

FIRE, FIRE DEPARTMENTS, AND THE INDUSTRIAL REVOLUTION IN WINDHAM AND WILLIMANTIC, CONNECTICUT

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The history of fire in Connecticut is closely linked to the industrial and market revolutions, for the forces that brought textile mills, clustered market centers, and urban growth to Connecticut also brought greater danger from fire.

Before the Industrial Revolution, fires were tragedies for individual families, but outside of cities like Boston or Philadelphia, didn't really pose problems for rural communities as a whole. In the 1600s and 1700s, Connecticut had few villages and no cities. Almost everyone lived on dispersed farms, separated from the neighbors by acres of open fields and managed woodlots with little underbrush. Fires were unlikely to spread from one house to another, so fire departments, firefighters, and fire equipment seemed unnecessary. Forest fires could be catastrophic when they occurred, of course, but they were confined mostly to frontier areas like Maine and Vermont, where there was much thick underbrush, but were comparatively rare in the open countryside of southern New England.

Still, those families whose houses or barns did catch fire were devastated. One of the most evocative descriptions of a house fire in rural colonial New England comes from the pen of the poet Anne Bradstreet, a Massachusetts Puritan, whose house burned in 1666.

"I waken'd was with thundring nois / And Piteous shrieks of dreadful voice," Bradstreet wrote, expressing the dread that also must have gripped fire victims in Connecticut. "That fearfull sound of fire and fire, / Let no man know is my Desire. / I, starting up, the light did spy, / And to my God my heart did cry / ... Then coming out beheld a space, / The flame consume my dwelling place."

With no fire departments, firefighters, or fire equipment, victims like Bradstreet had little choice but to stoically endure the loss of their houses and possessions. Bradstreet tried to shrug off the loss, but lamented, "My pleasant things in ashes lye, / And them behold no more shall I." The fire consumed her entire house: the roof, the dinner table, the window where she lit candles for her husband when he was away, and – most painfully – the room where her children were married. "In silence ever shalt thou lye," she wrote sadly of her destroyed home, "Adieu, Adieu; All's vanity."

But in the nineteenth century, industrialization and urban growth changed the ways that people confronted fires. A score of thickly settled mill villages and factory cities sprang up across eastern Connecticut, creating an environment where fires now could jump easily from building to building. A fire in one house, store, shop, or barn could grow quickly into

an inferno that could destroy an entire neighborhood, leaving dozens or even hundreds homeless.

Even outside of Willimantic, Danielson, Baltic, Putnam, and the other factory cities – and smaller mill villages like South Windham, Wauregan, South Coventry, and Atwoodville – fires became a more serious problem. The nineteenth century experienced the rapid growth of rural villages, as well as mill cities – clusters of houses, shops, and other central-place activities that funneled farm produce into the mill cities and villages, to feed to hundreds of new industrial workers. Everywhere in Connecticut, urban growth occurred. By the 1820s, people throughout the state increasingly were worried about fire.

So they took action. Bev York, the Educator at the Windham Textile and History Museum, showed us a copy of a booklet titled “A History of All the Fire Companies Ever Formed in Windham, Conn.,” written in 1885 by Windham County historian Allen B. Lincoln and printed by the Willimantic *Chronicle*. Lincoln tells how in 1825 the residents of Windham Center – one of the many new rural villages – organized one of eastern Connecticut’s earliest volunteer fire companies.

Knowing that those townspeople who still lived on dispersed, outlying farms would never agree to pay the taxes needed to support a fire company that would benefit only villagers, the residents of Windham Center voted to form their own fire district and pay for the equipment themselves. They drafted a set of bylaws and dispatched Dr. Chester Hunt, a village physician, to Hartford to secure the approval of the state’s General Assembly.

Plenty of residents volunteered to join the 24-man Windham Center fire company. “Firemen then were not only exempted from poll tax,” explained Lincoln, “... but also relieved from the more arduous and to many disagreeable duty of training with the militia.”

Firefighters’ duties were easier then than they are now. “Service in fire company consisted chiefly in brief monthly meetings and in service at fires, which were not only exceedingly rare, but generally engaged the efforts of all citizens whether firemen or not.”

The Windham Center fire district erected an engine house and purchased a pumper engine, ladders, and hooks to keep in it. Men, not horses, pulled the engine. As Lincoln, who inspected the engine years later in 1885, described it, “the body is shaped like a miniature rectangular coal barge, in dimensions about 6 x 2 ½ feet at the top, and 5 x 2 ½ feet at the bottom, and a foot or more deep. The body is mounted on a pair of low wheels, calculated to bring about breast high, for easy working, the handles of the pump levers.” Four men worked the pumps. Other firefighters used buckets to continuously load water into the engine. A four-foot pipe with a nozzle protruded from the engine, to which firefighters could attach a 20-foot hose.

“By vigorous working it could be made to throw a half inch stream fifty or sixty feet in the air,” Lincoln wrote. “Soon after the district purchased it, persons went up into the old Presbyterian church belfry” – Lincoln was referring to the old Windham Center Congregational Church, since rebuilt – “and the engine on trial threw a stream that sprinkled them in their high perch.” We enjoyed the thought of Windham Center residents racing to the belfry just to see if their grand new gadget could get them wet.

York showed us a vintage hand-pulled fire truck on display as part of the Museum’s fire exhibit. Once used by Willimantic’s Alert Hose Company, it was designed to transport fire hoses and unlike the Windham Center truck did not have a pumper engine. Still, it gave us a good idea of the size of these early vehicles. It has two large wheels, painted bright red and shiny black, a polished wooden drum around the axle, a wooden roller for carrying the coiled hose, a wooden tongue so that the firefighters could pull it, and two oak storage boxes. Without its hose, we could easily roll it across the Museum’s smooth wooden floor.

