISTERS and FRAMING PINS** made to order.  
**AMOS PETTINGELL,**  
 Steam Mill, Salisbury Mills.  
 ap7

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**CARRIAGE BOWS**

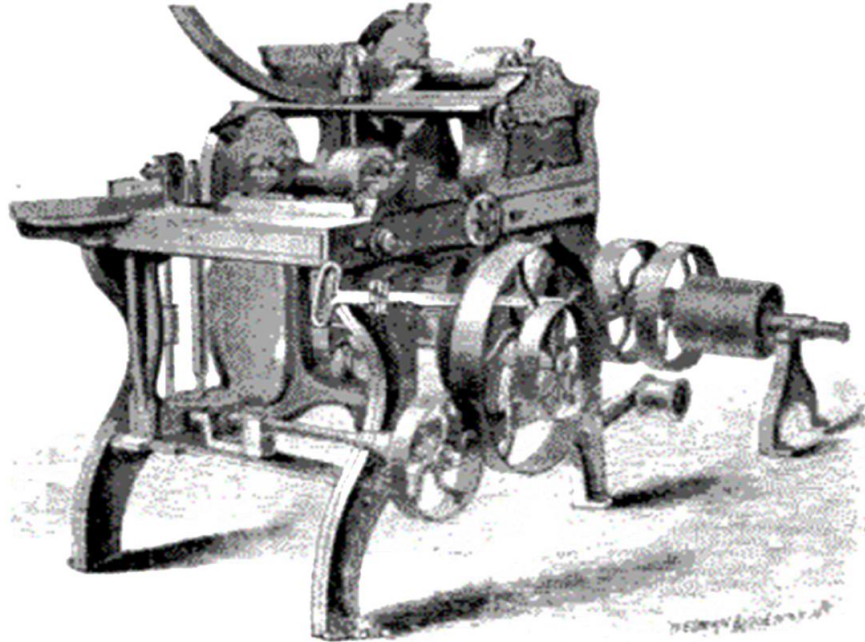
**O**F all descriptions on hand and made to order. Carriage manufacturers will do well to call before purchasing elsewhere.  
**AMOS PETTINGELL,**  
 Steam Mill, Salisbury Mills.  
 ap7

Charles Pettingell developing a line of carriage woodworking machinery, much of it aimed at wheel making. Only the young Pettingell Machine Co. displayed Amesbury wares at the Philadelphia Centennial Exhibition of 1876. Pettingell was described there as making over twenty different machines<sup>1</sup>, which would have been flowing into area factories. In 1880-1 he combined with a brother in a new factory adjacent to Locke & Jewell<sup>2</sup> to become a successful machinery maker to American carriage manufacturers. He was supported by the DeRochmont iron foundry directly across Mechanics Row in making cast iron bases and components for his machines.

- 1) *Draftbook of Centennial Carriages*, Hub Publishing Co., New York, 1876, pg. 111 (reprinted University of Michigan Library)
- 2) From Hub magazine, 1881, quoted in *History of Amesbury Carriage Makers*, Royal Feltner, self-published, Amesbury, MA

# Pettingell Machine Company, Carriage Wheel Machinery

## C. F. PETTINGELL, Amesbury, Mass., MANUFACTURER OF IMPROVED CARRIAGE AND WHEEL MACHINERY.



PATENTED APRIL 25, 1871.

The above cut represents a Rim Planing Machine that will dress one hundred sets of rims per day. It not only planes the rim on its inner and outer peripheries at one motion, but also on either of its sides, giving the required bevel. Fourteen of these Machines are now in actual use, giving perfect satisfaction.

Also Manufacture Hub Morticing, Rim Rounding, Spoke Tenoning, Spoke Smutting, Spoke Facing, Hollow Auger Tenoning, Spoke Polishing, and Rim Boring Machines; Driving Horse, Clamp Screws, Hub Presses, Dowell Cutters and Bits, Hollow Augers, and Morticing Chisels.

Carriage Gear Rounder, Dressing and Rabbing Machines, Surface Planers, Side Planers, Carriage Tenoning, Foot Morticing, Polishing and Boxing Machines.

**SEND FOR CIRCULAR.**

1874 Pettingell Advertisement

At left is a Pettingell rim planing machine on cast iron base, driven by leather belts. The 1871 patent was the first of Dudley Marston's 11 patents, this one developed while he was at the Locke & Jewell factory.

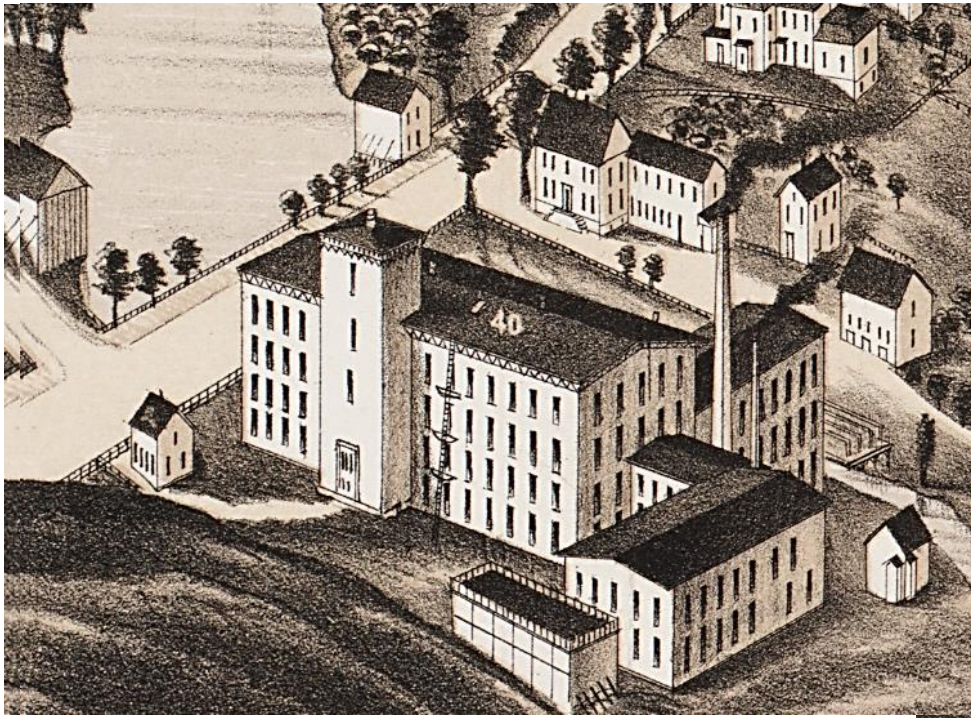
Below<sup>1</sup> a Pettingell spoke tenoner, having both vertical and horizontal circular saws cutting tenon surfaces and shoulders that mate with mortice slots in the wheel hubs.

<sup>1</sup> <http://vintagemachinery.org/photoindex/detail.aspx?id=19202>



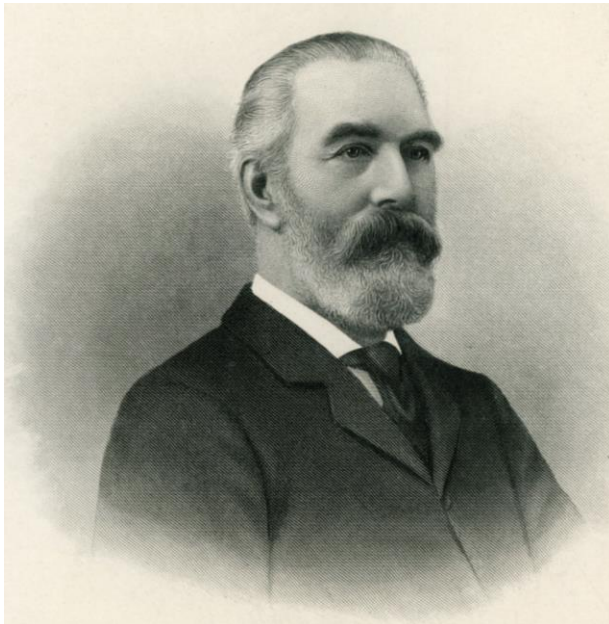
# Amesbury Woolen Co. becomes Robert Bleakie Woolen Co., 1876

## Bleakie mill, pictures from 1880 Aerial Map

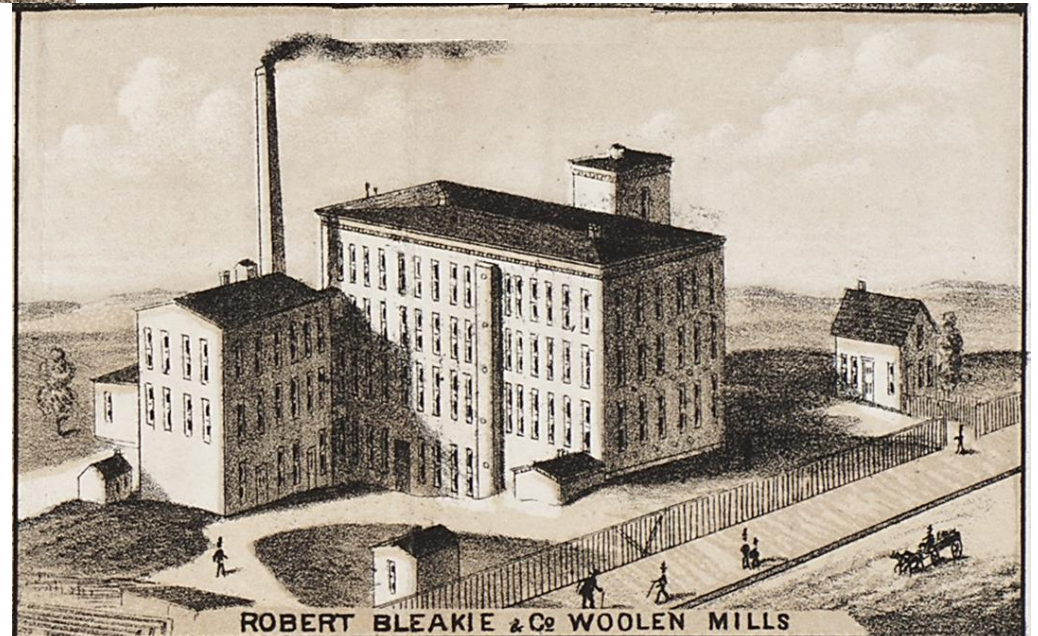


The extended 1870s recession upset operations and ownership of all Amesbury textile mills, resulting in Robert Bleakie, of Hyde Park, Boston, gaining ownership of Amesbury Woolen Mill. Bleakie owned several mills in Boston and Maine. He produced “shoddy” for a time in Amesbury from reprocessed wool and later various grades, including cashmere goods. With management acumen and a distribution system he turned the local mill profitable.

Based on unpublished research by Robert Morris.



Robert Bleakie





## Looking up Main Street ca. 1883 (after telephone utility poles)

Woolen mill on right, pond low on left with Carr & Allen carriage sheds below St. Joseph church tower (behind trees), not yet with a steeple. A horse-drawn street railway runs down Main Street to the Ferry. At far left, beside the railway tracks, there appears to be construction for the steps and front yard of the new textile mill agent's house, that being Edward Carpenter, seemingly the namesake for Carpenter Street, which was created at about this time (ref. unpublished research by Robert Morris).



From ebay collection of Amesbury stereo views

# Mechanics Row, 1880 Aerial Map, South Side View

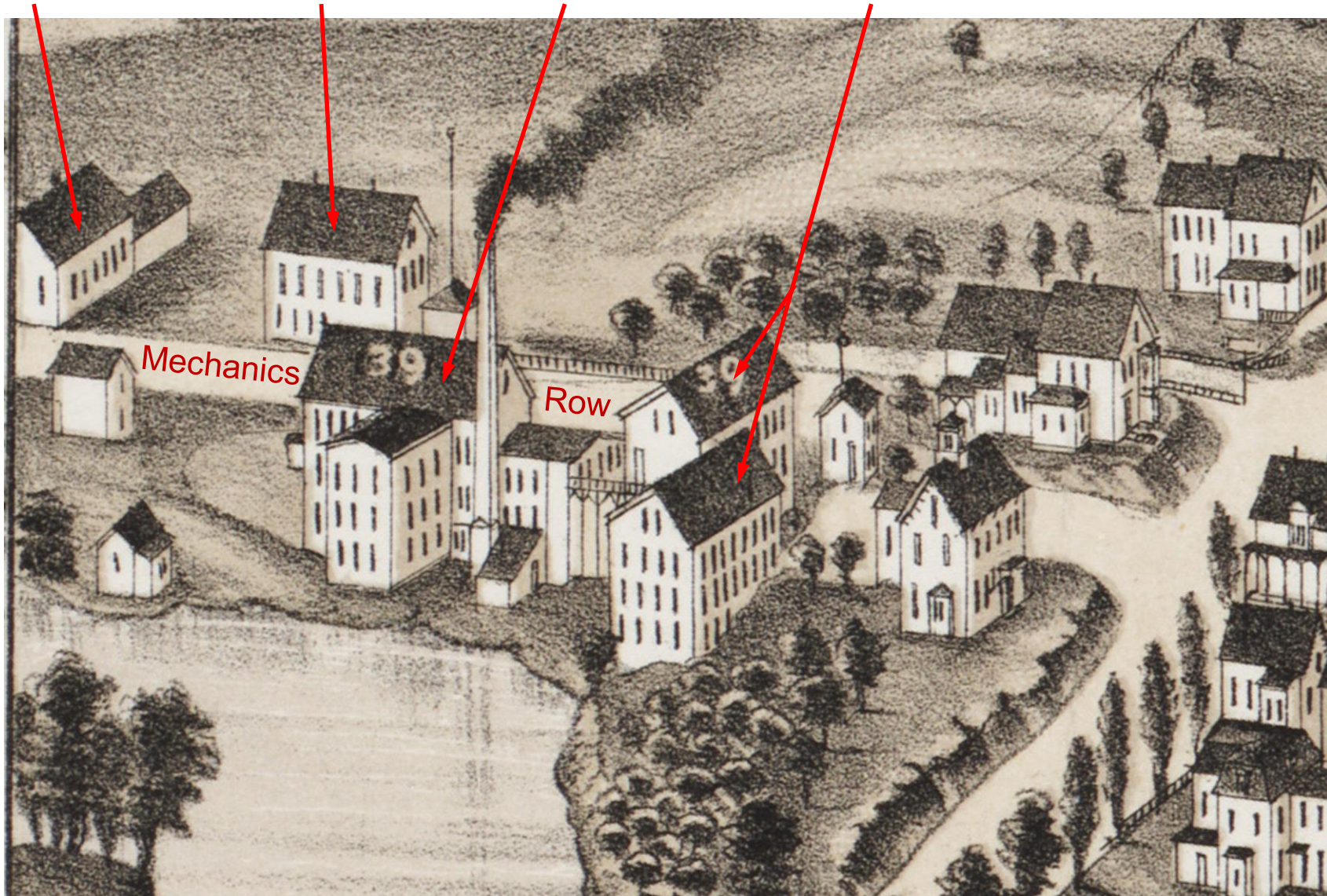
Locke & Jewell factory has a walk-out basement to the pond behind.  
The back of the factory appears in a winter scene photograph that follows.

