

Ammunition Manufacturing in South Coventry, Connecticut Bill Jobbagy February 2017

South Coventry has a rich history of producing ammunition primarily by three individuals- Ralph Crittendon, William Tibbals and Henry Mason. The Civil War was the highlight of production, and sales to sportsmen and the military continued for many years after the war. Product was made at three sites in the Village, two of which burned in the early 1900's and one remains today.

Ralph Crittendon was born in Portland Connecticut on January 14, 1820. William Tibbals was born in South Coventry in December of 1823. Both were ingenious mechanics and they began in the late 1830's as apprentices for John Boynton. John had a factory on Lake Street making wool carding machines of his own design. Ralph and William started their own company in May of 1849 making and repairing machinery to order. Ralph was a temperate man, while William was a hard drinker. They rented a building and machinery from Earl Smith and Alanson Washburn. The building was located on the Mill Brook just east of today's Visitors Center which is at 1195 Main Street.



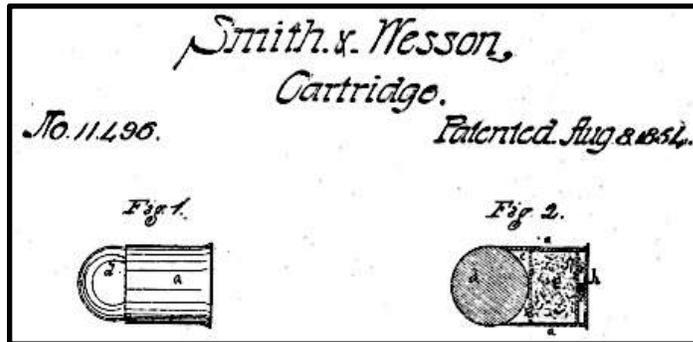
The first record of a sale was for 82,000 percussion caps at a price of \$54.00 to Samuel Colt between February and June 1849.



The percussion cap is a small metallic “cup” filled with a shock-sensitive primer, usually fulminate of mercury. The cap is placed on a pin in the rear of a gun barrel. When the pistol's hammer is released, it strikes the cap and ignites the primer which in turn ignites the gunpowder and fires the gun. This system replaced the flintlock arrangement which was prone to misfire. The percussion cap could also be used at the head of a grenade to set it off.

The Federal Manufacturing Census of the year ending June 1, 1850 shows that Crittendon and Tibbals made 45 million percussion caps valued at \$48,000, employed eleven hands and had five cap making machines. The similar 1860 census showed a production of 80 million caps. They also made an earlier type of ball ammunition for Smith & Wesson in Norwich and made cartridges and primers for the Sharps Rifle Manufacturing. Co. of Hartford.

Horace Smith and Daniel Wesson, of Norwich, were issued a patent on August 8, 1854, that changed the nature of gun ammunition. This was a charged bullet fired through a small hole in the base closure by an external pellet of fulminate. By 1860 their patent incorporated the bullet and powder in a metal casing with a hollow rim at the bottom which held the priming compound. It is essentially the same as the modern rimfire cartridge.



By the late 1850's Crittendon & Tibbals had acquired the rights to the Smith & Wesson patents and were making rimfire cartridges for, among others, the Bacon Manufacturing Company of Norwich and the E.A. Prescott Company of Worcester, Mass., both of whom were making Navy revolver pistols of .38 caliber.

April 1860 Advertisement:



In December of 1862, Crittendon & Tibbals made a new .52 caliber cartridge for the Spencer lever action rifle, developed with the help of the Cheney Brothers of Manchester, and the rifle was produced in the Cheney piano factory in Boston. The first record of a contract with the Federal Government was August 1863 for 200,000 .44 Wesson Cartridges at \$14.25 per thousand. During the Civil War they also made cartridges for Smith & Wesson, Bliss, Warner and Bacon revolvers.



The war demand caused Crittendon & Tibbals to look for larger quarters, and in October of 1863 they purchased the vacant Boynton Mill on Lake Street on the Mill Brook for \$7,000. The deed of sale lists the machinery in the factory consisting of about 50 machines for cutting, shaping and assembling cartridges, with associated tools and furnaces. They also had a storage house at the train depot. A correspondent at South Coventry writes: "This is one of the thriving, bustling towns of which Connecticut boasts so many. Here a large factory turns out nearly 400,000 metallic cartridges weekly." On the same day that their sale was recorded in the Coventry Land Records Office, Crittendon & Tibbals sent a proposal to the Ordnance Office soliciting orders for Spencer carbine cartridges.