Although Windham’s first two fire companies were in the rural villages of Windham Center and North Windham, the mill city of Willimantic, located in the northeast corner of the town of Windham, soon followed suit, establishing not one, but four separate fire companies.

The first fire company in Willimantic was Fountain Company No. 1, named for the power of its fire hoses. The Company held its first meeting in the fall of 1872. Three years later it changed its name to Alert Hose Company No. 1.

In 1886 Willimantic erected two new fire houses with hose towers. The Alert Hose Company shared one of the houses with the newer Excelsior Fire Company. Located at 13-15 Bank Street, it was close to the city’s more prosperous brick stores, shop, theaters, and hotels along “middle” Main Street, as well as the residential neighborhoods and silk mills along Valley Street.

The Montgomery Fire Company had its engine house in the thickly settled immigrant neighborhood along lower Jackson Street, where Jillson Square is today. This was a neighborhood of smaller houses, tenements, and less prosperous shops and stores, mostly made of wood.

Later in the century, in 1897, as scores of ornate gingerbread middle and upper class homes appeared on the slopes of Prospect Hill, a third fire company, the Hilltop Fire Company, was organized to service that neighborhood. The Hilltop Fire House, today a private residence, still stands on Summit Street.

In 1926 all four of the Willimantic fire companies were combined and located in the Bank Street firehouse.

Initially, we were surprised to learn that Willimantic had firehouses near Main Street and several residential neighborhoods, but not close by the most valuable – and vulnerable – businesses in the city: the Willimantic Linen Company's (later the American Thread Company's) gigantic thread mills along Lower Main Street and the two large cotton mills on either side of Bridge Street.

Fires were particularly hazardous for textile mills. Flammable lint and fabric dust hung heavy in the air, oil saturated the porous wooden floors, grease lubricated the machinery, and stacks of cloth, paper, wood, and coal lay all around. Workers often smoked. In the winter especially, when the air was dry, static electricity could build up in the fabrics, sometimes causing sparks to fly, according to Dale Plummer, the Norwich town historian. Until the introduction of electric lights in the late 1800s, the only artificial light came from the dangerous open flames of candles or oil lamps.

And as if all that wasn't bad enough, in the mid-to-late 1800s the mills augmented waterpower with coal-fueled steam boilers, further increasing the chances of a fire. Mill fires occurred frequently in both the United States and Europe.

Throughout the industrialized world, the textile mills responded to the threat of fires in several ways. Workers were ordered not to smoke. Large windows and long, narrow building designs – an architectural style that permitted sunlight to penetrate into the centers of the structures – increased natural light and reduced dependence on candles and lamps.

Humidifiers and sometimes even potted plants reduced static electricity.

Steam boilers were frequently relocated to outbuildings or ells – the Willimantic Linen Company placed theirs in a low, one-story addition next to the Willimantic River – where any fires that might start could be contained.

And early in the nineteenth century, beginning in Britain but soon spreading to the United States, textile mills pioneered so-called fireproof buildings.

Fireproof construction meant replacing old-fashioned wooden floors, walls, beams, and posts with modern iron, steel, stone, brick, or concrete. Some English factories tried covering their floors and ceilings with sheet iron, but that proved too expensive for most mills. More practical were cast iron beams and posts. Some mills covered their walls and ceilings with fireproof plaster, or even installed massive, vaulted masonry beams – although their weight made brick, stone, or concrete beams impractical for upper stories. Boiler houses in particular were likely to have sheet iron ceilings and cast iron beams, and stone, brick, or concrete floors.

Fireproof construction only protected the building itself, however. The people, equipment, and materials inside were still in great danger.

Like other textile mills, the Willimantic Linen Company and American Thread Company employed numerous strategies to reduce the risk of fires. According to insurance maps drawn in 1908 and 1915, ATC attempted to make its buildings fireproof, with plaster walls, masonry construction (stone, brick, and concrete), cast iron roof trusses in some buildings, water tanks placed in strategic locations, sheet iron roofing on the boiler house, asbestos shingles on a few of the other roofs, about a dozen hydrants in the mill yards, fire ladders leading to the roofs, and even automatic sprinklers.

But the maps also reveal that most of the floors were made of flammable wood planks, and most of the beams, joists, and posts were wooden, as well.

ATC had its own fire brigade as well, the American Fire Brigade, which it organized in 1899, the year after it acquired the Willimantic Mills plant from the old Willimantic Linen Company.

We learned more about the brigade just as the Museum exhibit was going up. Willimantic resident and venerable local historian Tony Clark dropped by with some interesting information. While reading back issues of the Willimantic Chronicle, he had come across several stories about the brigade.

In 1908 the American Fire Brigade consisted of 25 men, who drilled regularly. Other workers were expected to assist the brigade in fighting any fires that might occur.

At first, the brigade met in the mill's office building (today, the Museum's main building), but in 1903 it moved to the Hickey Building on Lower Main Street, opposite ATC's new, brick No. 6 Mill building – today a small, gray-painted wooden storefront under repairs.

In 1915 ATC renovated a brick warehouse – now the Museum's Dugan Mill exhibit building – as the brigade's new headquarters. According to a story in the December 10, 1915, issue of the Chronicle:

“This summer the Thread Company decided to do a little something for the boys and altered over the upper floor of the brick stock house just west of the main office building which stands between Union and Main streets. The roof was raised nine feet and three large rooms partitioned off which include an assembly room, a locker quarters with 15 lockers which accommodate two members and a commodious kitchen well equipped. A fine

pool table is part of the furnishings of the assembly besides easy chairs and other furnishings.”