De Rochmont  
Foundry

Tenement

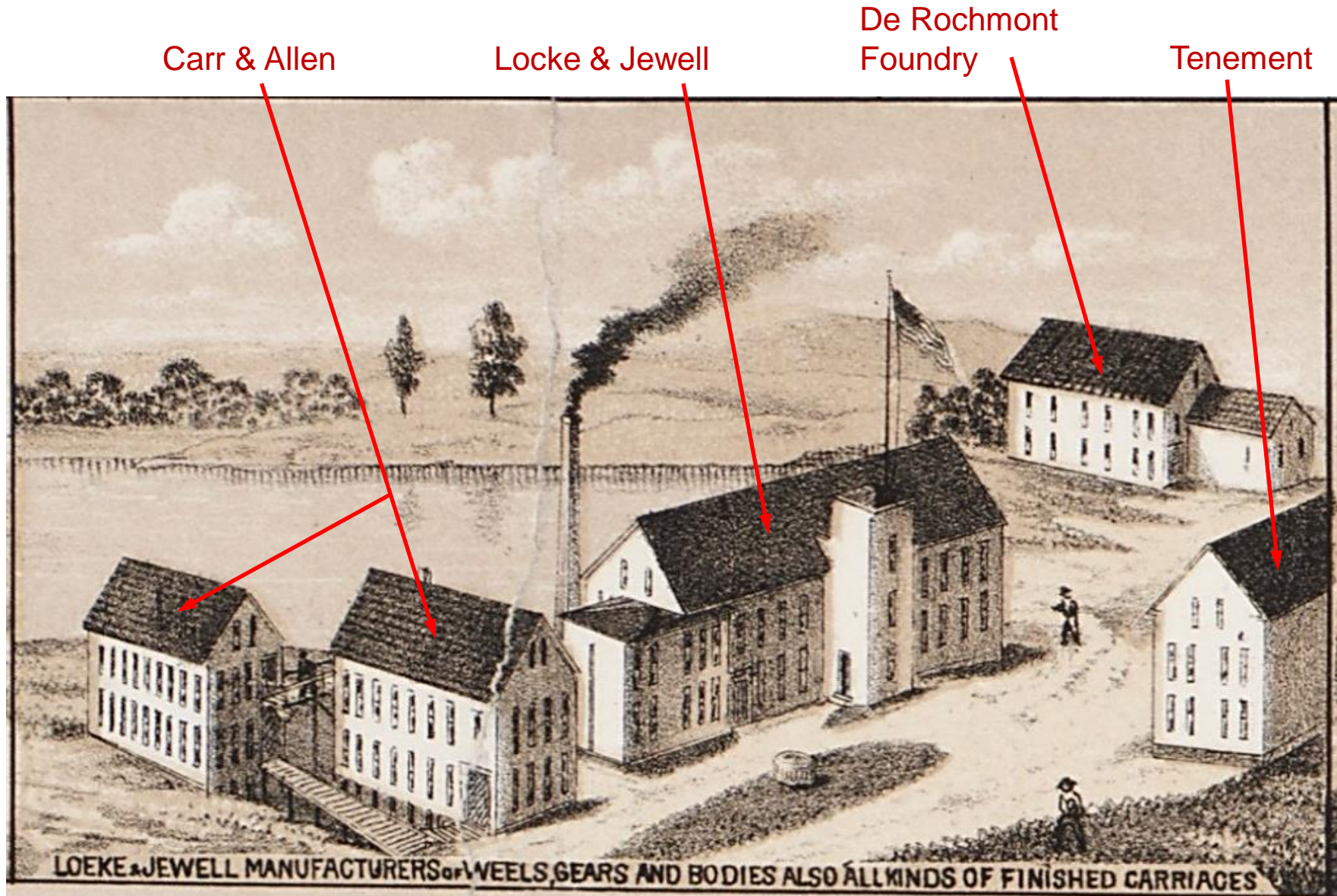
Locke & Jewell

Carr & Allen



# Mechanics Row 1880 Aerial Map, North Side View

De Rochmont foundry has been artistically moved across the street to be in view.  
No photos have been found showing the Locke & Jewell factory front



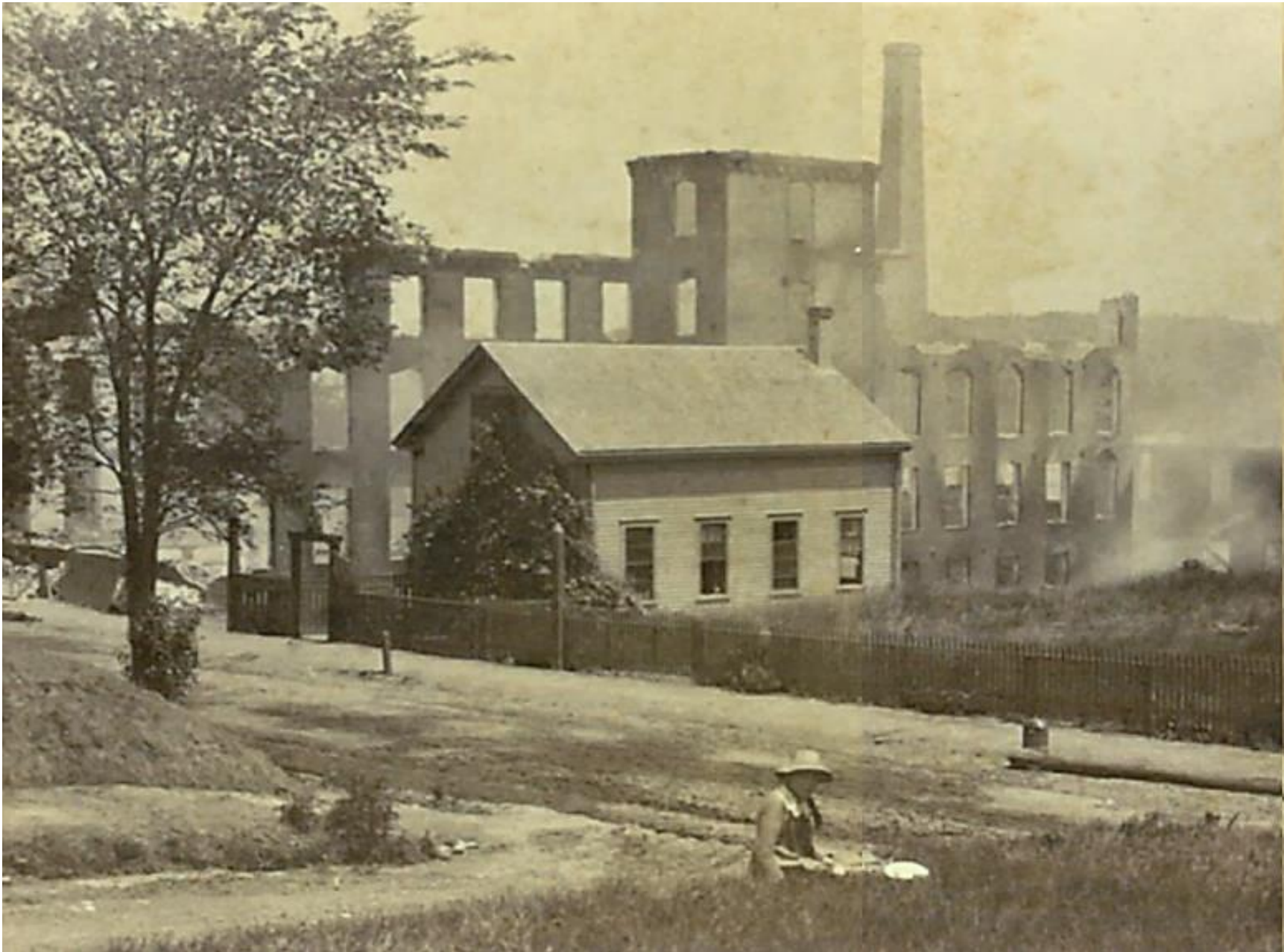
## Woolen Mills Before and After 1883 Lightning Strike and Fire

Below shows roughly similar views of the former Amesbury/Bleakie woolen mill before and after its disastrous fire. It was reported that 100,000 of its bricks were used to help build the Babcock building after the 1888 Carriage Hill fire. Mill remains sat for nearly twenty years. Some of the mill engine iron was salvaged in 1902. The large mill rowhouse on Carpenter St. was demolished ca. 1904. Noel and Roland Roy cleared the lot of wild overgrowth in 1953, the former seemingly the namesake of Noel Street now at that location. At lower right, a path cuts across the lot from Carpenter St. to the corner of the pond where a lane is seen that no longer exists. (Based on unpublished research by Robert Morris.)



# Amesbury Mills Sometime After Fire of July 5, 1883

Foreground right is front yard of the mill agent's house at Main and Carpenter Street  
For a few years around 1900, the mill office building housed Patten's Hollow Marble & Granite Co.



from unpublished research by Robert Morris

# Looking up Main Street After 1886 Ice Storm

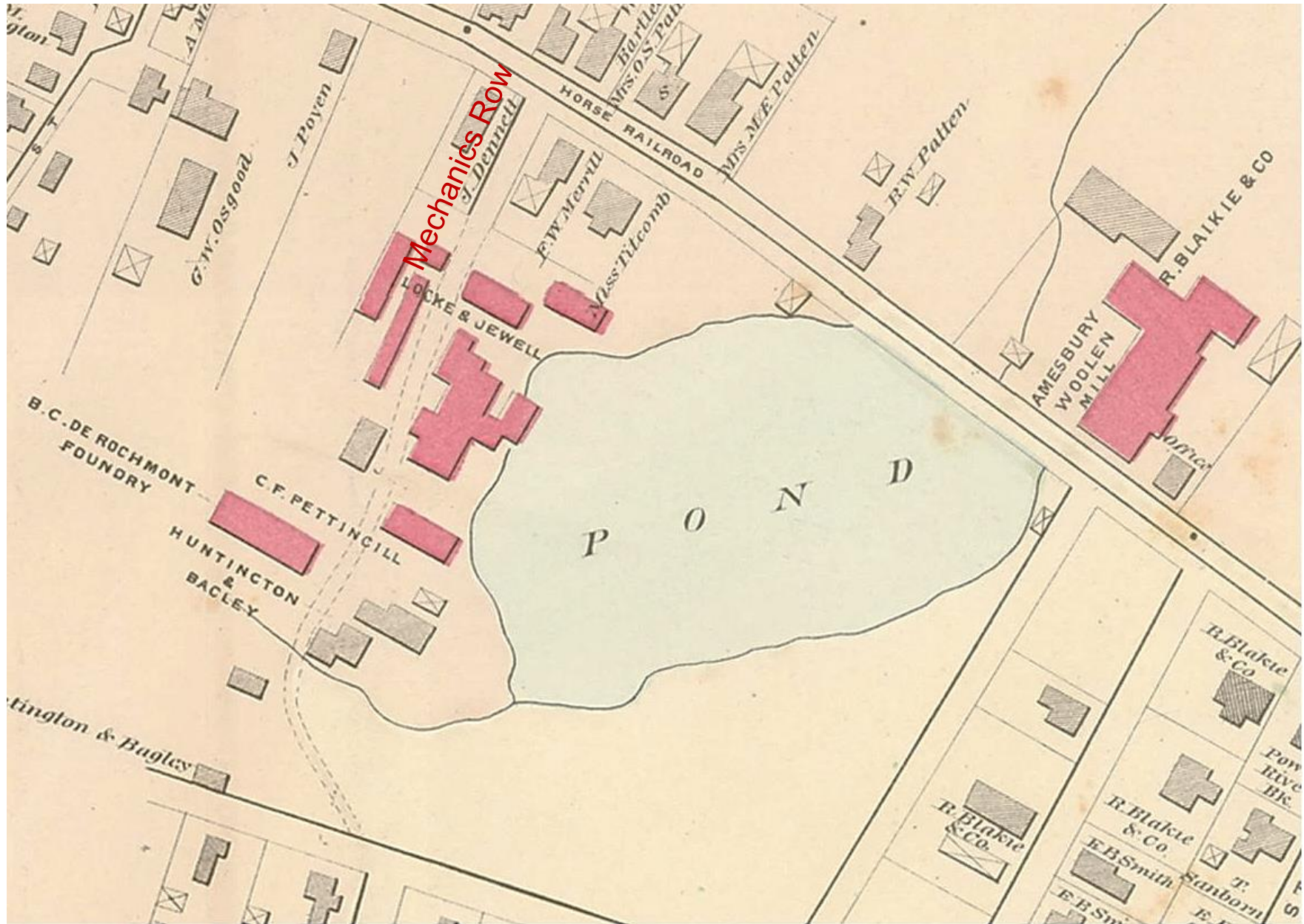
The woolen mill office building still appears at right, in today's Noel Street. Locke & Jewell and their carriage sheds can be seen in the background along the pond. Above their smokestack is the newly built school at St. Joseph's church, with a large belfry on top (between house and tree). Utility poles are for telephones, as electricity was not yet being generated in town. The house is the mill agent's residence, built by Robert Bleakie and later owned by carriage maker, Patrick Connor.



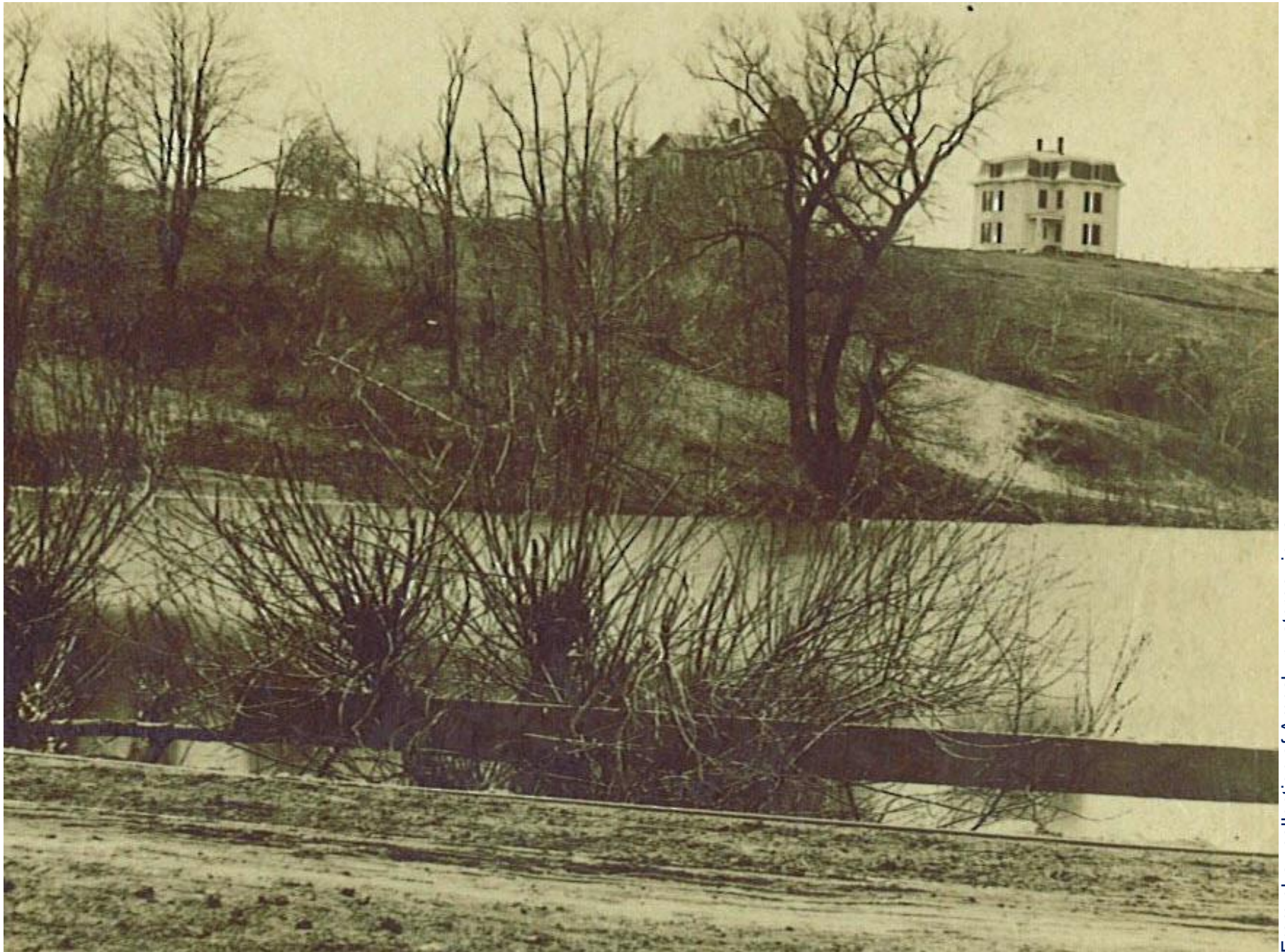
Photo courtesy of Steve Klomps

# Mechanics Row - 1884 Map

Locke & Jewell and Pettingell factories later burned in 1887  
 Huntington & Bagley still own portions of Mechanics Row



View up to Whittier Street, across Patten's Pond from Main St.  
#29 and #33, still extant on the far side of Whittier St. at corners with Locust St.



