

Note: See also in this context my article:

THOMAS ALVA EDISON (1847 – 1931)

About the man, his life, work, businesses, products and achievements in the world of telegraphy

AN OVERVIEW OF MY STOCK TICKERS

that once were in my collection...

INTRODUCTION

Because of the importance of the written message in the stock exchange and banking world, a special printing telegraph was developed for this application: the stock exchange telegraph. In Anglo-Saxon countries, stock exchange telegraphs are called "tickers", so called because of the typical sound they make. Tickers are therefore essential receivers of stock market reports, as well as news reports or other information such as sports results. The information is distributed from a central point to several recipients who print it simultaneously.

Usually, the printing wheel was also provided with symbols such as $1/8$, $1/4$, $3/8$, ... In this way, the usual exchange rate indications in Anglo-Saxon countries could be printed optimally.

Thomas Alva Edison (1847-1931) was also active in this field. As a boy, he sold newspapers and sweets on the trains of the Grand Trunk Railway and then became a telegraph operator. His talents enabled him to make important improvements to Calahan's 1867 stock exchange telegraph (notably the 'unison' system), leading to his own 'Universal Ticker' (see the remark above).



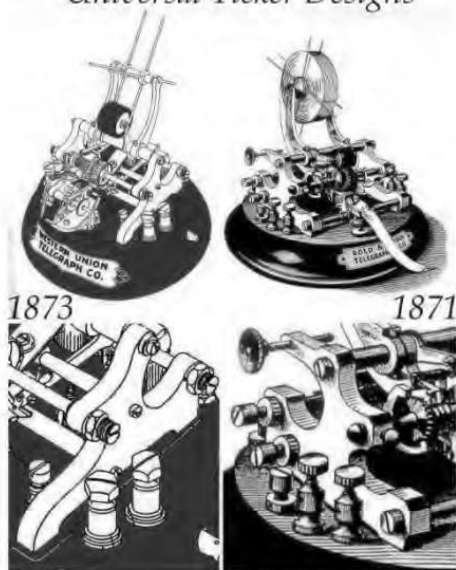
Ticker tape parade

1. The Universal Stock Ticker

This is the famous one, also known as the Western Union 3A. I could acquire it with the help of the late Roger Reinke.



Universal Ticker Designs

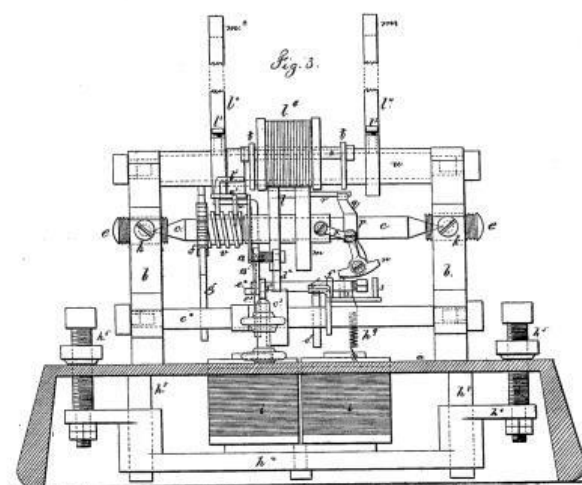


1873 Edison design

1871 Edison & Unger design

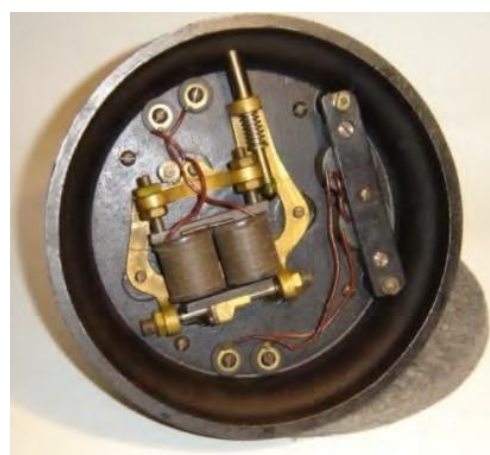
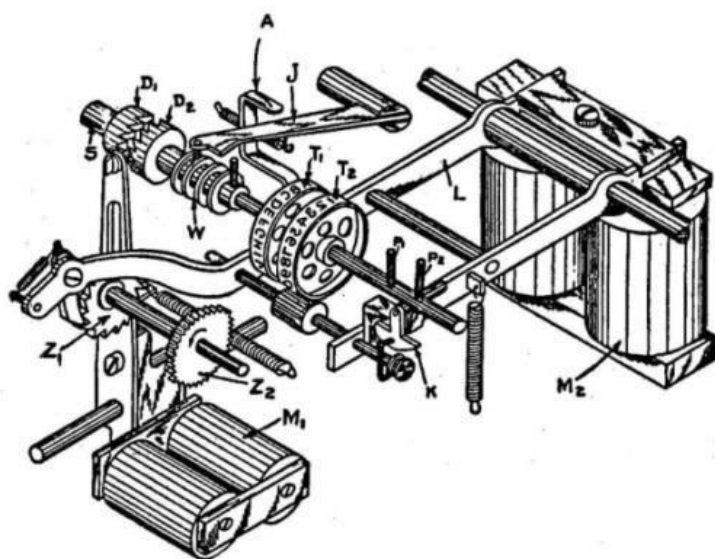


