



### Typewriters for the Trenches: Connecticut's Typewriters and Their Role in the Great War

The typewriter can be said to be one of the most useful inventions of the modern age. Just as the printing press had revolutionized communication in the 15th century, so too did the humble typewriter. The typewriter was vastly more efficient than handwriting. Documents could now be clearly written, relatively uniform, and easily copied on a much greater scale. Connecticut played a significant role in the machine's development and distribution with firms like Blickensderfer, Underwood, Royal, and Noiseless. As this article is part of the ongoing *Connecticut Industry During Times of War* series, I will be focusing on these firms and sharing a glimpse of the typewriter's contribution to the First World War (1914-1918).



*The first successful typewriter.*  
Source: Library of Congress.

The first commercially successful typewriter was the Scholes and Glidden typewriter, patented in 1868. Remington, A New York producer of firearms and sewing machines, acquired the rights and began manufacturing the machine in 1874. There were some holdouts in adopting these new, large, finicky machines but their value had been proven by the mid-1880s (Library of Congress). In the business world, they were indispensable. Office work began ballooning around this time. As a result, typing schools sprung up around the country along with competing manufacturers.

Connecticut would be the location for many of them.

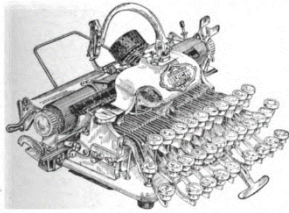
One of the earliest successful Connecticut firms would be the Blickensderfer Manufacturing Company located in Stamford. In 1893, George Blickensderfer stole the show from other manufacturers at the Chicago World's Fair with his newest invention: The Blickensderfer Model 5, the first truly portable typewriter. The small, lightweight machine used a typewheel to imprint text to paper. This allowed the user to actually see what they were writing, something not ubiquitous on typewriters in the late 19th century, but also allowed the user to easily swap out the typewheel mechanism to use another language or typeface without buying an entirely new machine (Fudacz). Orders poured in for the Blickensderfer typewriter, particularly in foreign markets. Distribution networks were set up across North America, United Kingdom, France, Germany, Russia, and Poland (Fudacz). The machine found its niche with journalists, travelers, and personal users, not as a permanent fixture on corporate desks. By the time the U.S. entered the Great War

in 1917, Blickensderfer had produced tens of thousands of machines, now being made from aluminum and known as the “five pound secretary” (Milton).

Underwood, undoubtedly Connecticut’s most famous typewriter company, actually started out as a manufacturer of typewriter ribbons and carbon paper for Remington. The company headquartered in New York City eventually decided to produce their own typewriter and located their factory in Hartford in 1901. The year prior, the Underwood Typewriter Company unveiled the Underwood Number 5. This would become the most successful typewriter design ever made. Often described as the first truly modern typewriter, it set the design stereotype of what a typewriter should look like for the next half century (Polt). It was front striking, meaning when a key was pressed it triggered the typebar to strike forward onto a piece of paper fully in view of the user, unlike the understroking machines of earlier years (Oden). It was also quite a quick machine. In 1906, *Office Applications* magazine organized the World Typewriting Championship held at Madison Square Garden in New York. These annual contests pitted quick typists and their preferred machines against one another on who could type an hour-long dictation, or reproduce an original text, the fastest and with the least amount of errors (Oden). Underwood dominated. Winners of the

International Typewriter Trophy from the years 1906-1917 were Rose L. Fritz, H. Otis Blaisdell, Florence E. Wilson, Margaret B. Owen, and Emil A. Trefzger. All of them used Underwood machines (Oden; Messenger). During the first two decades of the 1900s, Underwood’s machines were massively popular and outsold all other brands combined (Engler p.44). Of course, the typewriting competitions acted as fantastic marketing. The massive success of their product led Underwood to continue expansion of their Hartford factory. Employment numbers rocketed from 300 when the factory began operation to over 5000 in 1917 (Oden). The Underwood factory in

**“Blick”**  
**Featherweight Typewriter**



The Latest Improved Model Blickensderfer Typewriters have been used by Travelers and for other Personal Correspondence longer than any other. That tells the story. The Strongest and most Durable portable typewriter made. Will give years of hardest service. 170 Different Styles of Type, embracing all the Principal Languages of the World.

**The Blickensderfer Manufacturing Co.**  
Executive Office and Factory, Stamford, Conn., U. S. A.

*Blickensderfer advertisement in Typewriter Topics magazine, January 1918. Source: HathiTrust Digital Library.*



*Woman seated with Underwood typewriter (1918). Source: Library of Congress.*

Hartford was the largest typewriter works in the world at this point and, together with Royal, made Connecticut the typewriter capital of the country (*The Times Dispatch*, September 1912; Fudacz).