From ebay collection of Amesbury stereo views

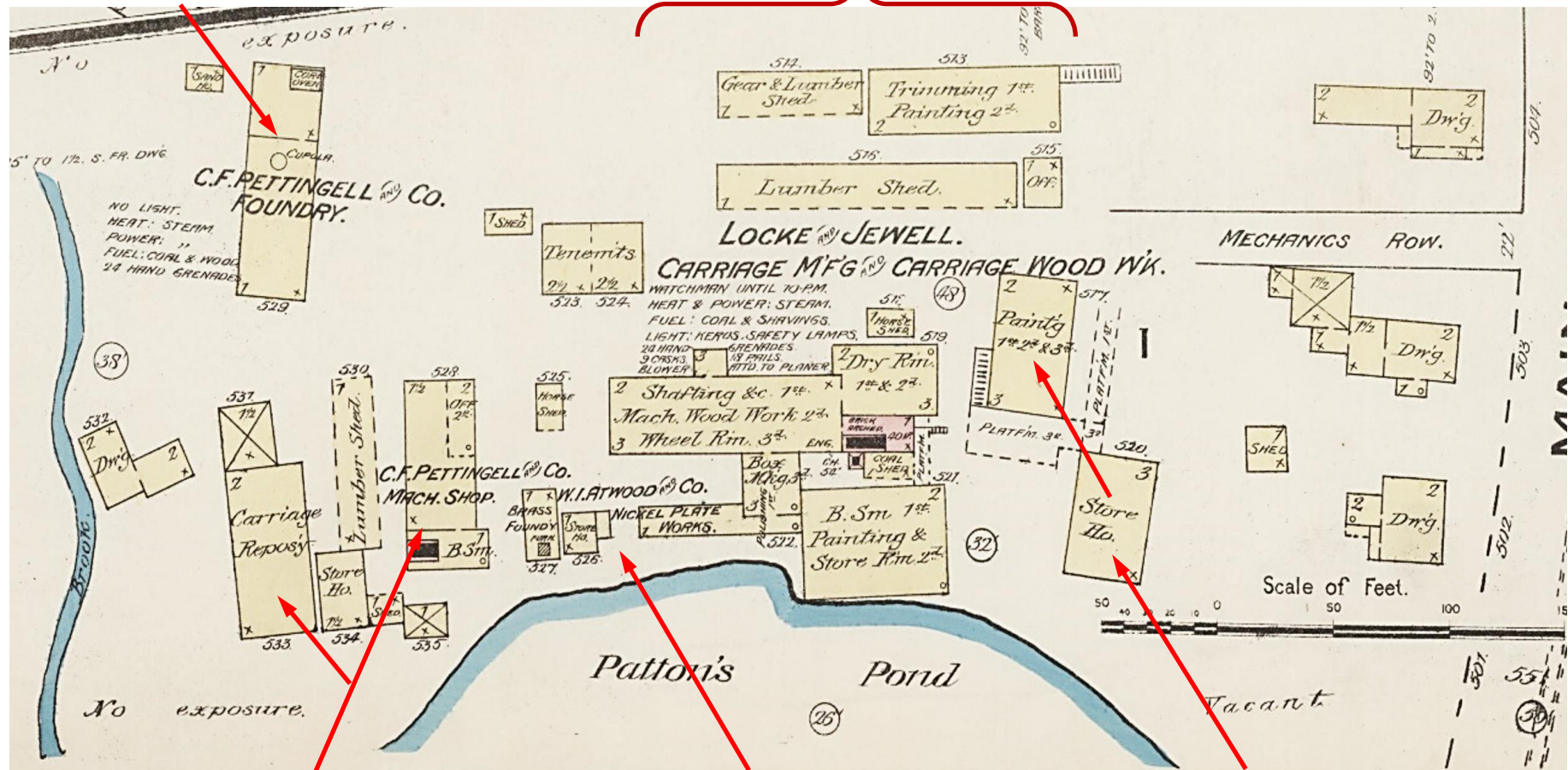


# Mechanics Row, 1885 Sanborn Insurance Map, Sheet 1

The Mechanics Row factory complex during its peak period. The 1880s were economically robust and business was thriving. Additional work sheds have been built. The hill across the street has been terraced to receive the tenement building and several rows of work sheds at different levels. The Atwood Brothers have built their shop down at the pond's edge, under the name of W. Irving Atwood & Company. Disaster then struck with a devastating 1887 fire.

De Rochmont Foundry,  
now Pettingell Foundry

Locke & Jewell



C. F. Pettingell &  
carriage storage

Atwood Brothers Co.  
nameplates and plating

Carr & Allen carriage making.  
Buildings were connected by  
upper story walkways.

# The Atwood Brothers, Nameplates & Plating

## silver plated nameplates to carriage lanterns and auto headlights

Washington Irving Atwood apparently used his first name only when legally required. So, W. Irving Atwood (1841-1926) and his surviving brother, Arthur Hiram Atwood (1843-1906) were born in Ohio to seemingly wandering parents, which perhaps strengthened their bond to stick together. The brothers had migrated by the 1860s to Maine where they married sisters Abigail Frances Hartwell and Elizabeth H. Hartwell, and had become silver platers in Portland. A common carriage item was a silver or nickel-plated brass nameplate attached to the rear axle or back of the carriage body or seat. By the 1870s the brothers had built such a business in Merrimac (then West Amesbury). As the economy recovered from 1870s hard times, they moved to Mechanics Row where Amesbury presented a larger market. (Amesbury supported another such shop on Water Street called Titus & Walker.) Atwood brothers cast small brass articles and carriage findings and performed light metal fabrication, continuing to build their business. By 1884 they were bustling with fifteen employees<sup>1</sup> and enjoying the booming 1880s.

Plating of varied objects is done. The business has a telephone and a branch store in Merrimac.

1881-08-20, Weekly News, Page3

**W. I. ATWOOD & CO.,**  
ELECTRO & GILD PLATERS.  
**Gold Plating!**  
**Silver Plating!**  
**Nickel Plating!**  
Watch Cases, Watch Chains, Spoons,  
Knives, Forks, Revolvers, &c.  
—PLATED AT SHORT NOTICE AT THE—  
**Nickel Plate Works**  
—OF—  
**W. I. ATWOOD & CO.,**  
AMESBURY.  
**Lowest Prices.**  
Orders by telephone or otherwise promptly  
attended to  
BRANCH SHOP—Merrimac, Mass.      j 11 j m

1) 1884-05-29, Villager, Page8, Town Businesses

## Atwood Brothers Move into Carriage Lanterns

W. I. Atwood & Co. expanded their buildings during 1885 and then in November prepared to move into the G. Cammett building on School Street (where the fire department now is) that had been vacated by carriage maker, Benjamin Lewis. An unpowered shop, the Atwoods installed a boiler and a fifteen-horsepower steam engine, and converted the blacksmith shop to a brass foundry<sup>1</sup>. They occupied the building by year's end, where they soon entered the making of carriage lanterns as the Atwood Manufacturing Company (unrelated to the Connecticut firm of Plume & Atwood, making kerosene lighting).

Lantern making prospered such that they moved in 1889 to part of the large new Babcock factory on Chestnut Street with 100 employees. W. I. Atwood's brother died in 1906, the company then operating with W. I. Atwood's son, Irving Henry Atwood, and major investment by F. E. Castle, formerly of Grey & Davis Lamp Company. Atwood Castle Company then occupied the former N. H. Folger carriage factory in 1909-10, after which it was moved in 1911 to plants in Elmira, New York and Battle Creek, Michigan as the Castle Lamp Company making automobile lighting.

### W. I. ATWOOD & CO., Nickel Plate Works, - - Amesbury, Mass.

GOLD AND SILVER PLATING.

MANUFACTURERS OF

### Crown Prince Carriage Bands,

PEERLESS TOP PROP NUTS, WHIFFLE-TREE TIPS, CARRIAGE  
NAME PLATES, SIDE LIGHT MOULDINGS, &c. &c.

We guarantee the Best Work.



This Cut shows the manner  
in which the Bands are applied.

Its advantages over all others  
are apparent at a glance.

No more Bands besmeared  
with paint and soiled with dirt.

Without question the Crown  
Prince is the most convenient,  
as well as the most stylish Band  
now in the market.

Merrimac, Mass., Aug. 27th, 1881.

Messrs. W. I. Atwood & Co.: I have used your Crown Prince Hub Band, and consider it the best thing out. It is very tasty in design, can be easily applied to a finished carriage, and has many points of superiority over any other Band in the market. It is destined to come into general use by carriage manufacturers.

J. B. JUDKINS.

☞ A sample set of these Bands sent by mail, postage paid, on receipt of one dollar. Send for Price List, &c., to W. I. ATWOOD & CO.,  
Sole Manufacturers, Amesbury, Mass.

The business is branching into varied products of larger production

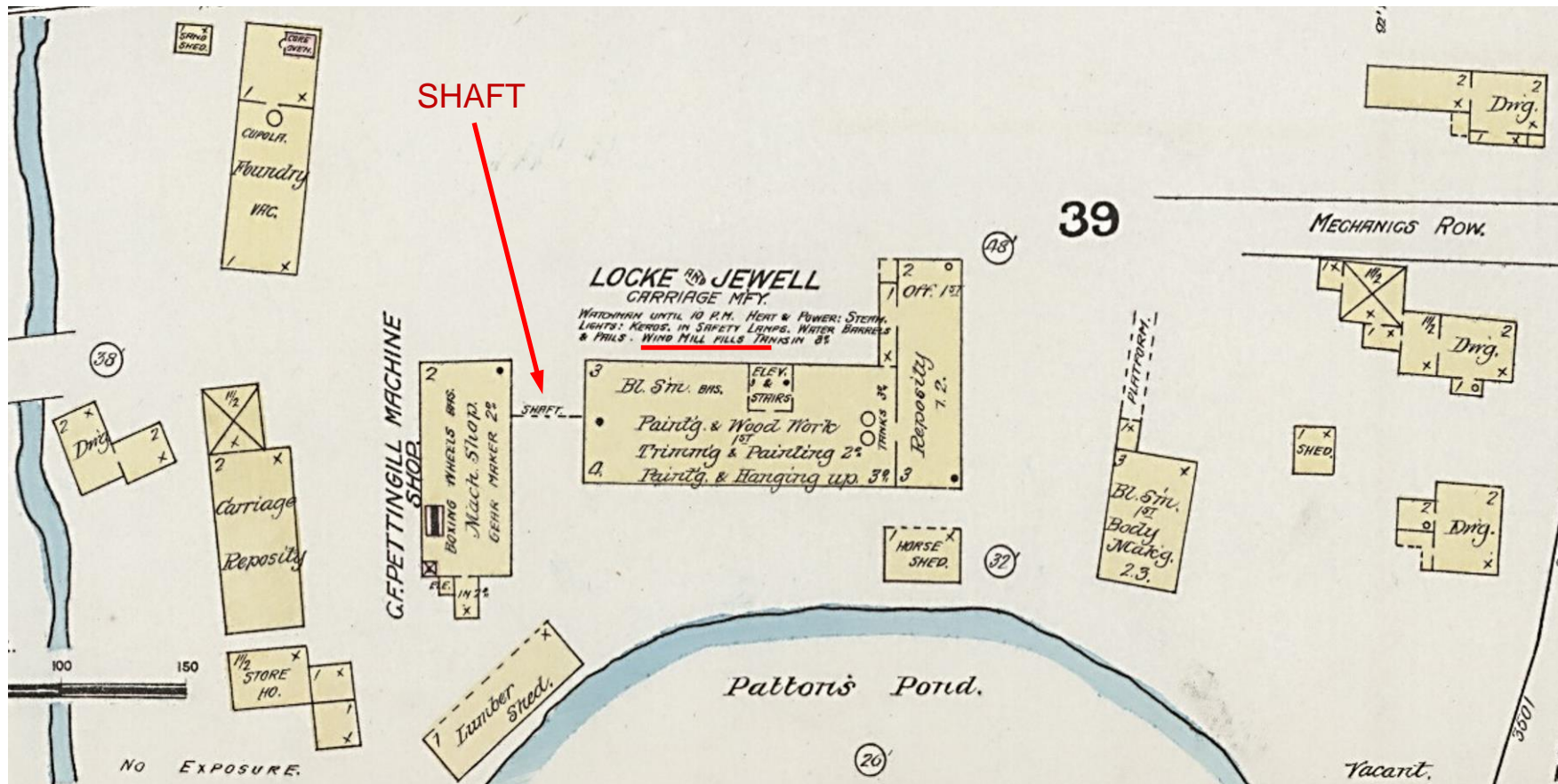
1881-11-04, Weekly News, Page8,

1) 1885-11-19, Villager, Page5, Move & Engine

# Rebuilt Locke & Jewell and Pettingell Factories After Fire of 1887

## 1889 Sanborn Insurance Map, Sheet 1

The new Pettingell factory is powered by a drive shaft from the steam powered Locke & Jewell factory. The latter has water tanks on its 3rd floor that are pumped full by a wind mill. The nature of work at the Pettingell factory has changed, notes stating that wheel boxing is done in the basement while gears are made on the 2<sup>nd</sup> floor, suggesting that Kendall & Lunt has occupied the building, as noted by J. J. Allen (appendix). Carriage gears are undercarriages. One stage of wheel finishing is “boxing”, in which the wheel is centered by its iron tire (outer rim), and then its hub is bored concentric with the rim to receive an iron journal box that will mate with an axle on the carriage gear. Kendall & Lunt may have also been using other work sheds on the property.