2 Sheets--Sheet 2
THOMAS A. EDISON.
 Improvement in Printing-Telegraphs.
 No. 126,532. Patented May 7, 1872.



Witnesses,
 Chas. H. Smith
 Geo. A. Martin

Inventor
 Tho^s. A. Edison
 Lemuel M. Sewell atty



2. See here my two telegraphs from the British 'Exchange Telegraph C° (EXTEL). The one on the left is derived from the above Universal by Edison



3. The Self-Winding stock ticker from the early 20-th century.

3.1. First a warning: The “Thomas Edison Myth”

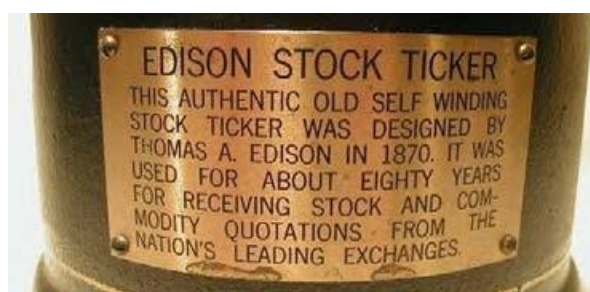
Now and then a “self-winding Edison” ticker shows up for sale (eBay,...). Not the model from the 1870’s but from the early 20-th century!!

Rusty Erpenbeck, on his <http://www.lostwackys.com/tickers/self-winding-tickers.htm> warns again this myth, or most often, this scam. Here is his message:

Quote

Many people still believe that Thomas Edison invented that particular Self-Winding Ticker. In part, because some are marked "MF'D BY T A EDISON INC". Many self-winders were manufactured in Edison's factory, but he had nothing to do with its invention. In fact, when the new self-winder came out, over 30 years had already passed since Edison's last ticker patents; and all had expired!

Furthering the myth, in the 1940's or 1950's, it is believed that at least one retailer purchased many obsolete selfwinders from Western Union and sold them as novelties with this brass plaque attached.



In the 1960's, retiring Western Union executives would often receive one of these "Edison" self-winders as a gift from Western Union. It has come to the point where even the Edison Museum displays one of these tickers with the Edison plaque as one of his first inventions, and they even sold postcards of it.

Unquote

I got another confirmation of this scam from Pierre Blanc, a well-known specialist in this field: “*A catalogue company called Hammacher Schlemmer. offered some they bought for sale in the 1960's. You could buy them through the mail or in their stores. They wrongly affixed a plaque to the front of the tickers they sold calling it an Edison ticker from 1870, which is completely incorrect.*”

3.2. My receivers

So, it is clear that they have nothing to do with Thomas A. Edison. The only connection to “Edison” this machine had was that it was assembled in a factory that bore his name. Other manufacturers made 100% identical models (e.g. J.H. Bunnell & Co, Hurd & Haggin, M&I Electric Co,...). Based upon the known serial numbers it is estimated that about 16,000 were made (and where did they all go ;o).

The Gold & Stock Telegraph Co. (owned by Western Union) introduced the Self Winding, which was invented by Georges Scott in 1902. In 1923 Western Union engineers, with the help of Scott, improved the original one and the official designation was the “Western Union Automatic Self-Winding 1-C Stock Ticker”. Minor improvements were made to it, including more efficient magnets and an ink box which housed two ink rollers. Typical model types are the 3-A, 23-A, 33-A, ...