The Royal Typewriter Company incorporated in Brooklyn, New York in 1904. In three years, they would be operating out of a new factory in Hartford, just a few blocks away from Underwood's facility. The company was a major producer right alongside the behemoths of



*Royal Standard typewriter used by Swedish politicians and writers Maria and Fabian Mansson (1911-1914). Photo 2019, Blekinge museum. Source: Wikimedia Commons.*

(Gilchrist). Thus making the Flatbed a more portable design than the typical desktop typewriters but also more functional than current portable designs, like the Blickensderfer (Fudacz). In 1914, Royal would introduce the Number 10 which saw sweeping success for its famed durability. Contributing to Royal's ascension to one of the largest typewriter manufacturers was the cost of their machines. When the Royal flatbed typing machine hit the market in 1907, it cost \$65 when many typewriters were priced around \$100 (Fudacz).

The last of these companies to set up manufacturing in Connecticut was the Noiseless Typewriter Company. The company started in Middletown in 1909 and occupied the former factory of the Eisenhuth Horseless Vehicle Company (Saunders & Schneiderman-Fox). The goal of the organization was included in its name: to create a noiseless typewriter when most offices were filled with the din of click-clacking typists. To make a quieter machine, the Noiseless Typewriter used ball-bearings on many friction points. Their design would use light, quick, uniform pressure from a typebar onto the type-ribbon to produce text on paper. This was in place of the hard smacking blows by typebars on other brands (*Cassier's Magazine* p.185-187). This pressure imprinting was

Remington and Underwood, however Royal would really have its heyday further into the 1920s and beyond which is outside the scope of this article. What differentiated Royal from the heavy competition of the early 1900s was the design of its Royal Standard models and their price. The Royal Standard had a "flatbed" design, appearing far less tall and boxy than competing models, although this was not always seen as a positive (Messenger). The benefits were that it weighed less than 30 pounds but still offered a full keyboard, put less components in between the user and the paper, and had a fast, light touch producing a clearer typed impression



## The Noiseless Typewriter

100% NOISELESS

Highly commended by well-known representative concerns after exhaustive tests, resulting in repeat orders and standardization of equipment.

The practical Noiseless mechanical construction not only insures a permanent noiseless result, but also increases durability by preventing the usual excessive wear and strain caused by the hammer method of typewriting.

Our catalogue will interest you. Send your address and we will mail you a copy at once.

MADE ONLY BY

**THE NOISELESS TYPEWRITER COMPANY**

General Sales Offices:  
253 BROADWAY, NEW YORK, N. Y.

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MIDDLETOWN, CONN., U. S. A.

Sales Offices: NEW YORK CHICAGO PHILADELPHIA WASHINGTON BOSTON BUFFALO

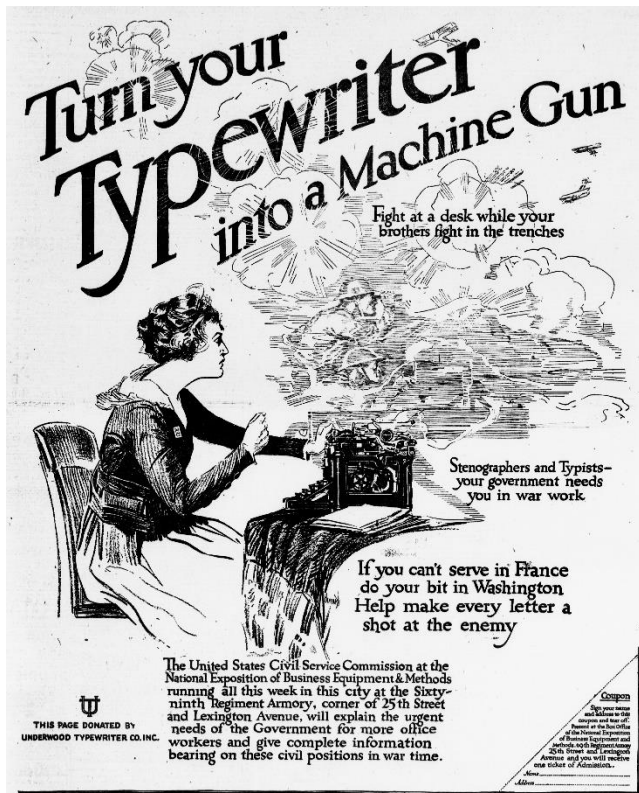
*Noiseless advertisement in Typewriter Topics magazine, February 1918. Source: HathiTrust Digital Library.*

regulated internally. No matter how hard the typist struck a key, the pressure of the typebar to the paper was consistently light (Fudacz). This new machine was certainly considered quieter in its day but it is not exactly noiseless. The company was smaller than its competitors in Hartford, maintaining less than 300 employees in the 1910s. Additionally, it had a few obstacles hampering their progress. Their typewriter was one of the most expensive on the market. Moreover, production was slow-going and they would not enter full production until 1917. Incurring financial problems, the company reorganized, dissolved, and reincorporated on the eve of the First World War (Saunders & Schneiderman-Fox).



