

U.S. Cartridge Company

Company Origins

Established in 1869, the United States Cartridge Company was led by the controversial attorney, politician, and Civil War general Benjamin F. Butler who, at the time, was a Republican congressman from the Fifth Congressional District (Essex County). Butler secured contracts for munitions with the federal government, which aided his fledgling company, initially incorporated with a capital of \$25,000.¹ Additionally, the increasing popularity of hunting, especially among the nation's growing middle class, resulted in an ever-greater demand for shotgun shells and rifle cartridges. The U.S. Cartridge Company quickly grew to rival such major ammunition manufacturers as Remington and Winchester.



This engraving of Benjamin Butler dates from the Civil War, during which time which he served as controversial general in command at New Orleans.

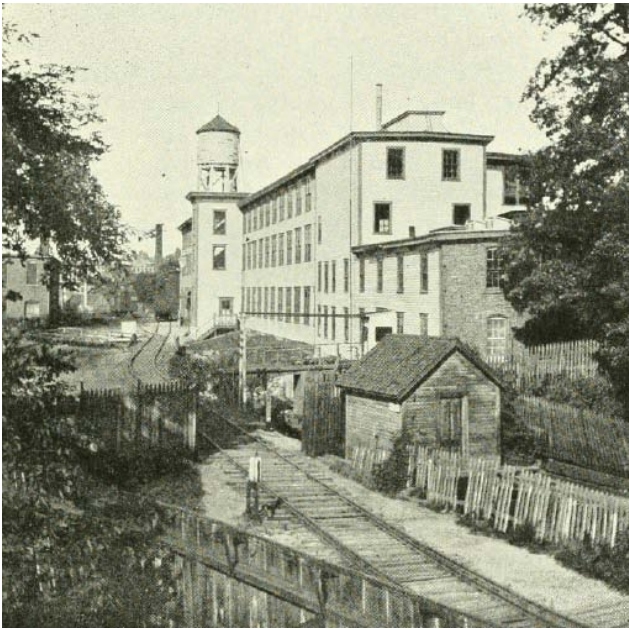


Dating from the 1880s and rife with racist caricature and political satire, this cartoon attacked Butler as a wealthy capitalist who self-servingly sought the support of workingmen and promoted racial equality while employing an African-American as his personal valet.

¹ "A New Enterprise in Lowell," *Saturday Vox Populi*, April 3, 1869.

Benjamin Butler

Much is written about Benjamin Butler as a political and military figure, but the skill, shrewdness, and acumen he displayed in the many business enterprises in which he was engaged has received far less attention. As a major shareholder of the Middlesex Mills, beginning in the 1850s Butler emerged in the late-antebellum years as one of Lowell's wealthiest residents. In 1865 he joined with several other local capitalists to form the Wamesit Power Company and the United States Bunting Company, the works of which were located along the Concord River at the former Oliver M. Whipple property. An astute judge of technical and managerial talent, Butler brought together a group of men to oversee these firms, as well as the cartridge company, and the two manufacturing concerns proved to be highly profitable.

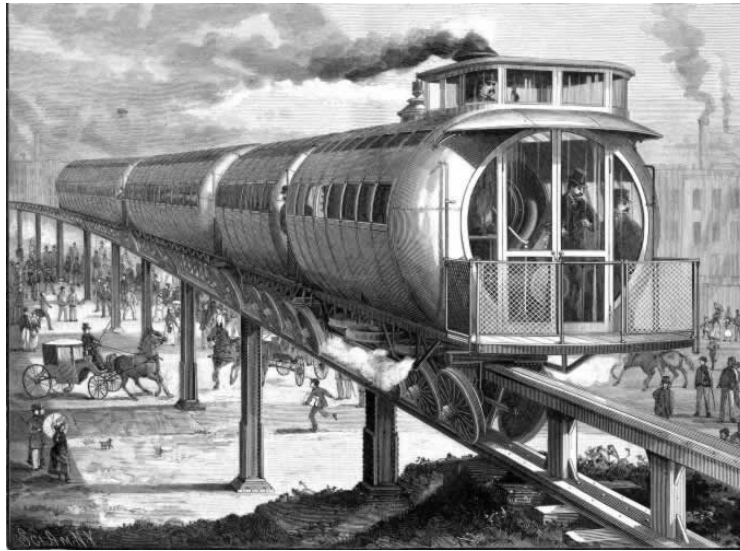


This view of the U.S. Cartridge Company plant dates from ca. 1899 and shows the wood-frame factory buildings that housed much of the machinery for cartridge production. In the early 20th century the company constructed brick buildings and these older factories were torn down.

