

LOOKING BACK AT OUR CIVIL WAR

Rhode Island's industrial might boosted the Union's war effort

Many historians consider the Civil War the first "modern war," by which they are referring to two things. It was the first war to mobilize the entire



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resources of a country. Second, it was the first war in which such a tremendous scale of resources and weapons were employed, a result of the Industrial Revolution. This revolution began in the mid-18th century in Great Britain, spread to the European continent, and leaped to America when Samuel Slater, an Englishman, built the first successful "factory" in the United States in 1793, a cotton-spinning facility which happened to be in Pawtucket. The revolution eventually enabled the mass production of textiles, tools, nails, screws, sewing machines and steam engines, improving the quality of life for millions. Nefariously, it also allowed the mass production of instruments of war.

Rhode Island's economic contribution to the Union war effort is nicely covered in Maury Klein's chapter, "Rhode Island's Civil War Economy," in the book "The Rhode Island Home Front in the Civil War Era," recently published by the state's Civil War Sesquicentennial Commission.

The war's increased demand for uniforms and blankets boosted the already substantial textile manufacturing industry in our state. As the war began, Rhode Island had 176 cotton mills and 57 woolen mills. To meet the demand, this sector expanded greatly. For example, the Atlantic Delaine Mills grew in size and the Wanskuck Mill was founded, both north of Providence.

The cotton textile industry was dominated by such groups as Brown and Ives and also the Sprague family. As the war opened, 26-year-old William Sprague, his brother Amasa and cousin Byron headed the Sprague businesses.

The astute and capable William took charge of the newly-formed A. & W. Sprague Co. Headquartered in Cranston, it operated nine mills with some 300,000 spindles. (Young William successfully ran for governor in 1860, the same year Abraham Lincoln was elected president and the southern states began seceding from the Union.)

Overall, the value of the state's cotton goods rose from \$20 million in 1860 to \$55 million in 1865; woolen goods increased from \$4 million to \$11 million.

Beyond textiles, Rhode Island factories contributed greatly to the Union war effort in a wide variety of metal-related industries.

In 1856, the Corliss Steam Engine Co. opened a foundry in the Providence area that produced engines, boilers, shafting, gears and heavy castings. By 1861, its steam engines were reputed as the best in the country. The company eventually produced the large metal ring that allowed the turret of the ironclad ship Monitor to turn. The company's advanced steam engine with its patented automatic cut-off valve was the mainstay in the industry for decades after the war.

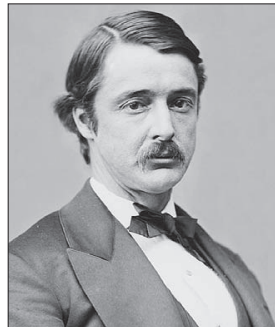
In addition to steam engines, the state's factories produced hinges, nuts, bolts, screws, nails, agricultural tools, sewing machines, valves, winches, rivets, stoves, safes, files, cutlery and springs.

The Brown and Sharpe Co. in Providence manufactured a precision gear-cutting machine, dividing machine, automatic screw machine and gyroscopic top, along with other innovations.



warwickhistory.com

A. & W. Sprague Co. operated nine textile mills in Rhode Island that helped keep Union soldiers clothed during the Civil War.



Wikipedia.com

Besides being a major industrialist, William Sprague also was elected Rhode Island's governor in 1860, the year Abraham Lincoln was elected president.

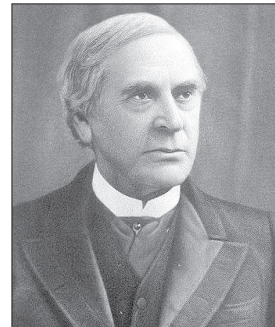
In 1858 it had invented the new Gibbs sewing machine; by 1863 it had produced 20,000 of them.

The great leap in production quantities was made possible by the development of a system of interchangeable parts on a large scale. "Each part is so made that it can be supplied to any machine and is thoroughly gauged, tested and inspected before it reaches the assembly room to be finally put in its place," reported the Providence Journal in December 1863.

Perhaps the most significant of Brown's inventions was the universal milling machine, which allowed the machining of rifle barrels. This invention eventually enabled the Providence Tool Co. to produce more than 70,000 rifles. It also manufactured 10,400 cavalry sabers, and its sewing machines were used to mass-produce clothing for soldiers.

Also adding to the war effort was the Builders Iron Foundry in Providence, which produced 11-inch smoothbore Dahlgren guns and shells and 13-inch cannons.

The Bristol Firearms Co. was founded by Ambrose E. Burnside, who rose to become a general and command the Army of the Potomac. This company evolved into the Burnside Rifle Co., which eventually produced 100,000



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George H. Corliss's Rhode Island foundry made a variety of products vital to the war effort, including advanced steam engines that were considered the best in the country.

carbines, a weapon that Burnside had patented.

Other notable companies that contributed to the war effort included the Providence Steam Engine Co., the Hope Iron Foundry, Mansfield and Lamb Co. (bayonets), Congdon & Carpenter (horse-shoes), American Ship Windlass Co., Jeremiah Heath and Bowen & Clark (military clothing), L. Chapman (cavalry boots) and M. H. Sullivan of Providence (military saddles).

Klein concludes, "Rhode Island's contribution was wholly out of proportion to its size and did much in those critical areas not only to define the new face of warfare but also to achieve victory for the Union."

A retired Army officer, Fred Zilian teaches history and political science at Portsmouth Abbey School and Salve Regina University and is a member of the Rhode Island Civil War Sesquicentennial Commemoration Commission Advisory Council. He is writing an occasional series of columns highlighting various aspects of the Civil War and their impact on Newport County and Rhode Island for The Daily News. Send him email at zilianf@aol.com or check out his blog at www.zilianblog.com and his Abe Lincoln website at www.honestaberi.com.