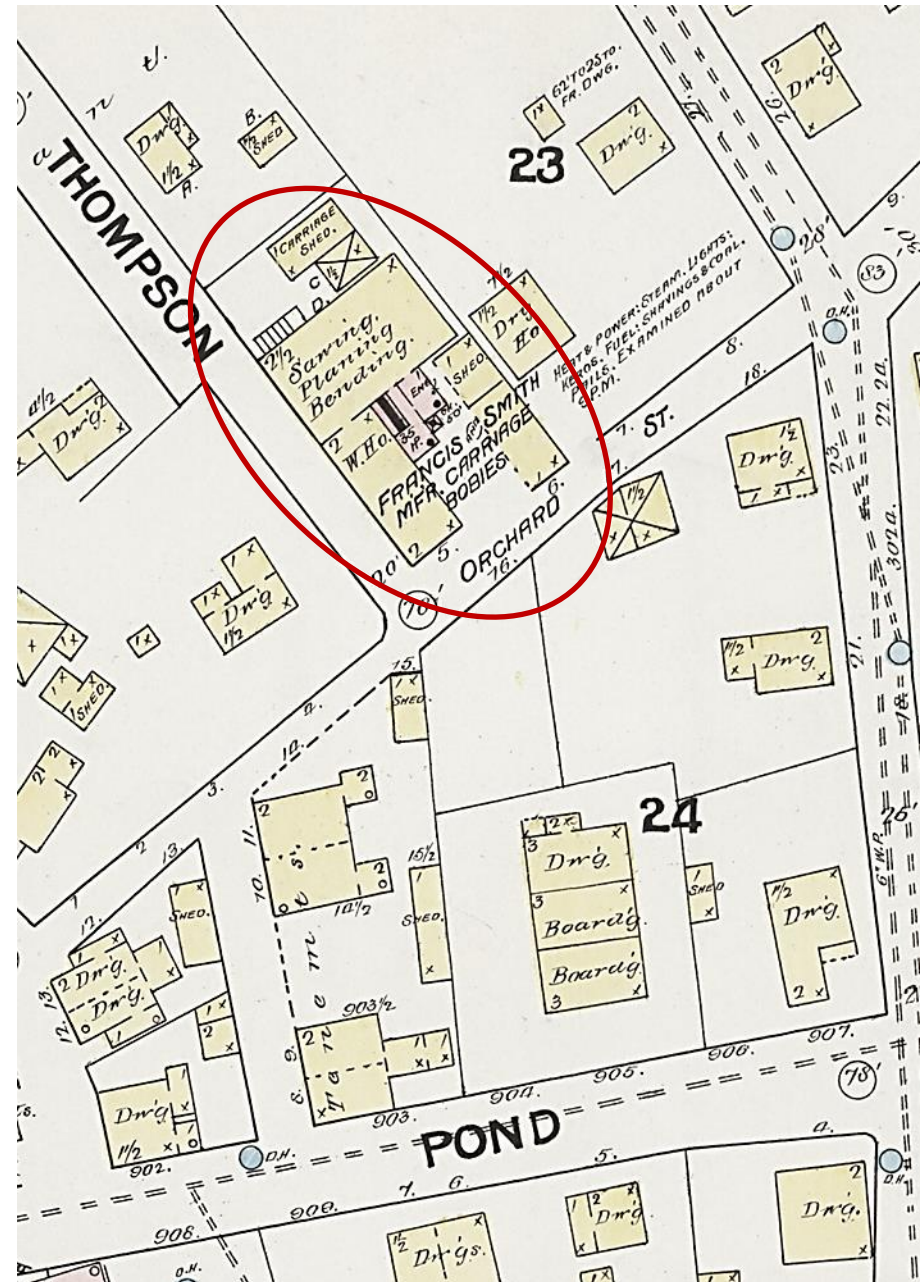


# Kendall & Lunt, Carriage Bodies and Gears

A similar theme at the corner of Thompson and Orchard Streets

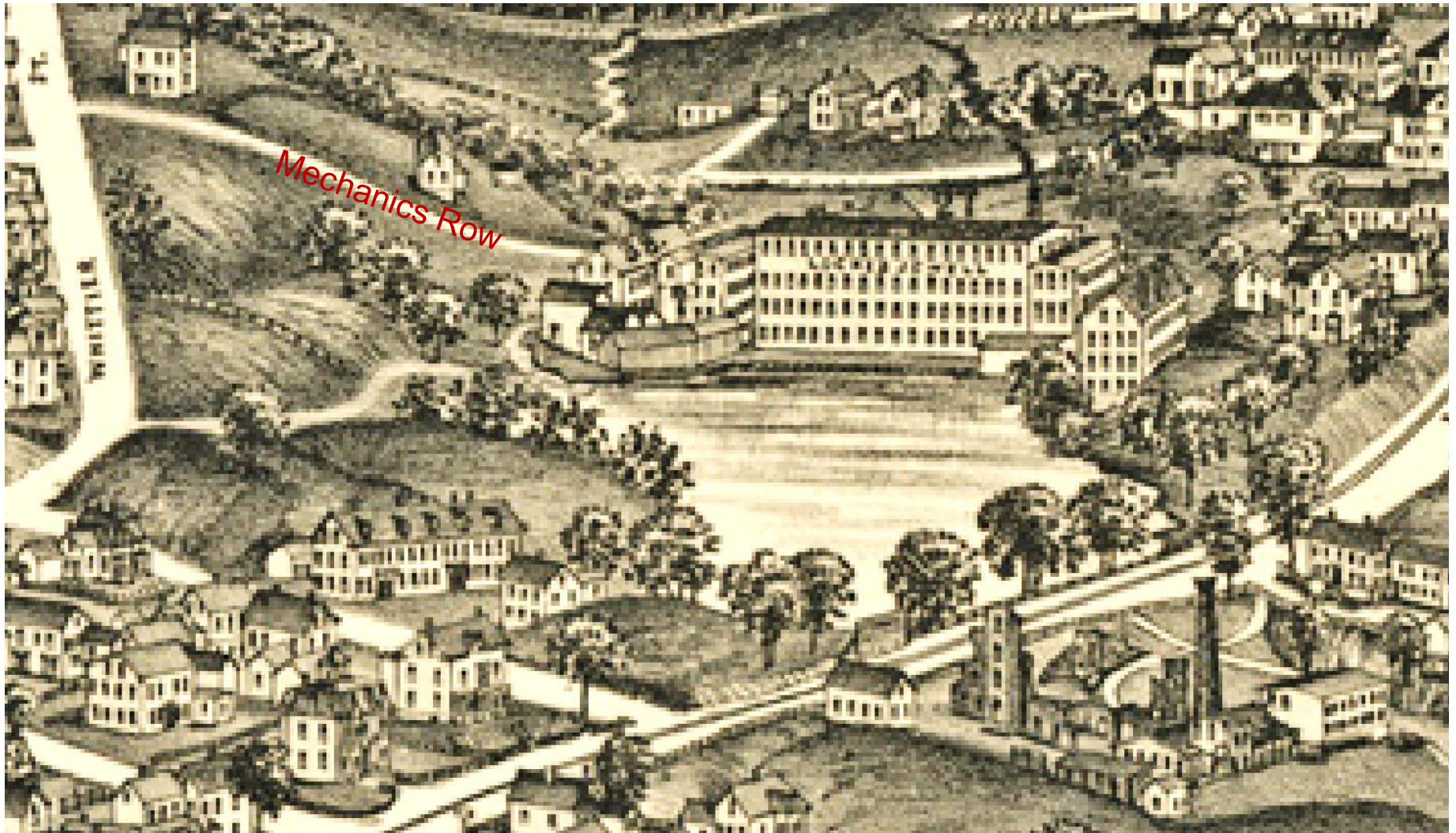
Kendall and Lunt began in a carriage complex on Thompson St. (originally called Church St. because of a Methodist church there), of which no signs remain today. It had started around 1870 with J. Nelson Lane, a brother of carriage maker T. W. Lane, and was next occupied by John Francis making bodies. After an 1880 fire it was rebuilt by John Francis and William Smith with a 35 HP steam engine (all much like Mechanics Row), joined in the mid-1880s by Fred Kendall as an independent body maker who then partnered with William E. Lunt. They added gear making and then expanded to Mechanics Row around 1888. They ultimately grew further and moved to Mill #6 on Mill Street.

Thompson St. did not then cross Orchard because of the Methodist church at the Pond St. location. That church burned in 1887 to be replaced for some years by a boarding house. (Thompson did not extend to Pond St. until around 1910.) The Methodist congregation soon purchased the lot at the corner of Main St. and Nayson's Court in 1887 to begin a new church building that remains today with a well-preserved exterior, despite extensive interior changes.



## Mechanics Row - 1890 Aerial Map

New Locke & Jewell factory on the pond, textile mill ruins remain on Main St. Locke & Jewell is numbered #27, on a table of named businesses that have likely paid for the privilege. The Pettingell building is numbered #38, described as “Kendall & Lunt, carriage woodwork manufacturers”. The economy remains strong in 1890, and Locke & Jewell has been rebuilt as a four-story factory, compared to previous three-stories, with low and nearly flat roof of more modern “slow-burn” construction. Carpenter Street now exists.

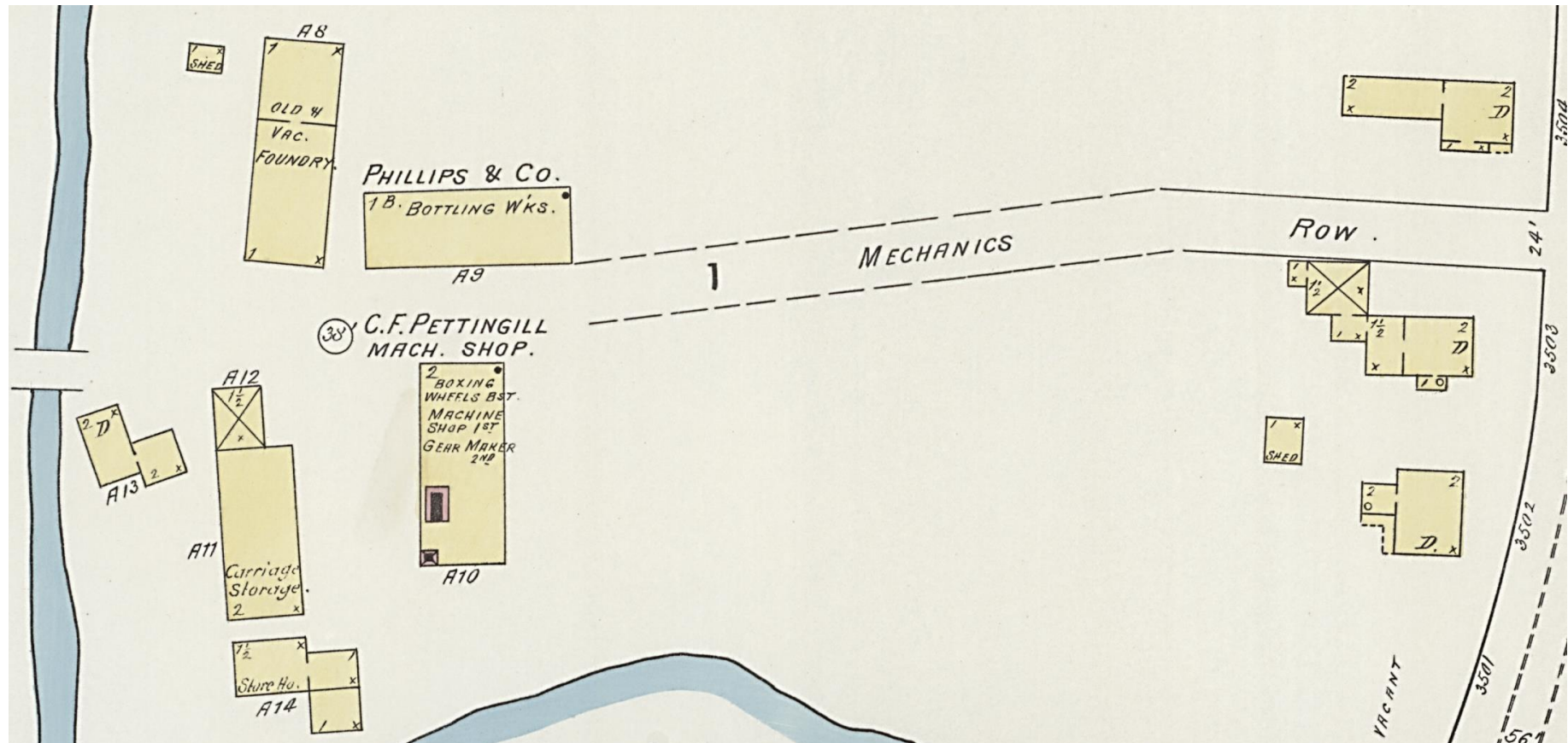


# Mechanics Row, 1894 Sanborn Insurance Map, Sheet 10

Following fire of 1891 and economic crash of 1893

Fire again destroyed Locke & Jewell and most other buildings in 1891, except for the Pettingell end of the street. The economy collapsed in 1893 into the depression of the 1890s, stifling recovery from that fire. The Pettingell building is still described as conducting the wheel boxing and gear manufacture of Kendell & Lunt, who are also shown on Sanborn Map Sheet 6 at their new location in Mill #6 on Mill Street. The Pettingell company had moved sometime during this period to Lawrence, Mass. and gradually shifted to its second generation of ownership. They returned to Amesbury in 1905 at 77 Elm Street as a maker of machinery and auto bodies.

No information has been found regarding Phillips & Co. bottling works, which appears to occupy a newly constructed building.



# Eastern Cycle Manufacturing Company

This bicycle maker began in the vacant former Pettingell factory in about 1896



Reproduction - Amesbury Carriage Museum collection



# Eastern Cycle Manufacturing Co. 1895 Stock Certificate

Arthur Hiram Atwood, of the Atwood brothers, relocated during 1891 to Chicago with some of his workers to form a lighting shop there. He returned to Amesbury in 1895-6 to form the Eastern Cycle Mfg. Co. with his brother. Below is a certificate of stock sold to the brothers' father-in-law, Alexander Hartwell. After two years they moved to the Babcock Building, near their previous lighting shop, their bicycle business lasting until closing out in April of 1900<sup>1</sup>.

1) Amesbury Daily News, Page3, 1900-04-11




George H. LaBarre Galleries inc., Portsmouth, NH

# Eastern Cycle Manufacturing Company Advertisement

Bicycles were hugely popular during the 1890s hard times, draining funds from other luxuries. Seen below, many Eastern components were from outside suppliers, indicating the diversity of a rapidly industrializing business. The bicycle craze essentially funded airplane development at bicycle shops of Glenn Curtiss and the Wright brothers.

The **FLYING YANKEE** Bicycles.



**A** Strictly High Grade Wheel that is high grade. Solid steel forged connections, bored out of solid forgings, best tool steel bearings, large hubs and hanger, graceful proportions and lines,  $1\frac{1}{4}$  inch head,  $1\frac{3}{8}$  inch frame,  $\frac{3}{4}$  inch back stays, Excelsior spokes, laminated wood rims, detachable sprockets, best chain and Ideal adjustable handle bars, Union-Record pedals, beautifully finished in black, maroon or green.

— — —

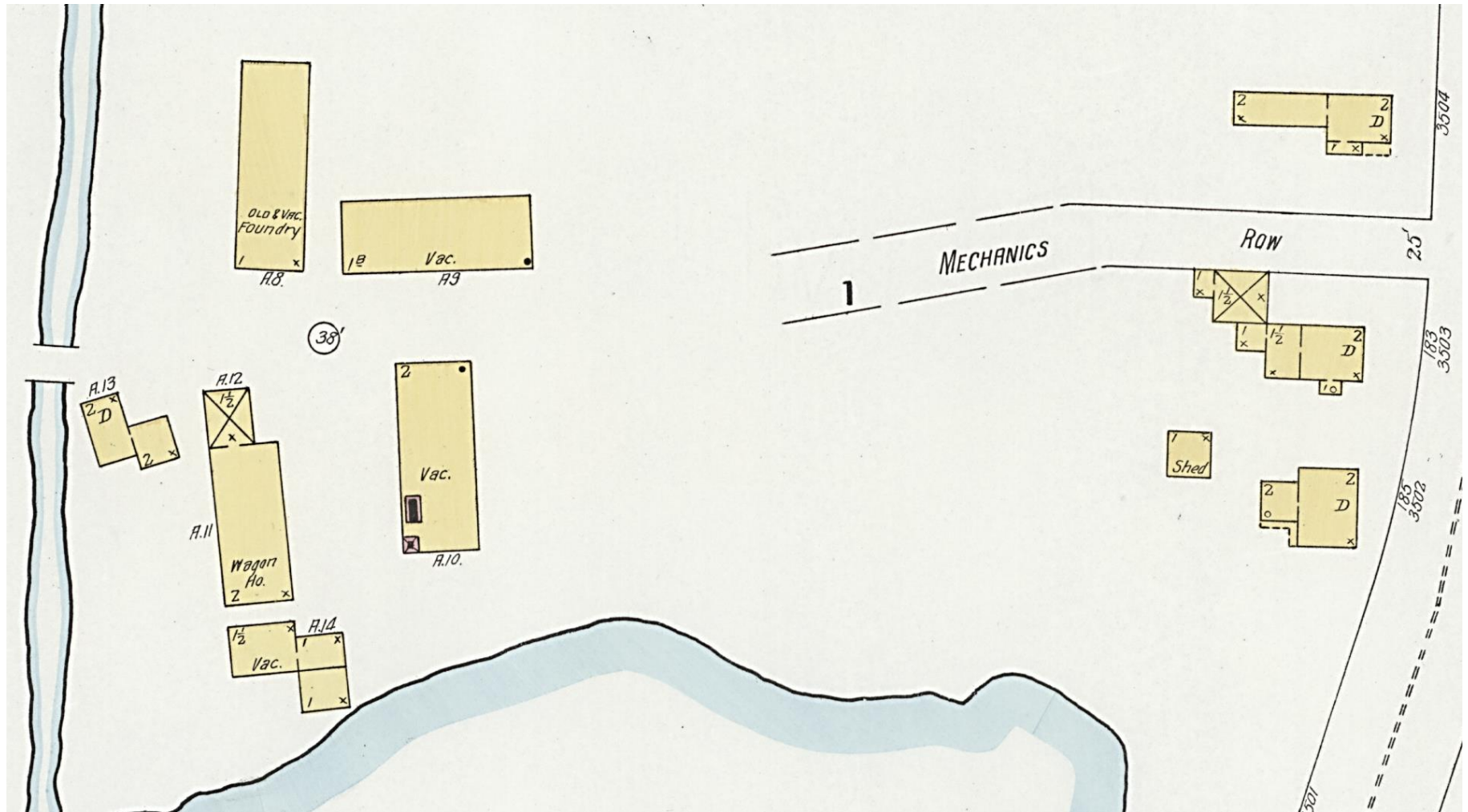
*Buy the Flying Yankee and get the best wheel money can buy.*

**Price \$100.**

Manufactured by the **EASTERN CYCLE MFG. CO.,** AMESBURY, MASS.

