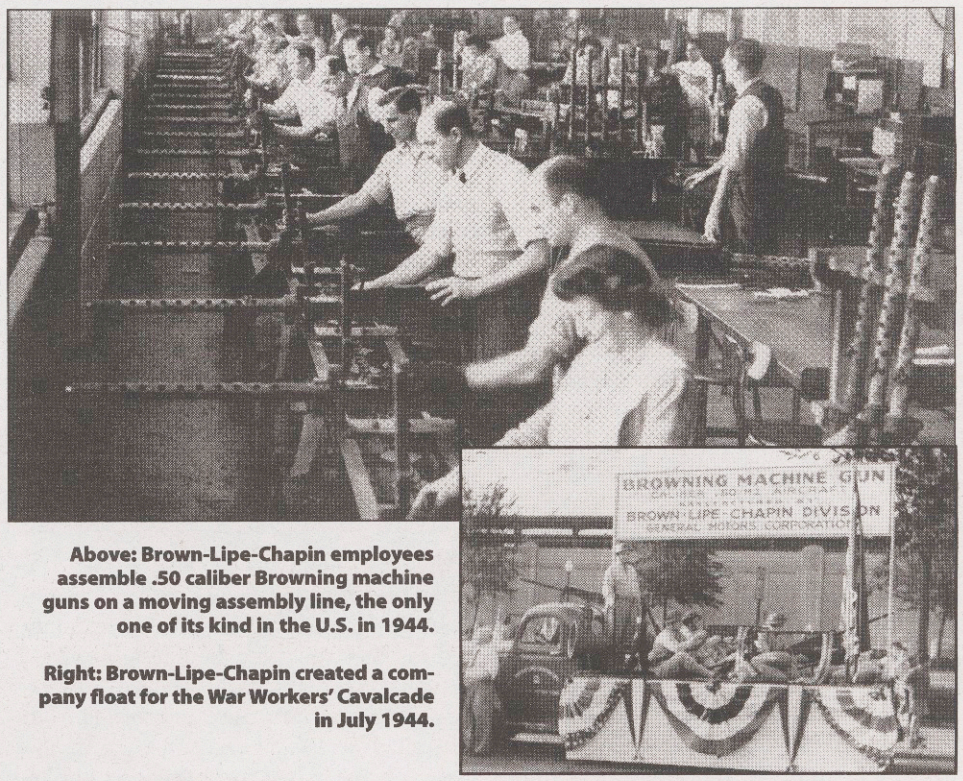
HISTORY FROM OHA

Brown-Lipe Chapin

Syracuse Manufacturers Mobilize for Victory in World War II: the Story of Brown-Lipe-Chapin



Above: Brown-Lipe-Chapin employees assemble .50 caliber Browning machine guns on a moving assembly line, the only one of its kind in the U.S. in 1944.

Right: Brown-Lipe-Chapin created a company float for the War Workers' Cavalcade in July 1944.

■ BY THOMAS HUNTER

Before the outbreak of World War II, factories located in Syracuse and Onondaga County made shoes, typewriters, air conditioners, washing machines, and many other civilian products. Military preparedness was low on the nation's list. However, shortly after the Japanese bombed Pearl Harbor, Hawaii on Dec. 7, 1941, and the U.S. declared war on Japan and Germany a few days later, President Franklin Delano Roosevelt set very challenging goals for many American manufacturers, including producing 125,000 airplanes, 120,000 tanks, and 55,000 anti-aircraft guns by 1943. Several local manufacturers answered the president's call for making war material between 1941 and 1945.

On July 28, 1944, the War Workers Cavalcade paraded along Salina Street in downtown Syracuse. Comprised of many local businesses that had shifted from manufacturing civilian products to war material, the cavalcade displayed these companies' patriotism via elaborate floats in a procession that took 2 ½ hours to pass 70,000 spectators.

This article is the third in a series that will focus on six local manufacturers that participated in the War Workers Cavalcade 70 years ago, and which played vital roles in supplying the Allied military forces with much-needed war items during World War II.

Producing for war & victory: Brown-Lipe-Chapin goes to war

Two inventors and entrepreneurs, Alexander T. Brown (1854-1929) and Charles E. Lipe (1851-1895) formed a business partnership in Syracuse in 1895. Brown, an amazing inventor and engineer, is credited with about 300 inventions, including the L.C. Smith breech-loading shotgun, the Smith Premier typewriter, a two-speed gear for bicycles, a pneumatic clincher tire, an air rifle, and an automatic telephone switchboard, which eventually led to the rotary dial telephone. In 1902, he also would become one of the founders of the H.H. Franklin Manufacturing Co., the makers of the air-cooled Franklin automobile from 1902-1934.

Brown's friend and business partner, Charles E. Lipe, was a mechanical engineer who opened the C.E. Lipe Machine Shop in 1880. At the Lipe Shop, Lipe worked on his own projects, including a handheld corn planter, a broom-sewing machine, and a cigar-box making machine, while renting space to other budding inventors and entrepreneurs. The shop became an incubator for new inventions and was known as Syracuse's cradle of industries. The Syracuse Journal credited these men with sowing "the germs that sprouted into major business enterprises in Syracuse and elsewhere."