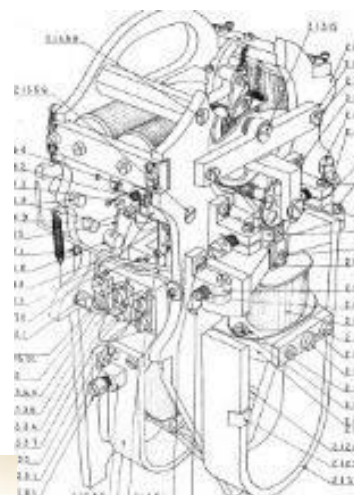
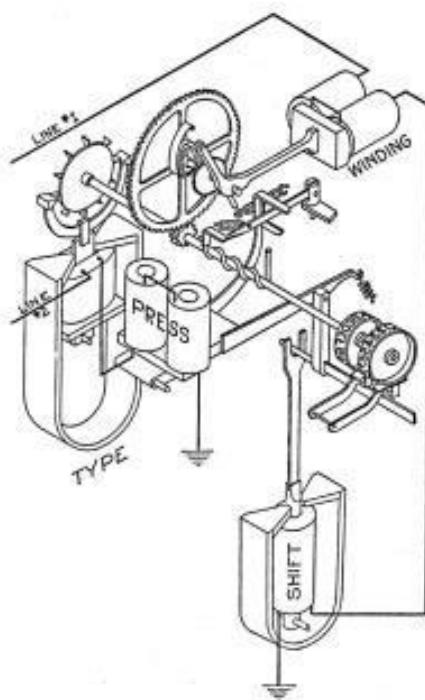
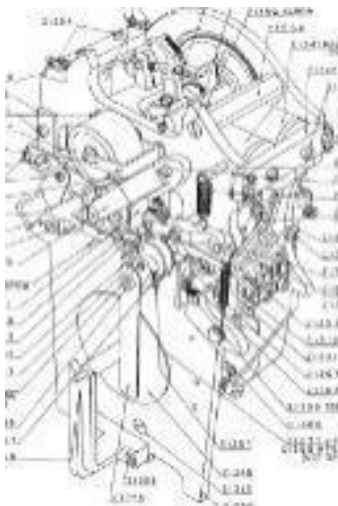
It is called ‘self-winding’ ticker because a small watch spring, which furnishes the power to revolve the type shaft, is wound automatically by current impulses sent over the wires.

In Europe, so far as I am aware, stock ticker reporting systems were only used in the Netherlands. The service was set up by Western Union. They had an office in Amsterdam and exploited an existing telegraph line to New York. The start-up date was 2 November 1931. In 1935 the “TIKKERDIENST” (meaning Ticker Service) extended its services to The Hague (it has never operated in Rotterdam).



Obviously a ticker tape from the Dutch Stock Exchange: see 'HEINEK', abbreviation from HEINEKEN (beer)

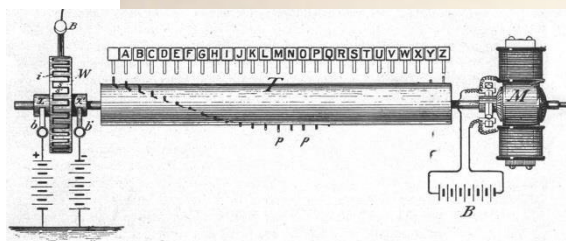




3.3. The transmitter

This transmitter was used to drive both the Universal Ticker as well as the Self Winding one. Through repeating relays and reasonable care in balancing lines, one central office transmitter could drive dozens of tickers over distances of 300 to 500 km.