# Mechanics Row, 1899 Sanborn Insurance Map, Sheet 11

Eastern Cycle Co. has moved to Carriage Hill. All factories and sheds are vacant, including the bottling works



# Amesbury Thermometer Company

## A new enterprise in the former Pettingell factory

The Eastern Cycle Co had vacated the former Pettingell factory no later than 1898, after which the Amesbury Thermometer Co. occupied it round 1902-3. The new company's product was a coiled bimetallic-strip dial thermometer, the strip being a laminated metal ribbon of steel on one side and brass on the other. Early examples from the late 1700s had joined the two metals by riveting together two separate strips, but by 1800 molten brass was being fused directly onto steel to form an intimately bonded single entity. Beyond the process of fusing bimetallic strips, the Amesbury thermometer was a relatively simple mechanism housed in a light brass case with a dial of either paper or later glass-enamel, the latter being obtainable from such sources as the Ohara Dial Co. of Waltham. Their building had a basement and two floors with steam heat and a gasoline engine to power machining operations. They were described in 1910 as also having an electric motor. Plating and forging were performed in the basement, with machining on the first floor and assembly on the second.

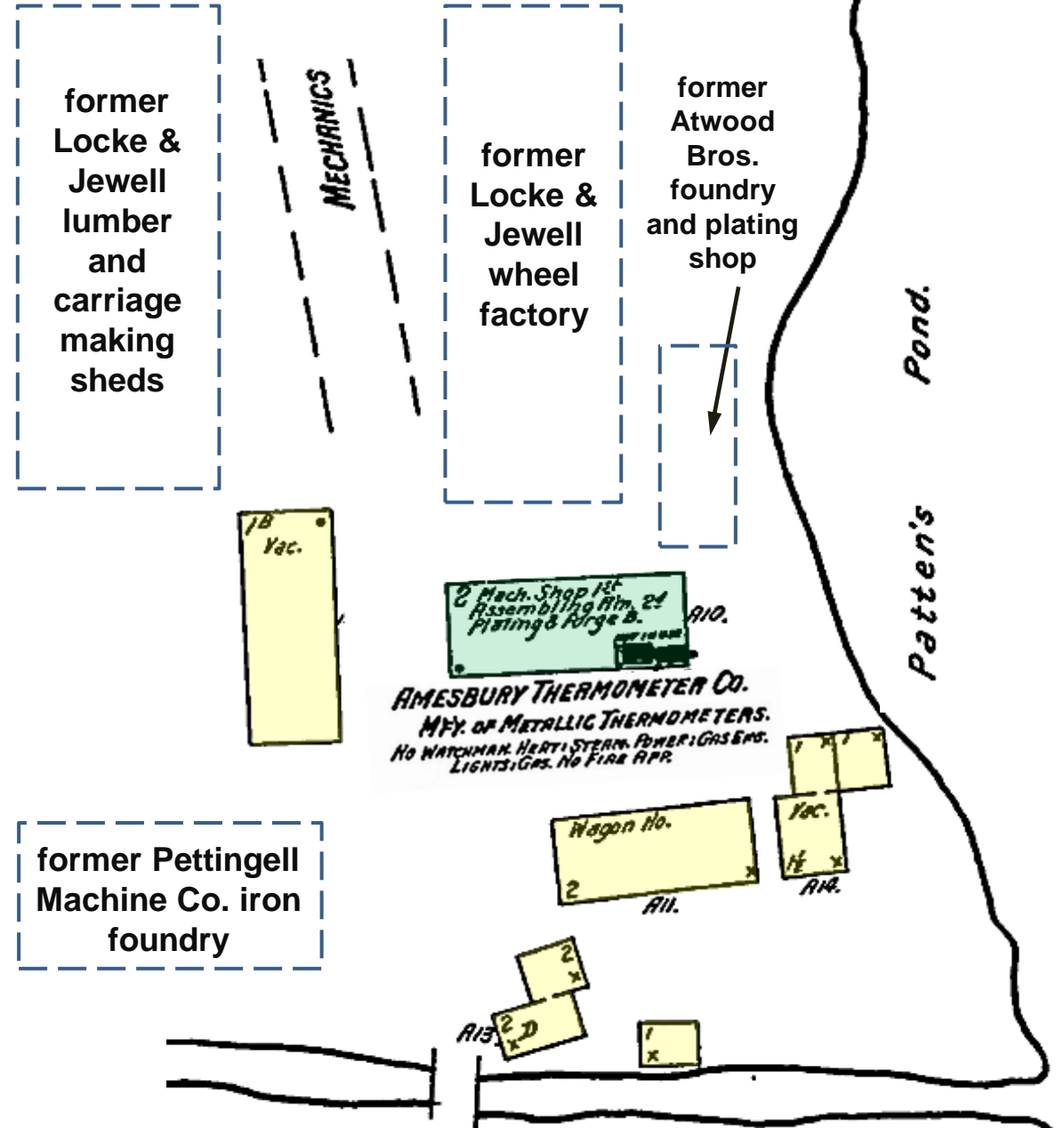
Bimetallic thermometers were more physically robust than were traditional glass-tube thermometers containing mercury or red-alcohol. They also had advantages of being easy to read and of producing sufficient motion to trip electric switches or move mechanical devices in regulation with temperature.

# Amesbury Thermometer Company – 1904 Sanborn Map

## first 20<sup>th</sup> century industrial occupant of Mechanics Row



Mechanics Row factories had either burned or been taken down, as indicated by dashed outlines of buildings gone when Amesbury Thermometer arrived. Beside the thermometer factory initially were former carriage making sheds plus a vacant tenement building across the street. Those had mostly been removed by 1909, leaving Amesbury Thermometer as the last factory building, accompanied only by the dwelling next to the creek.



1904 Sanborn Map, sheet 11

# Amesbury Thermometer in Gilt Case

showing internal mechanism

The mechanism resides on a metal plate that is soldered into a circular brass rim. The long thin bimetallic coil is held under a bridge that is screwed to a brass base plate, while the outer end of the coil is screwed to a split post in such a manner that the length of the coil can be adjusted by moving its attachment point. With changes in temperature, the coil will change curvature such that it will slightly expand and contract in diameter, and will rotate the temperature pointer hand that is pivoted at the inner end of the coil. Spacing between individual turns of the bimetallic coil is maintained such that they will not rub together and interfere with free motion as temperature changes. The relatively simple mechanism is of moderate quality.

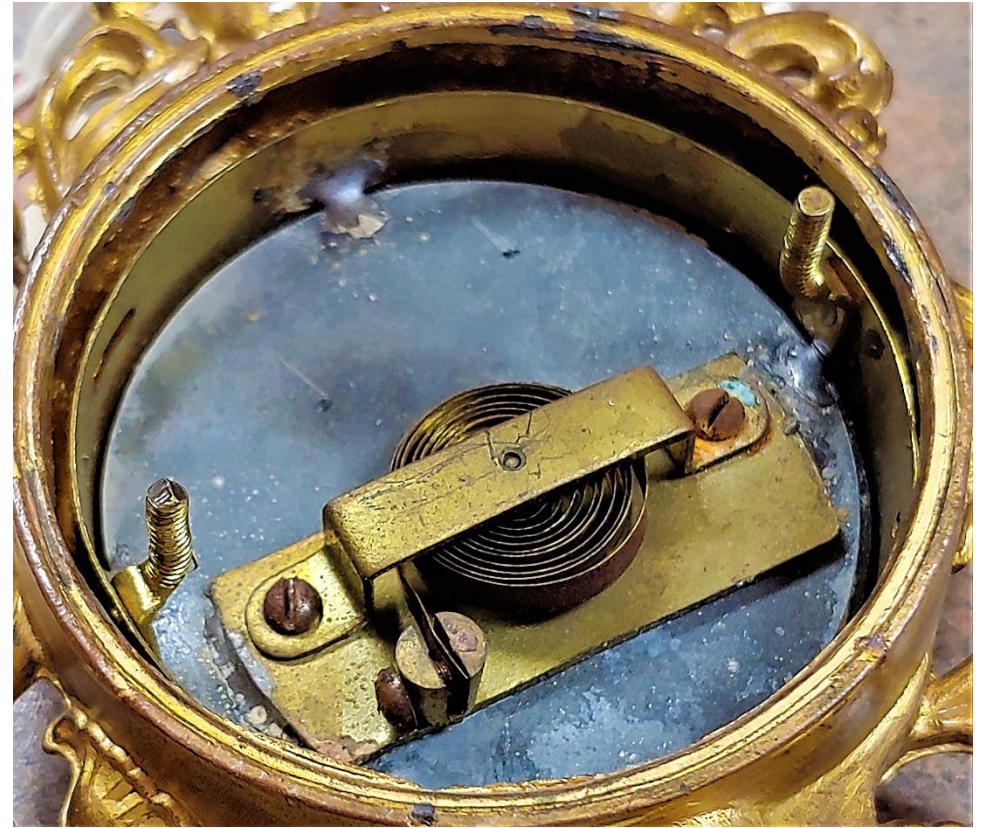
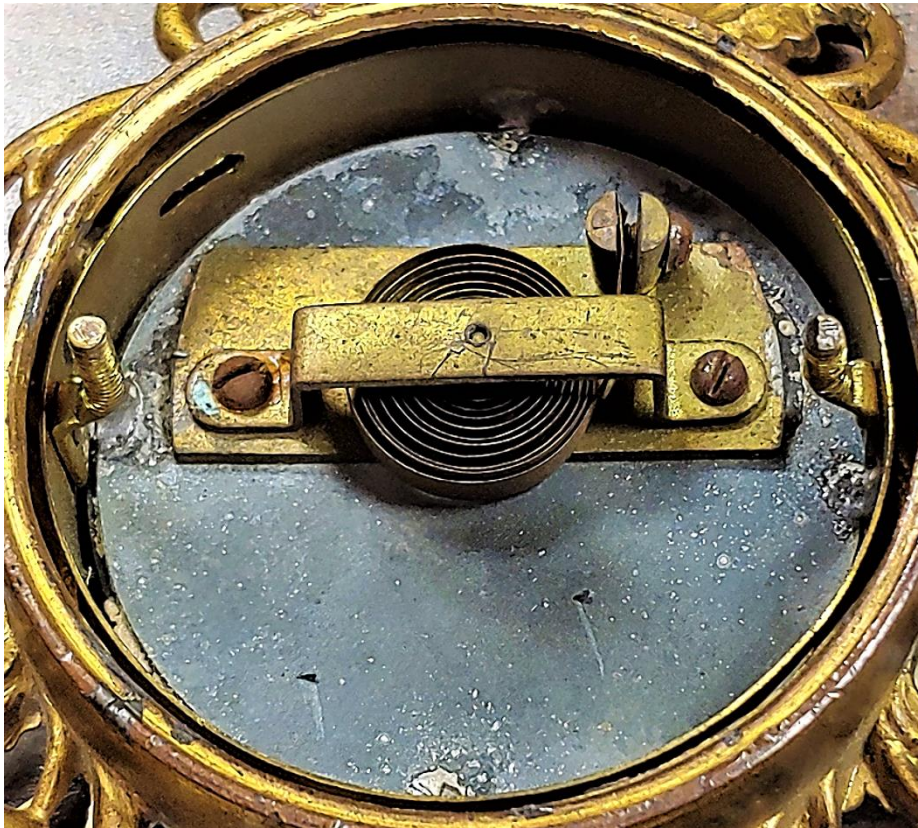


Photo courtesy Amesbury Carriage Museum

## John W. Miller of the Amesbury Thermometer Company

The origin of Amesbury Thermometer Co. is explained in the obituary at right (the timing hints at the possibility that Mr. Miller could have been a victim of the 1918 flu pandemic). Mister Miller had worked with bimetallic thermometers in Peabody, Mass. for 20 years, leaving certain that he was associated with the Standard Thermometer Co. of Peabody. Standard Thermometer made a similar product and enjoyed a longer lifespan than the Amesbury company. By 1910, Amesbury Thermometer had become a branch of the Standard Thermometer Co. and was identified as such in news articles. It appears that the local factory was then expanding into a wider range of industrial products under Standard Thermometer patents<sup>1</sup>.

Coincidentally, the next occupant of the Amesbury Thermometer factory was spark plug manufacturer, Randall-Miller, where the latter was a John Miller Jr. of Allston, Massachusetts<sup>2</sup>. Based on this obituary he was not related to the thermometer John W. Miller.

1) Amesbury Daily News, June 8, 1910, pg. 2

2) Amesbury Daily News, March 9, 1915, pg. 3

### **A LOCAL INVENTOR IS DEAD**

John W. Miller the well known inventor of the metallic thermometer manufactured by the Amesbury Thermometer Co. died after a short illness last night at the Anna Jaques hospital. His age was 67 years, one month, 24 days.

He is survived by a widow, one son Dr. Louis Miller, Peabody, Mass.; two daughters, Mrs. C. W. Putnam of this town and Mrs. Amella LaRocque of Salem, also one brother in Germany.

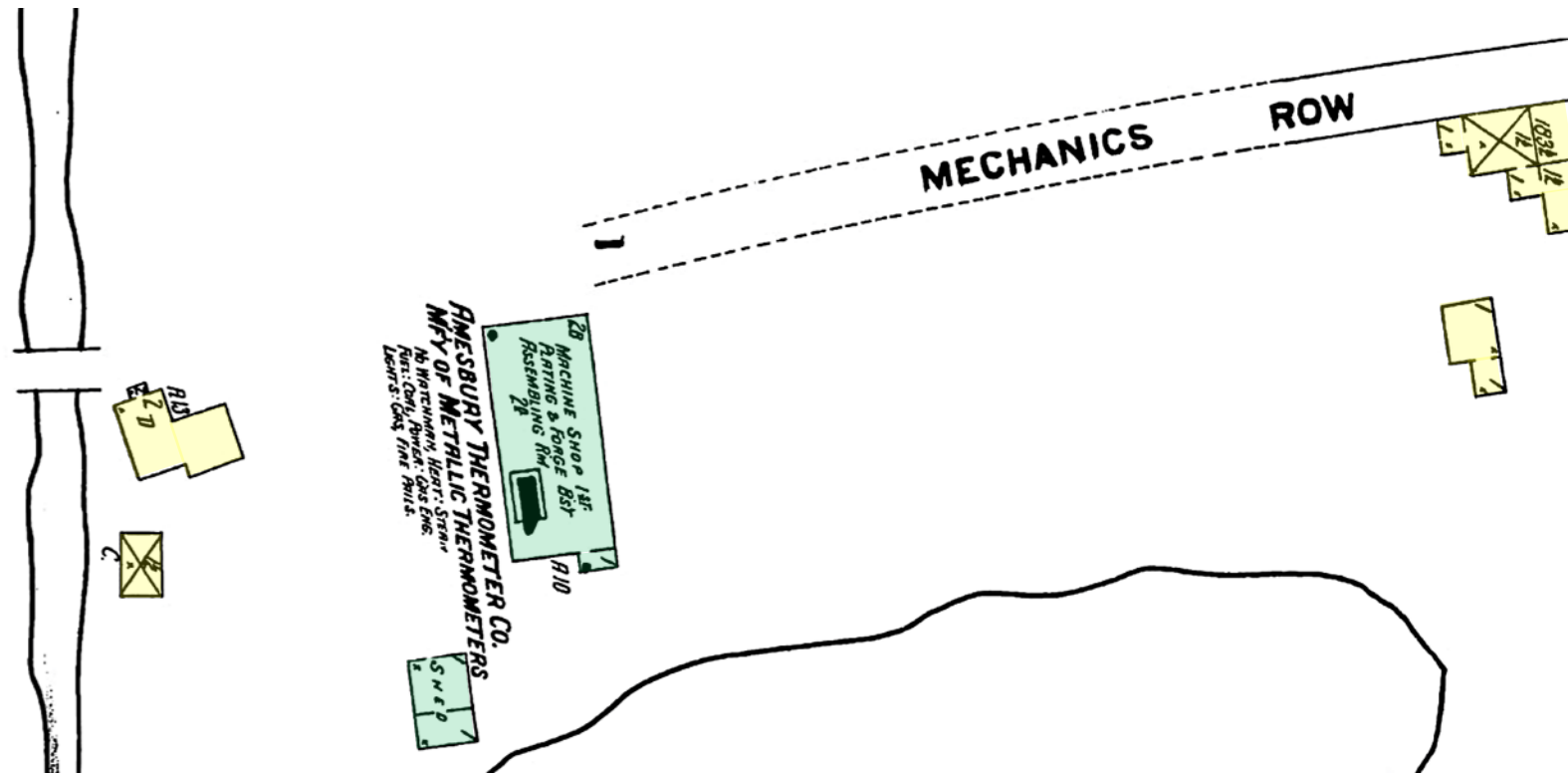
He was a member of Geo. Peabody Lodge, No. 18, A. O. U. W., of Peabody.