Inventors: Joe V. Meigs

For many years local merchant De Witt C. Farrington served as treasurer of U.S. Cartridge and presided over the company's financial affairs. For mechanical skill, however, Butler relied on the gifted inventor Joe V. Meigs, whom the general had convinced to move from Washington, D.C., to Lowell to join the company. From a prominent family in Nashville, Tennessee, Meigs was born in 1840. His father, Return J. Meigs, was a lawyer and Whig politician who served as U.S. attorney for the Middle Tennessee District. Upon the outbreak of war Return J. Meigs remained loyal to the union although he was part of a citizens committee that opposed President Lincoln's request to send troops to put down the rebellion. Nonetheless, feeling the heat from the city's many Southern sympathizers, Meigs moved his family to Staten Island in 1861 and eventually settled in Washington, D.C., where Lincoln appointed him clerk of Supreme Court.

The younger Meigs followed his father into the legal profession, but specialized in patent law and areas related to the mechanical arts. During the Civil War he joined the Union army while working in the War Department and proposed to Secretary of War Stanton that African Americans be organized into army units in his former home state of Tennessee, primarily to serve as sentries and aid artillery batteries. Appointed captain, Meigs was placed in command of the first all-black artillery battery in the United States military and engaged in a number of campaigns in the Volunteer state. After the war he returned to Washington and worked in the court of claims, handling patent litigation.



Joe V. Meigs achieved national renown for his patented single-track, elevated railway, a short experimental section of which was constructed in East Cambridge, Massachusetts, in the late 1880s. Despite its promise, this mass transportation system was never built in any other city.

Shortly before joining U.S. Cartridge Meigs patented a breech loading firearm and upon taking the position of “inventor” with Butler’s company, he patented a metal cartridge with an improved firing chamber that helped solve the problem of accidental explosions of firearms.² Butler appointed Meigs agent of the company when it began operations in 1869 in a stone building erected by the Wamesit Power Company, next to S.N. Woods’ grist mill, two years earlier.³ Meigs remained agent until the mid-1870s when Charles A. R. Dimon, also a Union army officer who served under Butler during the Civil War, replaced him. In the 1880s Meigs gained national renown as an inventor of a single-rail elevated railway system, for which he oversaw construction in East Cambridge.⁴ Meigs and Butler also pursued water transportation projects, forming the Pentucket Navigation

² Meigs was awarded a patent (No. 87,352) for a metallic cartridge with a fulminate chamber arranged in such a fashion that it would explode only in one direction, namely outward from the gun barrel. A brief description of this patent, dated March 2, 1869, is found in U.S. Congress, *Annual Report of the Commissioner of Patents for the Year 1869*, v. 2, 41st Congress, 2nd Session, Exec. Doc. 102, (Washington, DC: Government Printing Office, 1871), p.349.

³ “Cartridge Factory,” *Lowell Daily Courier*, December 18, 1868. Meigs’ role was primarily that of inventor. For the daily management of plant Butler hired Charles K. Farmer, who had experience in munitions manufacture in Springfield, Massachusetts, as superintendent. See “A New Enterprise in Lowell,” *Saturday Vox Populi*, April 3, 1869.

⁴ “Studying Rapid Transit,” *New York Times*, January 12, 1888.

Company in the 1870s with the aim of dredging sections of the Merrimack River to create a navigable waterway from Newburyport to Lowell. Unlike the U.S. Cartridge Company, however, neither of these enterprises were successful. Meigs eventually moved to Charlestown, Massachusetts, where he died in 1907.

Company Management: C. A. R. Dimon

For many years the key manager of the cartridge company was Charles A. R. Dimon. Born in Fairfield, Connecticut, in 1841 and educated in the local academy, Dimon became a clerk in the merchant house of an uncle in Salem, Massachusetts, his before enlisting as a private in the Massachusetts Eighth Volunteer Militia, commanded by Butler, in 1861. Dimon's intelligence and ambition caught Butler's attention and he was rapidly promoted to the rank of major while serving under Butler in Louisiana. Dimon gained renown for training and commanding a group of former Confederate soldiers who joined the Union army and became known as the "Galvanized Yankees."⁵ After the war Dimon returned to Massachusetts and eventually settled in Lowell after Butler appointed him agent of U.S. Cartridge in the mid 1870s. Under Dimon's capable management the company grew and by the early 1880s it employed 250 workers. Although the company produced primarily cartridges, paper-shot-shells, and primers, it engaged for a few years in the manufacture of the "Lowell Battery Gun," patented by De Witt C. Farrington and similar to the more widely used Gatling gun. Its works expanded with the construction of additional wood-frame factory buildings adjacent to Andrews Street and the company was recapitalized at \$150,000.⁶



Benjamin Butler's son, Paul Butler, assumed control of his father's enterprises in Lowell. Unlike his father, he never sought political office and he proved to be a talented mechanic.

⁵ As a colonel, Dimon commanded the "Galvanized Yankees troops in the Upper Missouri region in 1864-65. Michèle Butts, *Galvanized Yankees on the Upper Missouri: The Face of Loyalty* (Boulder: University Press of Colorado, 2003).