On August 26, 1864 Crittendon and Tibbals, sensing a decrease in orders, sold all of their holdings to Jacob Schuyler, Marcellus Hartley and Malcolm Graham for \$32,500 plus a \$10,000 mortgage payable in two years. These gentlemen were partners in a New York sporting and military goods company which bore their name. Business continued as usual under the name of Crittendon & Tibbals Manufacturing Company. Brigham Payne, a long time employee and investor was engaged to manage the company. On September 29, 1865 Payne sold his interest in the company to Schuyler, et al, for \$10,000. Schuyler and associates then purchased land in Bridgeport from P.T. Barnum (on today's Barnum Avenue), and also purchased the C.D. Leet Company of Springfield, Massachusetts. They built a new factory in Bridgeport, but completed the last government order for 1865 in South Coventry, though the company had a new label- Union Metallic Cartridge & Cap Co. In 1912 the Union Metallic Cartridge Company and The Remington Arms Company were combined to one company in Bridgeport called Remington U.M.C.

That company was incorporated in Bridgeport on August 9, 1867. Crittendon & Tibbals sold their remaining assets (the building on Lake Street and residence across from the Hale Cemetery) in June of 1866. Both eventually moved to Hartford where they lived the rest of their lives as successful businessmen.

Between Sept 1862 and August 1865 C&T delivered 28,073,507 cartridges, mostly .56 and .44, to the government at a cost of \$698,016!! This amounted to just over 25% of all the cartridges made for the Union Army and Navy in the Civil War.

Henry W. Mason was born in South Coventry on September 30, 1828. He was a machinist by trade, having apprenticed in Boynton's machine shop. He and his father both went to work for the firm of Crittenden & Tibbals in the manufacture of percussion caps in the late 1840's. On July 8, 1852, Henry's father was killed by an explosion of fulmination powder at the Crittenden & Tibbals cap works. Soon after Henry was named plant superintendent. After Mason's marriage in June of 1854, he left Crittenden & Tibbals and went to work at Colt's in Hartford. Returning to South Coventry, Mason went into partnership with Walter A. Loomis to manufacture hooks and eyes in the firm Loomis & Mason, ca1857. Soon after the start of the Civil War, Mason began the manufacture of paper cartridges in the Hook & Eye Factory located on the east side of Mason Street in a building that no longer exists. In 1866, Mason bought the building from Loomis and continued the manufacture of paper cartridges.

The 1870 Federal Census of Manufacturing for Coventry lists Henry Mason as a pistol cartridge maker with 18 employees and making 2,000,000 cartridges that year valued at \$18,000. His customers were Folsom, Schuyler, Hartley & Graham, and Merwin & Hulbert. The 1870 Directory of New York City lists Henry Mason as a cartridge maker on 52nd Street, with his home in Coventry. Mason is noted as superintendent of the American Metallic Ammunition Co. on 52nd Street in NYC 1868-1869.

In June of 1872 a newspaper article noted that Mason is erecting a new building for the manufacture of metallic cartridges in Coventry (on today's Mason Street) using a water turbine. He expanded the site in 1877 to include a bullet casting shop, storage and an 8HP steam engine. He was making cartridges of the following caliber- .31, .36, .44, .52 and .58, generally for Merwin & Hulbert revolvers and Evans repeating rifles.



In July of 1872 the Phoenix Metallic Cartridge Company was formed in Coventry. Mason provided the building and employees and had several patents applicable to the business. Joseph Merwin and William and Milan Hulbert of Brooklyn, N.Y. provided machinery and financing. These gentlemen were dealers in arms and ammunition in New York City since 1859. Metal for the cartridges was purchased from the Coe Brass Co. of Torrington, and powder was purchased from the American Powder Co. of Boston and the Hazard Powder Co. of Hazardville, Ct. The company also entered the business of making blasting caps. In 1877 the company produced 17,909,539 cartridges and in 1882 they produced 23,865,830 cartridges.

In 1882 Phoenix began making “Bottle Cases” which were drawn, three-part cans used to protect glass-stoppered bottles in use for ink, pomade and perfume.

The Merwin and Hulbert Co. suffered financial difficulties in 1880, but was able to recover. At that time they held 2/3 of the shares of the Phoenix Cartridge Co. The Phoenix Company continued full production through the 1880’s under the original owners. On July 28, 1891 the American Metallic Cartridge Co. was incorporated in Coventry. Marcellus Hartley had one-half interest. He was also president of the Union Metallic Cartridge Co. of Bridgeport, Ct. The other half was owned by the president of Winchester Arms. Phoenix sold its assets to Union. The building was then owned by the Mason family and their ammunition was produced under the name of American Metallic Cartridge Co. Henry Mason was an officer of the company. In 1898 the American Cartridge Co. stopped manufacturing in Coventry and its machines were distributed to the Union and Winchester companies.



The Mason Cartridge Shop ca1890, looking east on today’s Mason Street



Henry Mason became sick in 1887 and his son-in-law, Clarence Hoxie, took over his responsibilities. Henry Mason died on July 26, 1888 and Clarence continued his work until 1891. The building on Mason Street remained in his family who rented it for several uses until 1924 when it burned down.

References:

1. "Cartridges of South Coventry", Frank Krasnickas, 2006
2. Town of Coventry tax and Land Records
3. Coventry Historical Society
4. The Willimantic Chronicle
5. The Hartford Courant