The family resided in Peabody before removing to this town 12 years ago. For 20 years he worked upon the metallic thermometer before the Amesbury Thermometer Co. was organized in this town to manufacture it. He invented and made many improvements on the thermometer never taking out a patent for his inventions but turning them all into the company.

Amesbury Daily News, June 18, 1918, pg. 2

# Mechanics Row, 1909 Sanborn Insurance Map, Sheet 6

Only Amesbury Thermometer Co. buildings remain. Amesbury Thermometer had been absorbed by the Standard Thermometer of Peabody Square, Peabody. Standard, founded in 1885, concluded to move to the Roxbury area of Boston around the 1905-9 period, and had acquired the Amesbury company somewhere in that time. They introduced new products and activities to the Amesbury shop up to 1913, but moved Amesbury operations to their Roxbury plant that year, leaving the property briefly vacant.





# Randall-Miller Company, Manufacturer of Spark Plugs

A September 1913 article stated that the Amesbury Thermometer Co. was moving out of the former Pettingell factory<sup>1</sup>. Late October articles then reported that the inventor of a porcelain insulator spark plug was in town to survey the site for a kiln<sup>2</sup>. (Many previous spark plugs had used stacks of mica wafers as insulators.) The new owners had contracted a New Jersey firm to build an expensive kiln fifteen feet in diameter and thirty-two feet high by which the Randall-Miller Co. might fire as many as 32,000 insulators at a time<sup>3</sup>. Pottery experts had moved to town and the Board of Trade was pleased to be further entering the automobile industry.

A “baby-kiln” had test fired twelve hundred insulators by late December<sup>4</sup>, there was an initial firing of 10,000 in the final kiln<sup>5</sup> in early 1914, and some later firings were of 20,000. Automatic screw machines were turning and threading metal components, while other automatic machines cut off and formed raw clay into insulators. The clay formula was controlled and compounded by Randall-Miller, who claimed the only such automatic process in the country. Late 1913 continued busily. The R-M Boston office reported a 45,000 spark plug order from a motorcycle company, and in November a fellow drove flawlessly from Boston to Los Angeles on a set of R-M plugs<sup>6</sup>. There were reported November orders for 2 million plugs from Ford and 45,000 from Chalmers (Detroit)<sup>7</sup>. Randall-Miller exhibited at the Boston Auto Show during April 1914 recently finished plugs and plugs sparking in a live display, the article stating that<sup>8</sup> “Many cars in the exhibit are equipped with the plug.” They also displayed a gasoline filter/separator, being “a mechanical contrivance which absolutely prevents any foreign substance from reaching the carburetor.”

The Randall-Miller Boston organization was knowledgeable, financed, and well integrated into the automobile trade, but their ownership remains obscure. Amesbury was visited in February 1914 by owner, Mr. A. E. Randall, along with his wife and his banker, President Jackson of Paul Revere Trust<sup>9</sup> (Miller was Mr. John Miller Jr. of Allston, Massachusetts.) A very well-matched possibility is that the above was Mr. W. A. Randall of the Randall-Faichney Company.

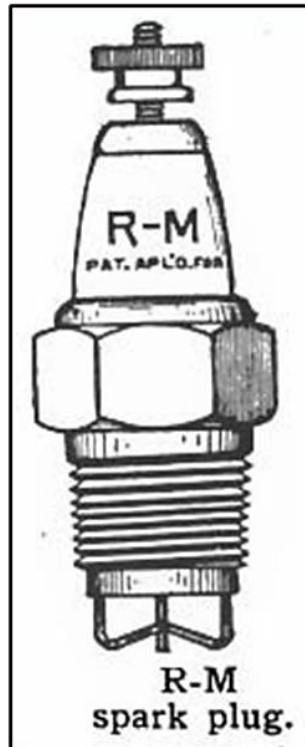
1) *Amesbury Daily News*, 1913-09-30, Page2  
 2) *Amesbury Daily News*, 1913-10-23, Page3  
 3) *Amesbury Daily News*, 1913-10-30, Page3

4) *Amesbury Daily News*, Page3, 1913-12-02  
 5) *Amesbury Daily News*, Page3, 1914-03-10  
 6) *Amesbury Daily News*, Page3, 1913-11-12

7) *Amesbury Daily News*, Page3, 1913-11-14  
 8) *Amesbury Daily News*, Page2, 1914-03-13  
 9) *Amesbury Daily News*, Page3, 1914-02-27

# Randall-Miller Company Introduction

New Things For **MOOR** Boatmen



## The R-M Spark Plug.

The Randall-Miller Company, of 998-1000 Boylston Street, Boston, Mass., manufacture the R-M spark plug, which is said to be non-leakable and vibration-proof. High-tension porcelain of special formula is used, and its taper seat is wound with asbestos and pressed into the steel seat, the upper end of which is then spun over a ridge on the porcelain. An annular ridge on the lower end of the porcelain is designed to protect the packing from the force of the explosions, and the construction is such that the porcelain and shell will expand and contract in a uniform manner. It is claimed that the points, which are of special material, will not pit.

\* \* \*

The above June 1914 news item is from *Motor Boating Magazine*, pg. 34. The R-M business office is at 1000 Boylston St. Boston. This is merely six months after purchasing the empty Amesbury factory. Randall Miller was seemingly functioning smoothly during 1914, and in 1915 was recorded as a spark plug manufacturer in the *Automobile Trade Directory* and in *Chilton's Automobile Directory*, both listing a company address as 93 Massachusetts Ave. in Boston. 1914 continued at an apparently good pace with little notable news (good or bad) other than several new hires near the end of the year. 1915 then began strongly.

# The Randall-Faichney Company of Boston

Randall-Faichney Co. was formed ca. 1888 by William A. Randall (1866-1959) and George H. Faichney (1869-1937). Randall had been born in Quebec but by 1880 his family was living in Rochester, New York where he and Faichney seemingly met, possibly at the University of Rochester. George Faichney had been born in Watertown, New York. Their unusual plan was for Faichney to remain in Watertown making glass-mercury thermometers, while Randall would go to Boston, manufacturing syringes and thermometers (the latter likely from Faichney), and various surgical specialties. Both branches operated as Randal-Faichney Company.

Their product choices were not random. Taylor Instrument Co. of Rochester had produced similar lines, buying in 1891 the Watertown (NY) Thermometer Co. that continued in parallel with Randall-Faichney of Watertown. William Randall married Marie Louise Bradstreet of Rochester in 1895, the couple then living in Swampscott, Mass. from where William easily commuted by train to his Boston Randall-Faichney factory on Causeway St. by North Station.

This continued until 1910, when the Boston branch began buying patent rights for automobile related items amenable to light manufacturing and fabrication<sup>1</sup>. These were porcelain insulator spark plugs<sup>2</sup>, a grease gun, and automobile horns (really whistles) operating on exhaust gas and actuated by a pull cord.<sup>3</sup> Horns were marketed by 1911 as Randall was planning a large new four-story concrete factory in Jamaica Plain<sup>4</sup> that opened in the fall of 1912. Such growth could plausibly include an Amesbury spark plug facility. Faichney was elsewhere with different technology. A partner for managing a new spark plug factory would come from around Boston.

This speculative growth was highly leveraged, and despite rising income the firm reorganized under bankruptcy in mid-1915. William Randall had by then relocated to Manhattan where he was engaged in manufacturing, but never again with Randall-Faichney. He lived in Kings, Brooklyn in 1940. Boston Randall-Faichney thereafter limited itself to surgical devices. George Faichney successfully continued in Watertown, NY, becoming Faichney Instrument Co. in 1920 and patenting during that period several items for the new Randall-Faichney Co. of Boston.

1) Search of patents assigned to Randall-Faichney

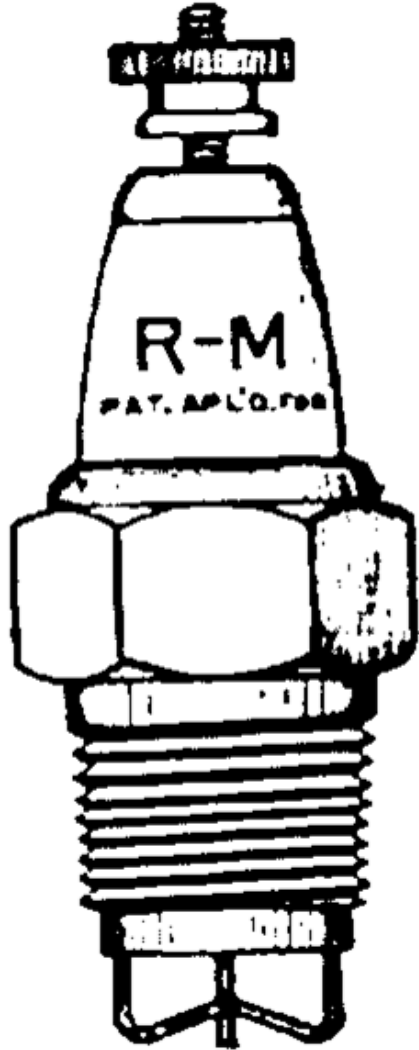
2) 1915 *Chilton Automobile Directory*, pg. 338

3) 1911 edition of *Cycle & Automobile Trade Journal*, pg. 293

4) *American Druggist & Pharmaceutical Record*, May 1912, New York, pg. 96

# Randall-Miller Co. Spark Plug Examples

Drawing from article in  
*Motor Boating Magazine*,  
previous page



Unused condition  
example, found on ebay



Badly rusted example  
found near factory site



## Randall-Miller Co. Boom and Bust

The rapid Amesbury startup was fully functional in just months, requiring resources, planning, and pre-work by an existing organization already having distribution channels in the trade (immediate significant contracts implied established reputation and performance). Relatively non-news-worthy operation during 1914 suggested a reasonably stable business without notable disasters or layoffs. It was reported in January 1915 that the factory was active, the kiln was firing porcelains, and in February that nighttime operations required to fill orders were keeping the area well lit<sup>1</sup>. The factory was visited by Mr. Randall that month, a few other items appeared in the newspaper, and then there were several surprising announcements. In early March 1915 it was noted that<sup>2</sup>, “John Miller Jr. who recently left his position with Randall-Miller Co. has returned to his home in Allston, Mass.” Then in early April: the plant was closing!

It turns out that carpenters were working to expand plant capacity by re-arranging the machine department, a skilled machinist from Boston had been hired to work there, and the changes were being personally supervised by Mrs. Randall<sup>3</sup> (perhaps because of Miller’s absence). It was announced at the end of May that Mrs. L. A. Randall was at the plant, which was expected to re-open soon<sup>4</sup>. Several circumstances here suit the proposition that the Randall-Faichney Co. of Boston was involved. William A. Randall’s family was residing in Manhattan on June 1 of 1915 where he was with another business, explaining why his wife would be representing him in Amesbury. Her middle name was Louise, and she was listed as Louise in all found adult-age censuses. This could be Mrs. L. A. Randall, the only flaw being the middle initial of “A”.

The plant shipped 5000 plugs in mid-June, cleaning out its stock<sup>5</sup>. Another work interruption occurred in mid-July as new clay turning machines were installed, perhaps with additional re-arrangement. A week later, Mrs. Randall was back in town to again re-start the factory<sup>6</sup>. Events suggested a positive future. However, the company made a full assignment to a Boston attorney in early October 1915 and permanently closed<sup>7</sup>, chronologically just after the bankruptcy reorganization of Boston Randall-Faichney Company. The coincidence is certainly suggestive.

1) *Amesbury Daily News*, Page3, 1915-02-03

2) *Amesbury Daily News*, Page4, 1915-03-09

3) *Amesbury Daily News*, Page2, 1915-04-12

4) *Amesbury Daily News*, Page3, 1915-05-25

5) *Amesbury Daily News*, Page2, 1915-06-16

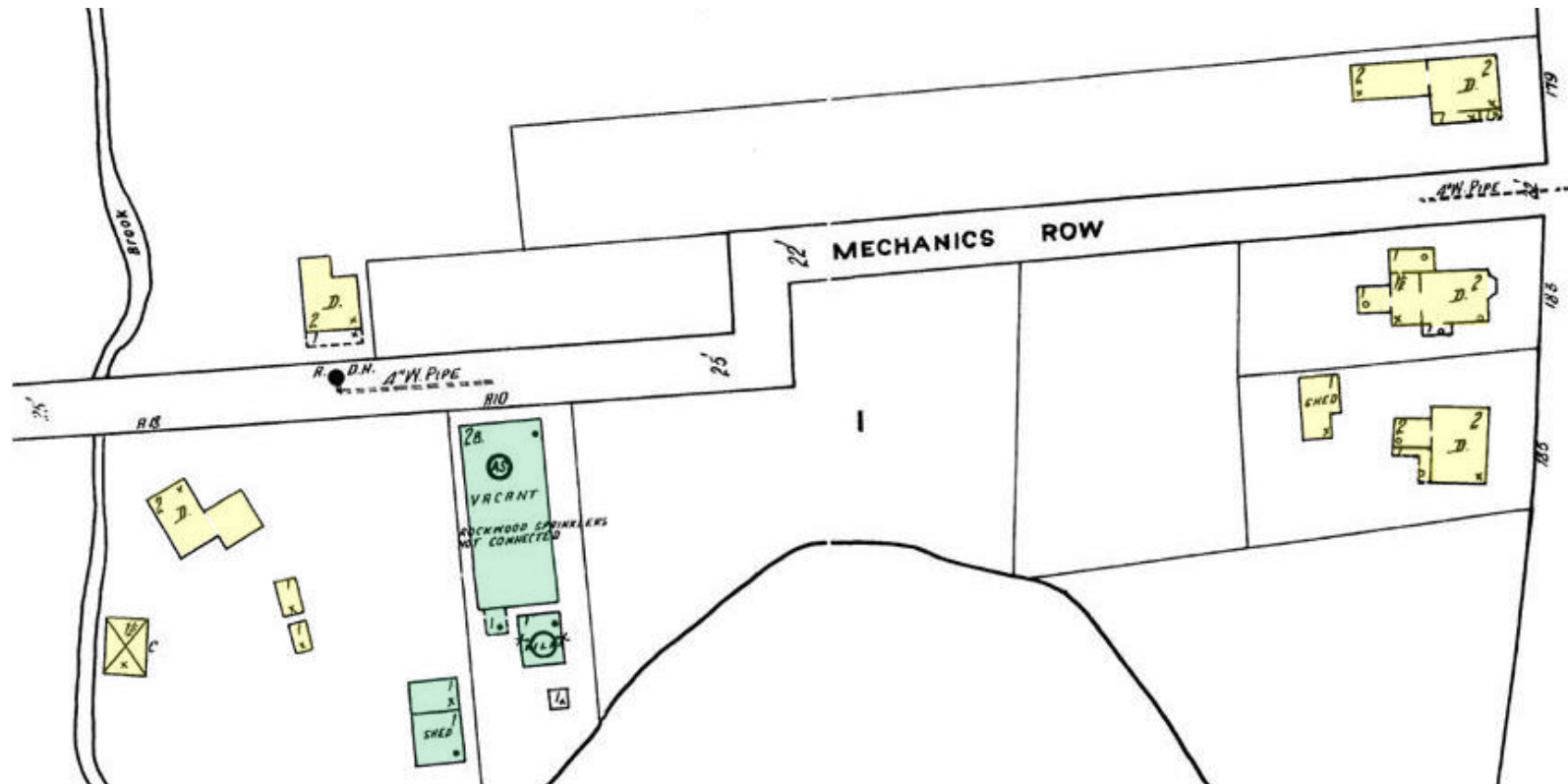
6) *Amesbury Daily News*, Page3, 1915-07-22

7) *Amesbury Daily News*, Page3, 1915-10-02

# Mechanics Row, 1918 Sanborn Insurance Map, Sheet 16

The Randall-Miller factory is now vacant, modern lot lines begin to appear, and a still-extant dwelling house has been built across from the former Pettingell factory. The small square structure directly behind the factory is Randall-Miller's kiln for firing porcelain spark plug insulators. This kiln would be the source of fire bricks occasionally found today on the Locke & Jewell site.

