

## Self Winding Clock Company

There are probably few people over age 40 who are not familiar with, or have at least seen, one or another model of a Self-Winding clock. Certainly, until the relative demise of Western Union Telegraph Company in the early '60s, they could be seen in the window of almost any of their offices. Although many called them "Western Union" clocks, they were made by Self-Winding and often remained their property, having been leased or rented by the user. These were but one of the numerous models the firm made, however, and their 1908 catalog included tower clocks, program clocks, office regulators and some models for the home.

Self-Winding had its genesis in 1886 in New York City when Charles Pratt, its first President, and Henry Pond joined together to manufacture and sell an electro-mechanical clock patented by Pond (#308,521) in 1884 and an improved version patented in 1887. Although Pond remained an active member of the management of the firm for only four years, his contributions to the areas of telegraphy and timekeeping continued for many years after his retirement.

The basic principle of the Self-Winding clock was to employ only a small portion of the clock's mainspring, rewound on an hourly basis by an internal mechanism. This would provide more uniform power to the

clock and eliminate the manual winding requirement altogether.

The firm's 1887 catalog offered twenty-six models including mantle and wall



Model #9 with mercury pendulum.

clocks, all priced considerably higher than similar weight or spring-driven clocks. During the early years, most of the basic movements and cases were made by others, with Seth Thomas and Howard being the predominant suppliers. The purchased movements were modified in Self-Winding's plant, where winding mechanisms and other attachments were added. Later, the company moved to a new and expanded plant in Brooklyn which allowed them to manufacture the entire movement.

By 1908, the Self-Winding firm had issued a 146-page catalog offering clocks of all descriptions, including tower clocks, post clocks, watchman's time detectors, fully jewelled astronomical regulators and program devices that allowed for the installation of a customized bell-ringing system for schoolroom or factory use.

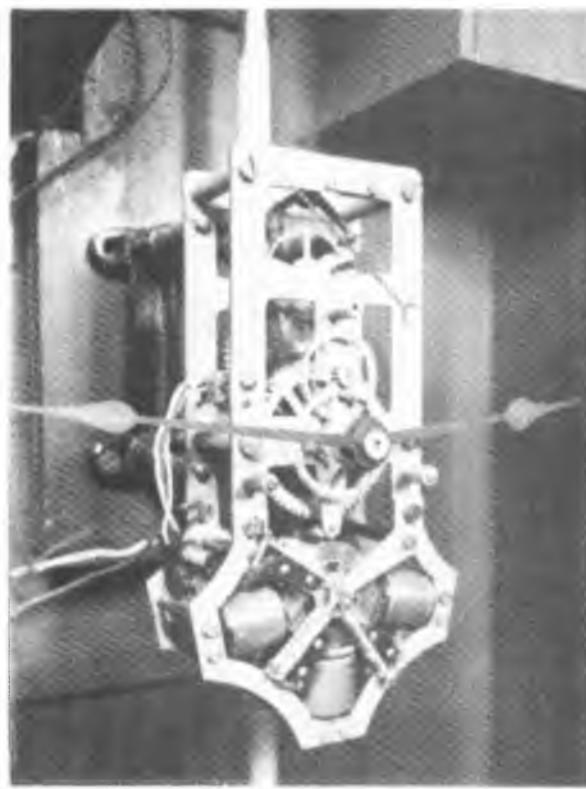
With the growth of the railroads in the late 1800's, Pond sensed the need for a national system of time distribution which would allow the railroads to develop schedules on a national basis and would permit other businesses to set meaningful hours nationwide. Although, there had been a number of systems proposed that permitted all clocks within a school or office to be synchronized, none of these had an individual correcting feature and most required that their spring-driven movement be wound weekly. However, one system devised by Gardner, provided

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train stations and other users requiring accurate time.

The inestimable advertising value of the "Naval Observatory Time" clocks in store windows and Western Union offices assisted in the profitability of the organization well into the era of inexpensive, accurate synchronous motor clocks which had replaced virtually every other type of timekeeper for home and business use.

The firm reached its peak prior to World War II and business declined until they discontinued operations in the late '60s, finally closing their NY office about 1970.



Wall model with "A" type movement #395. *Left*, front view. *Right*, close-up of movement.

for a signal sent at one-minute intervals to a group of remotely located secondary, or slave, clocks. Its disadvantage was that the clocks would stop in the absence of the synchronizing signal, or without weekly winding. It was almost inevitable that Pond's automatic rewind system and Gardner's concept of remote synchronization be combined. Tests of the new combined system in Chicago, utilizing telegraph lines to send the signals, were so successful that Pond purchased Gardner's patents and began making Self-Winding clocks with synchronizing capabilities available.

In 1889, Pond was issued patent #408, 846 for "An Automatic Time Signaling Device for Time Service." This patent was the cornerstone on which Self-Winding was able to develop a plan for the distribution of correct time with the Western Union Time Service Group, utilizing telegraph lines to transmit hourly time signals from the Naval Observatory in Washington, DC. The partnership was a long and valuable one for both organizations. Self-Winding provided clocks and performed such maintenance as was required at the factory. Western Union installed and adjusted the clocks along with



Dome covered striking mantle model.  
*Upper*, front view with dome removed.  
*Lower*, back view showing movement.

replacing the batteries and such field repairs as were required. Western Union provided the wiring for the synchronizing signals, and the partnership benefitted from the rental of the equipment to offices, factories, bus and



Metal cased Western union model (circa 1955).

### Suggested Reading

1. Ly, Tran Duy, 1991: *American Clocks*, Volume 2, Fairfax, VA, The Arlington Book Company.
2. Goodrich, Ward L., 1905: *The Modern Clock*, Chicago, IL, Hazlitt & Walter, Publishers.
3. 1983: The Self-Winding Clock Company, *The Journal of Electrical Horology*, June.

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