Together, these two gifted individuals invented and patented the Hy-Lo Bi-Gear for bicycles in 1894, and a year later formed the Brown-Lipe Gear Company. Their gear wasn't well-liked by bicycle makers but soon became popular with automobile manufacturers. In 1895, Lipe died and his brother Willard replaced him, and the company began making three-speed transmissions for Franklin, Ford, and the Yellow Cab Company.

In 1910, Alexander Brown and Willard Lipe teamed with Winfield Chapin to form Brown-Lipe-Chapin (BLC) to make automobile differentials, transmission gears, and clutches. This new company constructed a five-story building between West Fayette, Marcellus, and Seneca streets, and had almost 5,000 employees. During World War I, the federal government awarded BLC a $1.5 million contract to produce rear-axle differentials for 17,000 military vehicles. In January 1923, BLC affiliated itself with General Motors and became one of that company's divisions. As production waned between 1930 and 1933, GM closed the plant and converted it into an industrial center housing several small businesses, with GM retaining ownership of the building. This venture lasted three years until GM resumed production of automobile parts at the factory site in February 1936.

That same year, BLC became affiliated with Guide Lamp Division of General Motors, and instead of making transmission gears and clutches, employees turned to making flashier chrome parts: headlamps, tail lamps, hub caps, and bumper guards. The Syracuse Herald announced the resumption of operations at the plant as a major financial development for 1936. The product line grew to include steering gears and automobile emblems. However, the new iteration of BLC employed about 1,700 workers, not even half of the 5,000 workers employed by the former gear division.

While making the chrome parts for new and different GM vehicles in the late 1930s, plant personnel became accustomed to retooling the machinery. This experience became invaluable when employees were called upon to convert to wartime production.

The first military contract came to BLC in September 1940 to make .30 caliber Browning machine guns. To produce the machine guns, employees of the new gun-manufacturing department installed new machinery and trained new hires in the art of machine-gun manufacturing. By September 1941, the department occupied the entire fourth floor of the factory, made 265 parts integral to the composition of the Browning machine gun, and set up a test firing range on the roof where guns were fired through a large cylinder and into tons of sand.

BLC eventually made other wartime products, including barrels for carbines, and the .50 caliber Browning air-cooled machine gun. This machine gun, affectionately known as "the stinger" by military operators, was used on the wings of the B-17 Flying Fortress, on PT boats and submarines, as well as for anti-aircraft defense. It was this product that became the mainstay of BLC wartime production, replacing the .30 caliber gun, and by 1943, "stingers" were rolling off the assembly lines at the BLC plant 24 hours a day. The gun was utilized throughout the European and Pacific war theaters.

The "stinger" had a very low malfunction rate and military operators often praised the ordnance workers at the Syracuse plant for the quality of their workmanship. They knew that it wasn't only design that gave the weapon the designation of "America's most deadly small arms"; quality of machining the parts and properly assembling them also were critical to its overall performance. The Army and Navy recognized the company's workmanship in March 1944 by presenting it with the "E" Award for excellence in production of war equipment. By mid-July that year, BLC ordnance workers had made their 100,000th Browning machine gun, and testers had fired more than 13.5 million ammunition rounds. Later that month, Browning machine guns were featured on the BLC float for the War Workers Cavalcade.

But as the war came to an end, so did the demand for related wartime products. Soon after Germany surrendered in May 1945, BLC was winding down its production of machine guns. The War Department discontinued production of Browning machine guns that June. As the war continued against the Japanese, 1,100 war workers were reassigned to making other wartime products. That same year, women working at the BLC plant received retroactive back pay amounting to $500,000. The payout was in response to an equal-pay settlement by the UAW. The women employees were either wives of fighting men or worked at the plant to fill positions vacated by fighting men. During the war, employees increased from 1,700 to 3,000.

In July 1945, BLC began to produce parts for civilian vehicles again. Employees uninstalled the machinery used to make the machine-gun parts, replacing it with the previously dormant machines used to make civilian vehicle parts.

In 1951, BLC received its largest defense contract in history for making parts for the Curtis-Wright J-65 Sapphire jet engine.

The following year, BLC built a new plant on Town Line Road in DeWitt, where it began to build the jet engine; employees continued making chrome vehicle parts in the old plant, which was eventually closed and sold to Porter-Cable Machine Co.

In December 1961, General Motors consolidated BLC into the Ternstedt Division. At the time, Ternstedt was the third-largest GM division, producing several different vehicle body parts. Eight years later, in November 1968, Ternstedt Division merged with Fisher Body Division. Fisher Body made vehicle bodies for U.S. and Canadian passenger cars. About 2,000 employees at its Syracuse–area plant made automotive body hardware, parts, and accessories.

For the next 25 years — from 1968 to 1993 — employees at the Fisher Body plant continued to make automotive body parts for General Motors vehicles. In October 1993, General Motors closed the plant, known by then as the Inland Fisher Guide plant, due to major corporate restructuring. The 70-year relationship between the original Brown-Lipe-Chapin Company and the various iterations of General Motors divisions had ended for good. Today, the former GM plant has been revitalized as the Salina Industrial Powerpark, housing nine new businesses, none of which makes automotive parts. The park's largest tenant is Syracuse Glass Company, a 105-year-old company with its own illustrious history. ❑

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