*Quartermaster Corps soldiers in typewriter repair shop at Tours, France, 1919. U.S. Army Signal Corps Photograph. Source: Library of Congress.*

Like almost all industries in the United States, typewriter manufacturers were affected when America joined the war in 1917. Although the office supplies industry is not at the forefront of our mind when we think of war matériel, the typewriter was vital to the national war effort. In fact, a 1918 ruling in Washington D.C. by the War Service Committee classified the typewriter business as an essential industry (*The Bridgeport Times*, September 1918). The military considered the typewriter to be as indispensable for routine paperwork as the civilian industry did (De Pue). Officer's reports, official correspondence, supply quantity details, along with meetings and hearings that required a stenographer, all had to be typed. Combat divisions of the American Expeditionary Force were allotted 77 typewriters to be dispersed amongst their regiments. Base or training divisions received 80. The Intelligence Services for both land and air units, the Topographical Corps, the Quartermaster Corps, and many more would all receive typewriters (Center of Military History). Some typewriter manufacturers shifted parts of their production lines in order to produce other war equipment such as aircraft parts (*Carson City Daily Appeal*, June 1917). Still, most firms continued to manufacture as many typing machines as possible, even if they assisted with other wartime needs. The government proceeded to buy



A donated advertisement by Underwood Typewriter Co. in *The Sun* newspaper, October 21, 1918. Source: Library of Congress.

Company encouraged women to take on clerical jobs in order to help the government by turning their typewriter “into a machine gun” and to “fight at a desk while your brothers fight in the trenches” (*The Sun*, October 1918).

Our featured Connecticut firms each had their own roles to play. The year after the war ended, an editor for *Typewriter Topics* magazine estimated total typewriter production for the year of 1919. This offers us a glimpse at these company’s wartime capabilities. He placed Underwood at producing 190,000 machines that year. This was more than any other typewriter company in the world. The only close competitor was Remington at 150,000. Connecticut’s Royal factory made 100,000 machines and Noiseless made 15,000 (*Wall Street Journal*, November 1919). Royal, Noiseless, and Underwood typewriter companies most likely produced their machines at max capacity during wartime and into the postwar years, as long as they could obtain the necessary raw materials (Adams). Indeed, the Underwood Typewriter Company claimed that the war took every machine they could make (*The Washington Times*, October 1919). Underwood was proud to advertise that their wartime production of over 100,000 machines found their way to all forms of government agencies, ship yards, steel mills, the Red Cross, service members abroad, and more (*The Washington Times*, December 1918). On the other hand, the Blickensderfer Manufacturing Company suffered when trade was cut off with most European markets upon America’s entrance into the Great War in 1917 (Milton). These export markets made up the majority of sales for Blickensderfer’s portable machines and only France would continue purchasing in quantity.

every typewriter it could during the war years. Businesses bought the rest. Getting one for personal use was not an easy task as the machines became increasingly scarce and demanded a higher price on the secondhand market. Production supposedly increased by 100% between the years of 1909-1919, yet typewriter manufacturers could not meet the overwhelming demand. The United States Government requisitioned 75% of domestic production. Foreign governments took all typewriters that were sent overseas (*Wall Street Journal*, November 1919). With the war consuming industrial production and manpower, the position of women as typists was solidified forever. Women in factory and clerical work was becoming increasingly common. In 1890, only 17% of clerical workers were women; By 1930, this number was nearly 50% (Terrell). A wartime advertisement by the Underwood Typewriter

Blickensderfer diversified by producing munitions for the war effort. He even invented a cartridge-belt loading device for machine guns, supplying them to France and the United States. Unfortunately, Blickensderfer would pass away that same year, causing his company to be sold to another typewriter company in 1919 (Stamford Historical Society).

I'd be remiss to not mention the men and women who left the typewriter industry to join the Army or Navy. In addition to the industry producing for the war effort, *Typewriter Topics* magazine listed that 3,423 members of the typewriter and office equipment industry took up the call to arms (Messenger; *Typewriter Topics*, 1918). In the postwar years, the United States grew on the world stage. By the end of the

first half of the 20th century, North America was the global center of modern information, in part due to the mass adoption of the typewriter and its innovative typewriter industry (Boyer & England, p.244). Typewriter manufacturing played its part in Connecticut's continuous reputation as one of the leaders in industrial development in America. Today, the typewriter is considered a fun and antiquated novelty outside of serious collector circles. Perhaps



*Typewriter Division, Offices of American Red Cross, Rue Boisse d'Anglas, Paris (1914-1918). Source: Library of Congress.*

soon we will see a resurgence of their use and public interest like we are currently seeing with film cameras and vinyl records. Regardless if you have never used a typewriter before, their influence can still be felt in your everyday life. Your QWERTY keyboard in front of your computer monitor or on your phone screen is the same keyboard that appeared on the earliest successful typewriter mentioned in this article, the Scholes and Glidden typewriter from 1874.

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*The Gardiner Hall Jr Museum is open to the public Saturdays from 10:00am to 12:00pm. For more information, please call 518-791-9474.*

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