The street shows on this and town maps with sharp right-angle turns that have never existed. Amesbury Improvement Association now owns the Locke & Jewell site, and controls the first 25 ft. from the water in most areas around the pond



## Amesbury Fibre Company, Leather Board – 1919

The former Pettingell factory had sat empty since the 1915 removal of the spark plug company. Since about that same time, the Metalite Company had flourished in several former textile mill buildings in the upper millyard along the Powow River. Their product was leather board, also known as fibre board, leatherette, or counter board, based on patents by Albert L. Clapp of Marblehead. This was a composite of leather scraps, wood pulp, and wastepaper shredded and pounded into dense felt and stabilized by additives into a stiff board replacing leather in stacked heels and heel counters (stiffeners around the backs of shoes). Leather had become expensive during the WWI, leather board thus having a market among regional shoe towns such Haverhill and Lynn.

In August 1919 an experienced Metalite manager and inventor named Eugene L. Perry formed the new Amesbury Fibre Company making leather board at the former Pettingell factory, a three-story wood frame building on Mechanics Row. There was sufficient space for manufacturing operations, and they used the still-remaining kiln to slowly and thoroughly dry leather board year-round. Eugene Perry purchased the factory and occupied the adjacent house. He seemingly brought with him a millwright named Simeon Gosselin whose family occupied the street for nearly the next century.

There appears to have been softening of the leather board market by late 1920, likely a post-war letdown, such that the Metalite Co. in the upper mill yard underwent a reorganization with new investors, and the Amesbury Fibre Co. was sold after one year to Thomas F. Waldron of Haverhill, who had been a dealer in the business for several decades. Waldron pressed ahead as OK Fibre Co. Inc., operating for extended hours on Mechanics Row, adding new dryers, and seemingly doing well for several years. But, by mid-1924 Waldron had sold the business to Benjamin J. Checkoway, operating as Checkoway & Willar Co. of Newburyport and continuing to make leather board.

# Benjamin J. Checkoway Businesses

Checkoway & Willer Co. continued on with a process very much like that of the Metalite Co., although now using mainly quality wastepaper and leather board scraps. They had machinery for mixing, drying, cutting and trimming, and finishing to desired thickness their product, and trucking the output to local shoe towns, with plans for expanding<sup>1</sup>. Benjamin resided on Federal St, in Newburyport but had a local connection through his brother, Abraham, who operated an Amesbury scrap business, with frequent newspaper adverts for all kinds of scrap materials. Benjamin was something of a similar hustler, and as leather board demand apparently faltered during the later 1920s he likewise turned toward a junk and salvage business, using the Mechanics Row building as a storehouse for scrap metal, the latter coming from local auto body factories, and in particular from Biddle & Smart<sup>2</sup>.

The wool business was also pursued with some success, as Benjamin opened in mid-1928 a retail shop on Main Street selling bolt wool fabric, which was stored with scrap metal on Mechanics Row<sup>3</sup>. The former Pettingell factory thus met its demise in June of 1928 when it was totally destroyed by a fire that was difficult to fight because of junk densely packed within. (Still, there were sufficient wool supplies elsewhere to support the retail fabric shop.) Benjamin kept the property, rebuilding on the site a single-story concrete building that was nearing completion by early October to be used as his wool and scrap metal storehouse<sup>4</sup>. Foundation remnants of that building remain, but the building was replaced sometime mid-20<sup>th</sup> century by a residence. While not directly industrial, it was the home of the family that operated Dennis Brass Foundry at nearby 250 Main Street, in the former water works building that still stands behind the CVS parking lot.

1) *Amesbury Daily News*, 1924-06-28, Page1

2) *Amesbury Daily News*, 1928-06-28, Page1,

3) *Amesbury Daily News*, 1928-07-13, Page4,

4) *Amesbury Daily News*, 1928-10-03, Page4,

**\$3.00 WOOLEN GOODS**

**\$1.25 yard**

***Biggest Run Ever Had for Your Money!***

I have just bought from a Franklin, Mass. manufacturer who is going out of business 7400 yards of Woolen Goods, suitable for dresses and suitings, which will be placed on sale at 78 Main St., Amesbury.

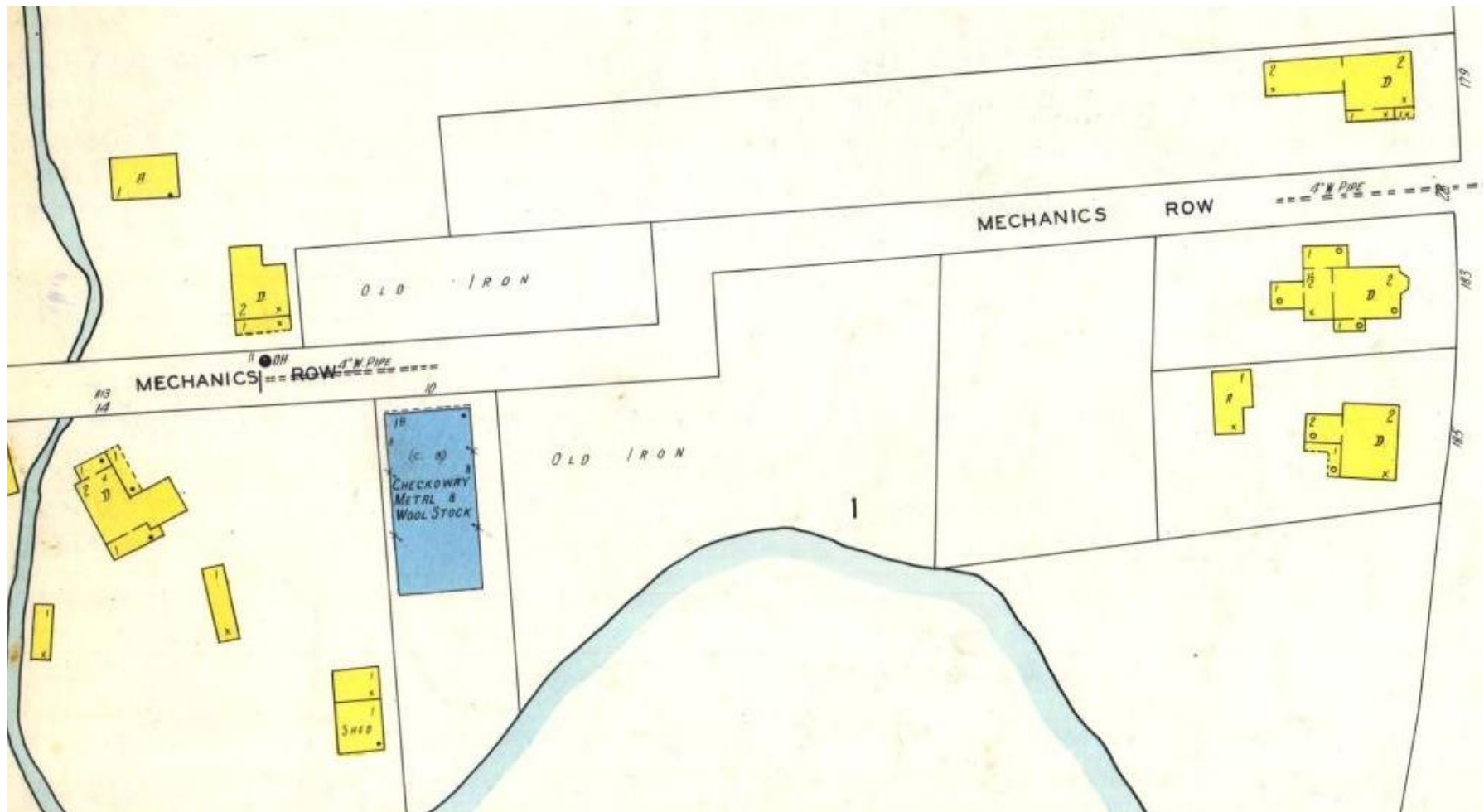
**B. J. CHECKOWAY**

*Amesbury Daily News*, 1928-07-13, Page4,



# Mechanics Row, 1930 Sanborn Insurance Map, Sheet 16

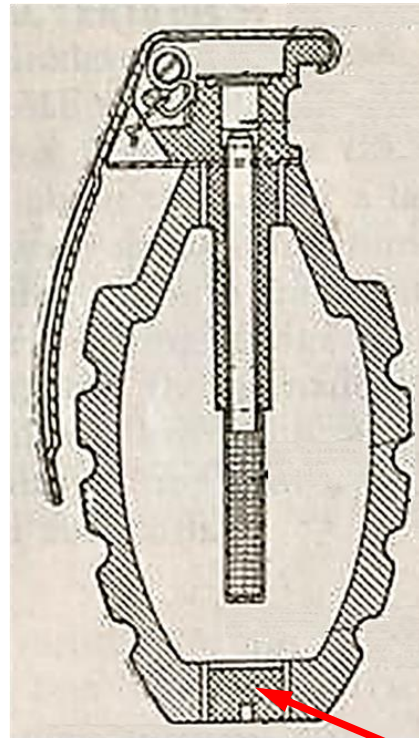
The new concrete Checkoway metal and wool storage building is the only remaining commercial building. Several new domestic structures are appearing on the street, including on the left side of the creek. Several of those families had arrived because of businesses on Mechanics Row, as had several original residences on Greenwood Street. The Checkoway building disappeared sometime around mid-century.



# Hand Grenade Casings

Mark 2 (mk2) hand grenade casings are common among the crop of buried metal left by factory fires, an iron foundry, and a scrap dealer on Mechanics Row. As the U.S. entered WWI in April of 1917 it had no fragmentation grenade, prompting invention of the classic “pineapple”. A second version (mk2) arrived in 1918 because of a flaw in the original fuse. Shapes evolved slightly over the years

and by the early 1940s the threaded filling plug on the bottom had been eliminated. Examples found around Pattens Pond all have threaded holes at both ends, with or without bottom plugs. There seemingly is always an empty casing having no attached parts other than plugs. Only the Pettingell factory existed on Mechanics Row during the mk2 lifetime, which was vacant during WWI, the surmise being that grenade casings arrived later as salvaged scrap. They can cause excitement. Police and Fire were called when one was found during work on Main Street<sup>1</sup>; the Middle School was evacuated when workers found another on Mechanics Row<sup>2</sup>. Numerous others have been found in the area.



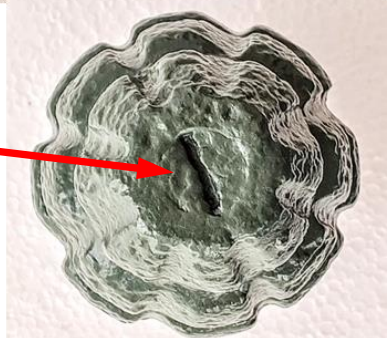
as-found



cleaned



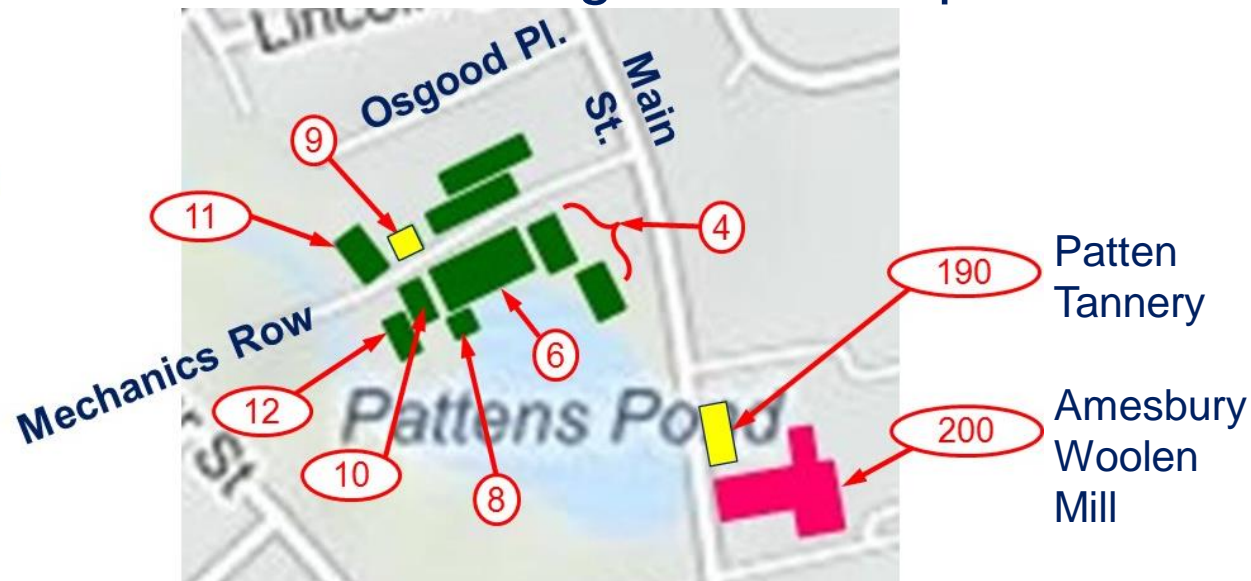
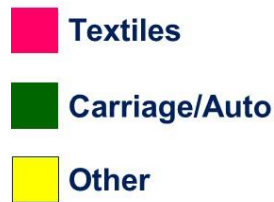
filling  
plug



1) *Amesbury Daily News*, 1980-09-03, Page14

2) *Amesbury Daily News*, 1997-08-29, Page1

# Mechanics Row Buildings and Occupants



Company	Category	Comment	Power	Dates	Address	
Carr, John C. & Allen, George	carriages		hand	1870 ca.1876	4 Mechanics	burned 1887
Douglass, Ed. O.	carriages	repairer	hand	1891	4 Mechanics	burned
McClellan, John	carriages	carriages bodies	hand	1891	4 Mechanics	burned
Locke, Joseph R. & Jewel, Hiram	carr. sleighs wheels	carriages, Warner patent wheels & gear	40 HP	1867 1887	6 Mechanics	burned 1887
Pettingell, Charles F. Machine Co.	machinery	carriage woodworking machinery		1873 1881	6 Mechanics	burned 1887
Locke, Joseph R. & Jewell, Hiram	carr. & sleighs	not listed as wheel maker	40 HP	1887 1891	6 Mechanics	burned 1891
Atwood W. I.	lighting	brass castings and nickel plating		1875 1887	8 Mechanics	burned 1887
Phillips & Co.	bottling			1892	9 Mechanics	torn down
Pettingell, Charles F. Machine Co.	machinery	carriage woodworking machinery	drive sft.	1881 1887	10a Mechanics	burned 1887
Kendall & Lunt	carriages	wheel boxing	drive sft.	1888 1894	10b Mechanics	burned 1928
Eastern Bicycle Co.	bicycles	A. H. Atwood, formerly of Atwood Mfg.		1895 1897	10b Mechanics	burned 1928
Amesbury Thermometer Co.	thermometers	metallic thermometers, speedometers	gas eng.	1903 1910	10b Mechanics	burned 1928
Standard Thermometer Cp.	thermometers	metallic thermometers, speedometers	gas eng.	1910 1913	10b Mechanics	burned 1928
Randall-Miller	auto	auto spark plugs		1913 1915	10b Mechanics	burned 1928
Amesbury Fibre Co.	shoes	leatherboard for shoe heels & counters		1919 1920	10b Mechanics	burned 1928
OK Fibre Co.	shoes	leatherboard for shoe heels & counters		1920 1924	10b Mechanics	burned 1928
Checkoway, B. J. & Willar Co.	shoes	leatherboard for shoe heels & counters		1924 1928	10b Mechanics	burned 1928
Checkoway, Benjamin J.	scrap metal	metal & wool storage		1928 ca. 1940	10c Mechanics	torn down
DeRochmont, Benjamin C. Iron Foundry	metal	carriage iron hardware		1875 ca. 1884	11 Mechanics	torn down
Pettingell Machine Co. foundry	metal	foundry	S. Eng.	1884 ca 1887	11 Mechanics	torn down
Kendall & Lunt	carriages	bodies & gear		1888 1890	12 Mechanics	torn down

# Appendix

# Robert Patten: Brick Maker, Banker, State Representative

*History of Essex County, Massachusetts, Vol II, compiled under D. Hamilton Hurd,  
J. W. Lewis & Co., Philadelphia, 1888, pg. 1531*

## ROBERT PATTEN.

Stephen Patten, the grandfather of *Robert*, was born June 19, 1707, and his father, Willis, December 11, 1738, and died September 12, 1816. The occupation of Willis Patten, was that of cooper, brickmaker and farmer. He married Hannah Sargent, and had nine children, viz.: Stephen, Jonathan, Willis, Moses, Amos, *Robert*, Hannah, Unis and Thomas.