⁶ "The U.S. Cartridge Works," *Saturday Vox Populi*, July 30, 1881; also, see the entry for the United States Cartridge Company in *The Bivouac*, (Lowell: 1886), p. 54; Peter M. Molloy, *The Lower Merrimack Valley: An Inventory of Historic Engineering and Industrial Sites*, (Washington, DC: National Park Service, 1976), p. 69.

Paul Butler

At about the same time Charles Dimon joined U.S. Cartridge, Benjamin Butler's son, Paul Butler, having graduated from Harvard University in 1875, began working at the cartridge factory with Meigs. Unlike his father, Paul Butler eschewed party politics and immersed himself in the mechanical arts and inventive endeavors at the cartridge company. He succeeded Farrington as treasurer and after Benjamin Butler's death in 1893 he was the cartridge company's guiding force.⁷



These brick buildings are the major remnants of the former U.S. Cartridge Company's plant along Lawrence Street.

⁷ Frederick W. Coburn, *History of Lowell and Its People*, v. 3, (New York: Lewis Publishing Company, 1920), pp. 6a-6b.



These two photographs were taken immediately after the U.S. Cartridge explosion in that destroyed numerous houses and killed 22 people.

Dangerous Conditions

As in other 19th century manufacturing establishments, worker injuries in the factory of U.S. Cartridge occurred all too frequently. Workers at the cartridge company faced not only the common perils of injury from machinery and the belt-driven power system on the shop floor, but also from the dangerous nature of producing ammunition.⁸ The most horrific of these dangers struck in late July 1903 when an explosion, sparked by the ignition of gunpowder in one of the company's powder magazines that was located just over the Lowell city limits in Tewksbury, killed 22 employees and nearby residents, while injuring more than 70.

The massive blast destroyed or severely damaged about 70 houses in Tewksbury's Wigginville neighborhood and the shock was felt as far away as Haverhill, where windows broke and doors of homes "swung open with a crash as if by a gust of wind."⁹ A closed-door inquest held at the Lowell Police Court in August was followed by Judge Hadley's ruling in October that held Paul Butler and his aunt, Blanche Butler Ames, who were the principal partners in U.S Cartridge Company, responsible for the explosion. Likewise, the Dupont Powder Company, which produced the gunpowder stored in the magazines, carried some of the blame.¹⁰ One result of the disaster was the U.S. Cartridge

⁸ For an example of a small explosion that injured two female cartridge employees, each 14 years old, see "Accident at the U.S. Cartridge Company's Works---Two Young Girls Injured," *Lowell Daily Citizen*, February 8, 1878.

⁹ The death and devastation resulting from the explosion at the U.S. Cartridge Company received national attention. Of the many terrible deaths, the most widely reported concerned four young boys who were about to swim in the Concord River near the seven-arch bridge, about 1,000 feet from the company's powder magazines, and were killed by the massive shock waves from the blast. "Like Gun's Flash," *Boston Globe*, July 30, 1903; "More Than a Score Killed by Explosion," and "Wide Effects of the Shock," *New York Times*, July 30, 1903; "Loose Powder Grains on Floor Cause of the Lowell Explosion," *Boston Globe*, July 31, 1903.

¹⁰ Judge Hadley also found the foreman of the work crew responsible for the blast and cited the Tewksbury Selectmen for their negligence in not taking steps to have the magazines removed from a populated area. See "For Halloway's Death: Judge Hadley Holds Goodwin Responsible, Powder Companies and Selectmen also Held Accountable for Magazine Explosion at Tewksbury, July 29" *Boston Globe*, October 3, 1903.

Company's construction of three magazines in South Lowell on the east side of the Concord River, south of the Boston & Maine Railroad tracks.¹¹

The Ames Family

About a year before the explosion in Wigginvile, the cartridge company lost the services of Charles Dimon, who died of cancer while serving as superintendent as well as Lowell's mayor. Assuming Dimon's duties was Butler Ames, a nephew of Paul Butler and son of Adelbert and Blanche Butler Ames, Benjamin Butler's sister. Like other members of his family Butler Ames attended Phillips Exeter Academy, graduating in 1889, but then went to West Point. A member of the class of 1893, Ames served only briefly in the army, but volunteered upon the outbreak of the Spanish-American War and attained the rank of lieutenant-colonel while commanding troops in Puerto Rico.



In 1900 Butler Ames and John O. Heinze established the Heinz Electric Company and located its factory next to the U.S. Cartridge Company plant.

Similar to his uncle Paul Butler, Ames was mechanically inventive and in 1900 he joined with John O. Heinze to form the Heinze Electric Company, manufacturers of electrical equipment, including coils for wireless telegraphy and, by 1905, electrical coils and magnetos for automobiles.¹² After 1902, Ames divided his time between Heinze Electric, which had its factory close to the cartridge company's plant off Andrews Street, and U.S. Cartridge. Paul Butler continued to serve as treasurer and eventually Ames Butler became the company's president. The two presided over a period of expansion in

¹¹ "New Magazines Nearly Completed," *Boston Globe*, December 16, 1903.

¹² One of the earliest advertisements for the Heinze Electric Company's line of automobile products appeared the trade journal *The Automobile*, v. 13, (July 6, 1905), p. 35.

the 1910s, during which time U.S. Cartridge constructed a group of brick factor buildings extending along Lawrence Street and the Wamesit Canal.¹³

Wartime Boom

By 1917, U.S. Cartridge, inundated with orders for munitions from the United States military and its allies in World War I, was the largest employer in Lowell. With over 8,000 employees, nearly half of whom were females, the company's operations included a plant in Billerica, manufacturing space in the former Bigelow Carpet Company's factory on Market Street, as well as the works at the Wamesit Canal.¹⁴

The Drive for Unionization

The wartime boom in the demand for munitions resulted in an unprecedented pace of production at all of the major American cartridge producers. This occurred at the same time that organized labor, notably machinists' unions, with the support of an increasingly powerful American Federation of Labor, intensified efforts to expand membership and improve working conditions. A major unionizing drive at cartridge manufacturing plants in the summer of 1915 precipitated a number of work stoppages.¹⁵ In September, hundreds of employees at the U.S. Cartridge joined this effort as company officials were confronted with largest strike in the firm's history.

Captain Thomas Doe, the plant manager, refused to negotiate with the machinists representing U.S. Cartridge workers. He locked out 500 employees who supported the union demands for an eight-hour day, increased pay, including overtime, and a formal grievance process for arbitrating labor-management conflicts. Unable to continue production, Doe initially shut down the factory. He subsequently attempted to resume production with strikebreaking employees who were met at the factory gate on Lawrence Street by jeering protestors. Pressured by the heavy demand for munitions U.S. Cartridge officials settled the strike in early October, with many of the wage and work rule issues resolved in favor of the machinists.¹⁶

¹³ The growth of U.S. Cartridge extended to Maurer, New Jersey, part of Perth Amboy, where the company operated a small plant employing 109 persons by 1918. See Bureau of Industrial Statistics, Department of Labor, State of New Jersey, *The Industrial Directory of New Jersey*, (Paterson, NJ: News Printing Company, 1918), p. 344.

¹⁴ Coburn, *History of Lowell and Its People*, v. 1, pp. 166-167, and v. 2, p. 417.

¹⁵ "Say Strike Will Spread," *Boston Globe*, July 18, 1915.

¹⁶ "No Work for 500 Machinists," *Boston Globe*, September 16, 1915; "Cartridge Plant is Closed," *Boston Globe*, September 17, 1915; "Girls Jeered in Lowell Strike," *Boston Globe*, September 30, 1915; "Strike Ends in Lowell Plant," *Boston Globe*, October 2, 1915.



This advertisement for U.S. Cartridge Company shotgun shells dates from 1926, after the National Lead Company had taken over the cartridge manufacturer and had moved much of the production in Lowell to a plant in New Haven, Connecticut.

Corporate Takeover and Decline

While the Butler and Ames families controlled the cartridge company through most of the 1910s, the National Lead Company acquired half of all shares of U.S. Cartridge stock. After Paul Butler's death in 1918, the Butler family sold its remaining interest in the company to National Lead. By 1922 the New-York-City-based National Lead Company, which also controlled the Winchester Repeating Arms Company, sought to transfer the operations of U.S. Cartridge to the Winchester plant in New Haven, Connecticut. Despite attempts by local politicians, members of Lowell's business community, and the city's Central Labor Council to maintain production in the Spindle City plant, U.S. Cartridge curtailed its manufacturing and laid off employees. Congresswoman Edith Nourse Rogers appealed to the various parties and conferred with the U.S. Justice Department to keep the plant open, but by late 1926 much of cartridge manufacturing machinery was moved to New Haven. One final effort to retain the production of radiators—this product line had only recently been established the Lowell cartridge plant—also failed and U.S. Cartridge closed down on January 1, 1927.¹⁷

¹⁷ "Cartridge Shop May Remain for Time," *Lowell Courier-Citizen*, October 22, 1922; "Will Seek Intervention of U.S. Government to Keep Cartridge Co. in this City," *Lowell Courier-Citizen*, October 19, 1926; "Federal Agent at Cartridge Shop," *Lowell Courier-Citizen*, October 23, 1926; "Take Steps to Keep Cartridge Shop Here," *Lowell Courier-Citizen*, October 26, 1926; "Cartridge Plant to be Vacated by Jan. 1," *Lowell Courier-Citizen*, October 12, 1926.