Robert, whose portrait is here shown, was born at South Amesbury, October 28, 1776, when the great struggle of independence was progressing. About 1807 he bought the John Hoyt, Sr., homestead of one of his descendants and moved to the Mills, where he spent the remainder of his life. He was president of the Powow River Bank from 1850 until his death, February 27, 1858, and was the first treasurer of the Savings Bank, which office he held for several years. He was frequently called into town business, holding the office of selectman nine years, and was three times elected representative to the General Court. In 1841 he was elected county commissioner for three years, and served the town in various capacities during his life. His principal business was farming and brick-making, which he pursued for more than half a century. For many years he furnished all supplies in that line, there

being no other brick-yard in this section of the town. No doubt it is the oldest brick-yard in town, and was first used by John Hoyt, Sr., and, in fact, the remains of an ancient yard were to be seen when Robert Patten moved there, so ancient that the oldest inhabitants knew nothing about it.

Mr. Patten married Rodie Sargent, and had Betsey, born March 9, 1804; Abigail, born September 30, 1806; Susan H., born February 4, 1811; Orlando S., born July 10, 1808; Hannah, born July 17, 1814; Robert Willis, born January 13, 1817.

Betsey married Patten Sargent; Abigail married Orlando Sargent; Susan married Daniel Sargent; Orlando (2d) married Ann M. Sawyer; Hannah never married; Robert Willis married Eliza A. Brown, daughter of Enoch Brown, and had two children, viz.: Enoch B. (not married) and Carrie B. (she married Stephen F. Woodman, and had two children, viz.: Willis P. and Esther).

Robert Willis Patten now lives in the old homestead, and carries on farming and the making of brick. When a young man of eighteen he learned the trade of tanning, and at the age of twenty-one years, engaged in this business with his brother Orlando, and continued for thirty years. He has been selectman and was representative in 1858.

# Amesbury Woolen Company Description and Features

**THE NEW WOOLEN MILL.** The new woolen mill, located near Patten's Pond, Amesbury, has a large portion of its machinery in operation. It is a very conveniently arranged mill, and the machinery is of the newest and most improved patterns. It has already sent into the market some handsome styles of Ladies' Cloth, Plaids for dress goods, and Shirtings, and its looms are busy weaving new and desirable styles of woolen goods. The company makes its own gas by the aid of the new gas apparatus manufactured by the Union Gas Light Company of Boston. The gas is made from a product of coal oil and water, and gives a free and beautiful light. We were informed by the agent that the cost per hour for one light was one cent. The machinery is run by steam, and the water for finishing purposes is supplied from the pond by means of a large iron pipe. The supply of water is ample for a much larger mill. Since the erection of the factory, a wooden building, three stories high, has been completed, which is used as a storehouse for wool, for wool-sorting, for drying wool, for making warps, and for dyeing. A neat counting-room has also been completed, and the company may now be considered as fairly engaged in its new enterprise. May success attend their operations.

The Villager newspaper Dec. 15, 1864

## No. 3437.

### AMESBURY WOOLEN COMPANY,

#### AMESBURY, Mass.

OWNED by Company.  
GOODS—Fancy Casimeres.  
STOCK—Wool.

SURVEYED—September 4th, 1874.  
CAPACITY—Eight sets.  
POWER—Steam, 80 horse power engine.

#### DESCRIPTION.

- No. 1—MAIN MILL**—Heavy four stories, eleven feet each. Size 125 by 50 feet. Walls brick. Roof gravel. Cornices brick. SCUTTER none. LADDERs two stationary. FLOORS not arranged for flooding. FINISH open. STAIRS in tower. ELEVATOR none. First story, finishing and engine room, height 14 feet, open finish; Fales & Jenks' pump in engine room, communication with boiler room by iron door. Second story, carding, this floor communicates with second story of **No. 2** by iron door, hose port. Third story, weaving, communicates with third story, **No. 6**, by bridge, iron covered doors. Fourth story, spinning.
- No. 2—Boiler House**—Two stories, brick, gravel roof. First story, boiler room, divided from **No. 4** by brick wall. Second story, wool for card and duster, communicates with second story, **No. 1**, by iron door; with second stories, **Nos. 3** and **4** by wood door, tin lined, and with second story, **No. 6**, by platform.
- No. 3—Picker and Dry House**—Two stories, brick, gravel roof, open finish. First story, dry room and pickers; have two pickers in this building, first floor, both in separate rooms, divided by brick walls, ceilings are brick arched and have cement floors, tin lined doors to **No. 4**, shutters are tin lined on the outside, and are closed every night. Wool dryer divided from pickers by brick wall; dry room communicates with **Nos. 3** and **5** by tin lined doors.
- No. 4**—Two stories, brick, gravel roof, open finish. First story, hurr picker, store room and repair shop. Second story, spinning; open finish; this floor is open to second story of **No. 3**, making one large room, divided from second story, **No. 2**, by brick wall, wood door, tin lined.
- No. 5—Dye House**—One story, brick, gravel roof, communicates with **Nos. 3** and **6**.
- No. 6—Frame Mill**—Three stories, gravel roof, open finish. First story, scouring, washing, extracting, and store room, stairs to second story open. Second story, store room and wool sorting; bridge to second story, **No. 2**, iron covered doors. Third story, dressing and spooling, bridge to **No. 1**, iron covered doors, iron shutters to **No. 1**, on windows opposite **No. 6**, also to windows over second story of boiler house.

#### SPECIAL FEATURES.

- Pickers are well arranged, and, with exception of hurr picker, are in brick rooms; hurr picker flows into yarn picker room, through hole in brick wall.
- Drying is done in **No. 3** by sucking the hot air from the top of the room by fans and blowing it under and up through the wool. Steam pipes for heating the air in the room are suspended about three feet above the wool. It appears to be a safe arrangement.
- Boilers—Four tubular boilers in **No. 2**, well arranged, about six feet from floor above.
- Oils—Lard oil for wool, mixed sperm and paraffine for lubricating.
- Heating—Steam.
- Lighting—Gas, made on premises, in frame gas house, about 75 feet from mill. O. P. Drake's machine.
- Waste removed daily.
- Hours of Work—Eleven daily.

#### FIRE APPLIANCES.

- Lightning Rods—None.
- Ladders—Two stationary, at main mill, some movable.
- Buckets—Good supply in all the buildings.
- Extinguishers—Five Babcock, distributed through the building. Axes and bars are also kept for fire.
- Steam Jets—None.
- Sprinklers—None.
- Tank—One in tower.
- Watchman with clock and Buerk watch.
- Auxiliary Aid—Four hand engines, within one mile.
- Hose—350 feet, distributed at hydrants.
- Pipes and Hydrants—Have two vertical pipes at main mill, two hydrants in yard, and one double one with 50 feet hose at second story of **No. 1**, outside the door leading to **No. 6**, available for either building. Have one large hydrant near office in street, by which, in case of fire, they can receive help from the Salisbury Mills, or give them help if needed.
- Fire Pump—One Fales & Jenks' in **No. 1**, in engine room. Gear-ing slides upon main shaft.

#### CHARACTER.

The Buildings appear to be in good condition, and are kept neat and orderly. They have five extinguishers, and a good supply of tanks and buckets. There has been some improvements within the last few years.

# Company Descriptions by John J. Allen

*A History of Carriage Making & Automobile Body Building in Amesbury, John J. Allen, Typescript, 1955*

## **BENJAMIN C. DEROCHMONT — IRON FOUNDRY**

Operated an Iron Foundry and was located on Mechanics Row, and built up quite a business in this line, producing parts for carriage making machinery.(note – DeRochmont also had a foundry in Newburyport.

J. J. Allen, pg. 85

## **ATWOOD MFG. CO.**

Was established in 1871 at West Amesbury by W. I. Atwood as President and I. H. Atwood as Superintendent, where they did a metal plating business for a number of years, then moved to Amesbury proper, where the name was changed to Atwood Brothers Co.

## **ATWOOD BROTHERS CO. – METAL PLATING & NAME PLATES**

Moving from West Amesbury to Amesbury, they located on Mechanics Row, off Main St., and added the making of name plates for the use of different manufacturers in marking the carriages that they sold at retail. This was a small plate about three inches by three-quarters of an inch, with the name of the dealer who sold the carriage, and was attached to the wooden part of the rear axle, or on the back of the body. They remained in this location a few years, then moved to the “Cammett Building” so-called, located on School St., in 1884, and added the manufacture of carriage lamps. In 1890 they moved to the Amesbury Carriage Co. building on Chestnut St., where they occupied a part of the third floor, and had a hundred employees, every one of whom was a trained and skilled mechanic. Quite a number of them were Germans, and came to Amesbury from New York and New Jersey. In 1891 A. H. Atwood retired from the firm and moved to Chicago, taking quite a number of the best workmen with him, where he established a lamp making business.

J. J. Allen, pg. 7-8

# Company Descriptions by John J. Allen

*A History of Carriage Making & Automobile Body Building in Amesbury, John J. Allen,  
Typescript, 1955*

## **EASTERN BICYCLE CO. — BICYCLES**

Mr. Atwood retired from the firm of Atwood Bros. Mfg. Co., carriage and automobile lamp manufacturers in 1891 and moved to Chicago, Ill., taking a number of the best lamp makers with him, where he established a lamp manufacturing business. He remained in Chicago until 1896, when he returned to Amesbury, and commenced building bicycles under the name of Eastern Bicycle Co., and was located on Mechanics Row. In 1897 they moved to the Amesbury Carriage Co. building on Chestnut St., and continued a few years, when the business was closed out.

J. J. Allen, pg. 90

## **KENDALL LUNT & CO. – CARRIAGE GEARS & BODIES**

The well-known firm of Kendall Lunt & Co. manufactured carriage gears and bodies. It was composed of Fred F. Kendall, a practical body and gear maker, and Wm. E. Lunt, a practical gear maker, who continued the business started by Mr. Kendall, and then moved to Mechanics Row, off Main St., to a building of the Pettingell Machine Co.

They remained here two years, when business increased so rapidly, they were forced to seek larger quarters. Accordingly, they moved to Mill #6 located on Mill St., which was a 3 ½-story brick building 90 x 35 ft.

J. J. Allen, pg. 132



# Company Descriptions by John J. Allen

## LOCKE & JEWELL — CARRIAGE BODIES WHEELS & GEARS

Joseph R. Locke and Hiram Jewell came to Amesbury from New Hampshire in 1867 and started making carriage gears and wheels, having erected a factory in “Patten’s Hollow” on the banks of “Patten’s Pond” on Mechanics Row off Main St. Previous to this all wheels and gears and about everything in carriage findings came from West Amesbury. Their business was successfully carried on until 1880 when they added the manufacture of finished carriages to their line. In 1880 their business amounted to \$100,000, building wheels, gears and 600 finished carriages, employing sixty workmen.

In 1882 they built several wagons in “Natural Wood” and placed them on the market under the name of “Amesbury Road Wagon”. This style did not seem to hit the public taste very strong at first, it seemed to everybody to be too gaudy. Trade in them languished for a while, but evidently only while the popular taste should be developed, perhaps in a tendency of the times in that direction, in interior house finished and in furniture. They were on the right track however, as persistence brought the public to appreciate their idea. In two or three years other manufacturers joined them in trying out novelties in “Natural “Wood” in the shape of Park Carts, also four wheel vehicles for fancy driving. Nearly every firm building carriages in Amesbury took up the idea. The leaders of fashion at the seaside adopted them, and from that time they grew in popularity on fashionable drives so that a large part of the vehicles were light-colored. All in all, these “Natural Wood” carts were the most stylish vehicles on the road.

They were the oldest established firm in Amesbury manufacturing wheels and gears. With years of experience in all departments of the trade, from manufacture of wheels and gears, also body work, to the ironing, painting and trimming of all variety of vehicles, they had the reputation, not in turning out the largest number of carriages, but work that would give the best of satisfaction to hundreds of buyers. The “Chicopee Wagon” and “English Pleasure Phaeton” were specialties of theirs that were appreciated by the riding public. The carriage trade generally were indebted to this firm for many inventions in carriages and carriage machinery which did more to establish the manufacture of high-grade carriages in Amesbury, than any other feature in the business.

In 1887 their factory buildings were swept by fire, and replaced with a large four-story wooden building 150 c 50 ft., where they continued in business until they were again burned out in 1891. They had done a large business in 1890 and were preparing to do a larger one in 1891. Their new loss was \$100,000, and the buildings were never replaced, and the company retired from business.

J. J. Allen, pg. 141

# Early Description of Locke & Jewel - 1

*The Villager* weekly newspaper, July 20, 1871, pg. 2 (cont'd next two pages)

## Carriage Business—No. 3.

A visit to the Wheel and Carriage factory of Messrs. Locke & Jewell, reveals to us the increase and extent of the business transacted by this enterprising firm since the location of their business in this village. In 1867 they bought a lot of land of Huntington and Bagley on the margin of Patten's pond, and erected thereon a building 30 X 50 feet, and two stories high, with a basement. Their factory was not ready for occupancy, however, until April 1st, 1868. Capital invested, \$9000. Their machinery at the time consisted of a ten-horse-power engine; two circular saws; one cutting off saw; one dressing machine; two planing machines; three polishing machines; and two rounding machines: giving employment to seven hands; and using 72 000 spokes and turning out 1200 sets of wheels. The pay-roll averaged \$400 per month; gross amount of sales, \$12,000.

In 1869 increasing demands necessitated an enlargement of their factory and an addition of 15 X 40 feet was made thereto, with a "dressing-room" 15 X 30 feet, also a boiler house, 15 X 18 feet, and a "Brayton's Patent Steam Generator" engine of twenty-horse power, thus doubling their motive power — They also purchased additional land for storage purposes, and bought a full cargo of spokes in the rough, to the number of 80,000. To such an extent had the carriage business grown, that a still further enlargement was demanded, and the following year a store-house, 18 X 30 feet was erected, and a stable 20 X 24. An addition of 30 X 50 feet, and two stories high with a tower and elevator was made to their already enlarged factory. During this year they purchased 100,000 spokes, and used 150,000 feet of lumber, mostly hickory and ash.

## Early Description of Locke & Jewel - 2

*The Villager* weekly newspaper, July 20, 1871, pg. 2

The present year they have \$50 000 invested and employ 23 hands. Monthly pay roll, \$1549. They have manufactured 4000 carriage parts; 8000 sets of wheels, consuming 170 000 feet of ash and hickory plank and 300 000 spokes. Gross amount of sales \$70,000. They have further increased their motive power by putting in one of "Brayton's fifty horse power new patent steam generators" which runs the following machinery:—Four circular saws; one cutting off saw; two spoke lathes; four polishing machines; three planing machines; one dressing machine; four trimming machines; three rounding machines; one hub mortising, one carriage mortising and two boring machines; also, a rim dressing machine, the invention of one of the hands employed by the firm. Mr Dudley J. Maraden, who is indebted to Messrs. Locke & Jewel for invaluable assistance rendered in its production. The machine is capable of dressing 100 sets of rims in ten hours, doing the work of ten men, easily.

In the facts as stated above is readily seen the prosperity of a branch of business unknown in the community three years ago, and where is now two firms of like work, one of which was started by us a few weeks since. Several of the machines employed in their work were invented or perfected by the senior member of the firm, who had the reputation of being one of the best mechanics in Rockingham county, N. H., and has certainly added to his reputation while residing among us. Messrs Locke & Jewel purchase the most of the ash lumber used by them, in central and northern New Hampshire. The spokes and rims in New Jersey, Pennsylvania, Ohio, New Hampshire and Massachusetts. Their hubs come from Exeter N. H. from the celebrated firm of I. S. & S. A. Brown, and they also purchase largely in Brentwood, N. H. The lumber used by them comes by car loads, and their freight bill to the Eastern Railroad Company ranks next to that of the Sainbury Mills Company. Most of their work is sold to the carriage makers, in this village, although they have a large Eastern trade.

## Early Description of Locke & Jewel - 3

*The Villager* weekly newspaper, July 20, 1871, pg. 2

To one who has never witnessed the workings of the various machines which the ingenuity of man has invented for the manufacture of carriage parts, the factory of Messrs Locke & Jewell will well repay a visit, and he will see more of the movements of this increasing industry than has been described above.

It may not be out of place in this connection to remark that one additional branch of trade is needed in our village to complete and perfect the carriage business, and that is a factory for the manufacture of springs and axles. Now, our manufacturers purchase thousands of dollars worth of these annually in Maine and Connecticut, when they could be manufactured as well here as elsewhere.