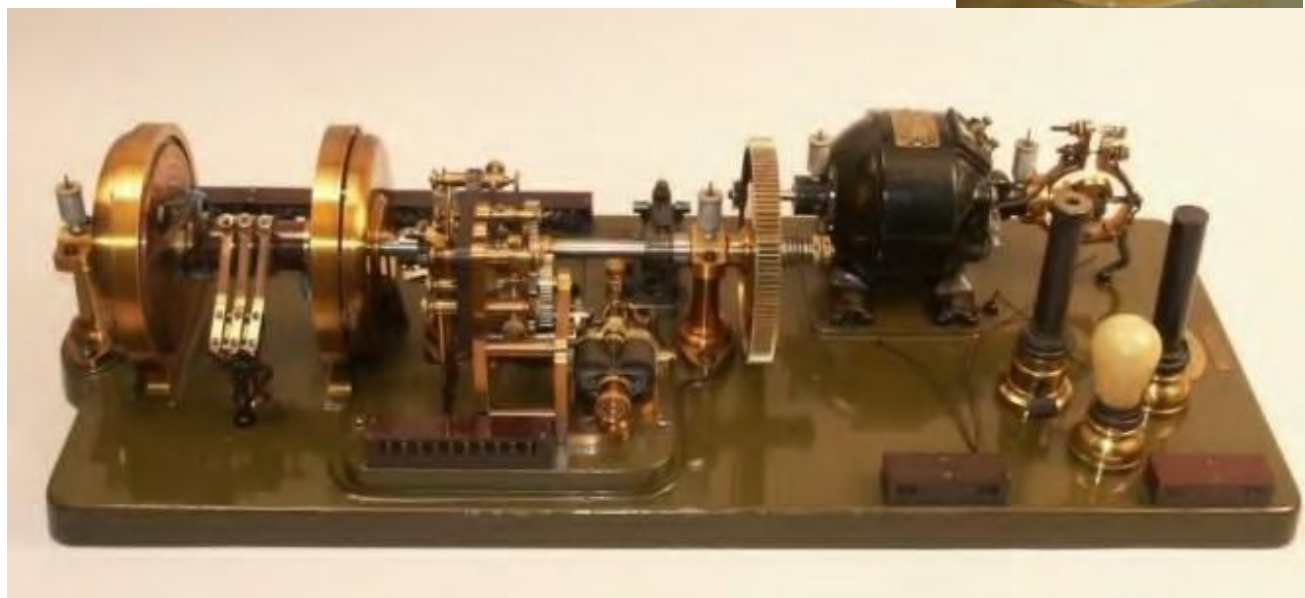
Ticker keyboard transmitter universal



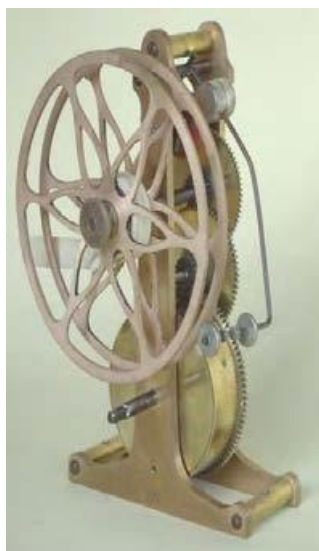
3.4. Other equipment at the central site.

This was used by Western Union well in to the 19th century.

Automatic transmitter 10-B Keyboard Transmitter



Two Anti-Noise Sets 2-A
 Two Ticker Condensor 2 3 AC
 Stock Ticker Tape winder
 Keyboard Perforator
 S-N circuit Panel 3-A and 1A



3.5. Some photographs from a friend with an amazing collection of stock tickers.



APPENDIX: Chronology of the Stock Ticker [by Pierre Blanc]

1. E.A. Callahan of The American Telegraph Co. invented the first stock ticker in 1867. He formed The Gold & Stock Telegraph Company in NY on Sept. 19, 1867 to manufacture & market the tickers. The first ticker was placed in the office of David Groesbeck & Co. in NY. In Sept of 1871, Western Union Telegraph Company took over The Gold & Stock Telegraph Co. Mr. Calahan resigned.
2. Samuel Laws invented the Laws Stock Ticker in 1867 & started the Reporting Telegraph Company to market the ticker & service. Laws retired early and sold his patents to The Gold & Stock Telegraph Co.
3. Thomas Edison invents the two wire Universal Stock Ticker in 1870-1871. Sets up shop in Newark, NJ on Railroad Ave with William Unger to manufacture stock tickers called the Newark Telegraph Works. Patents are bought by Gold & Stock. In 1871, Edison moves shop to Ward St. & changes company name to Edison & Unger. Continues making Universal Tickers. Approximately 6k Universals were produced. In 1872, Edison supplies the Exchange Telegraph Co of London with a stock ticker designed with the help of Unger. Used without success until 1902 when FW Higgins invented the EXTEL Ticker. Edison & Unger dissolve their partnership.
4. George M. Phelps of Gold & Stock invents the Phelps's Stock Printer called "The Financial Instrument". Its use was limited due to its delicate nature & expense.
5. In 1871 The Manhattan Quotation Co. produces a single wire stock ticker invented by J.E. Smith & Charles T Chester. The company was acquired by Gold & Stock. Tickers were leased for \$10/month. Stock quotes and symbols were printed in one line, making it difficult for brokers to read.
6. The Commercial Telegram Co. ignores all patent rights & introduces its own ticker invented by Stephen D. Field in 1880. They were ordered to pay Gold & Stock \$266K for patent infringement.
7. Gold and Stock produced a superior ticker invented by George B. Scott called the Scott Ticker to compete with The Commercial Telegram Co. This new Gold & Stock machine sat in a beautiful wood base. Due to a falling out between The NYSE and Gold & Stock, the Commercial Quotation Ticker becomes the official ticker of the NYSE instead of the Scott Ticker.
8. The Commercial Telegram Co is taken over by the NYSE in 1889 & renamed The New York Quotation Company. They manufactured a refined version of Field's original ticker called The New York Quotation Stock Ticker at their West Street Plant. This became the exclusive ticker used on Wall Street.
9. The Stock Quotation Company introduced their own stock ticker invented by A. Wirshing & was greatly improved by John Burry, incorporating a self-winding device. This ticker was used by the Consolidated Exchange and became known as the Burry Ticker. 11,666 Burry tickers were in service. By 1923, most Burry tickers were used in sporting and financial gossip services of various News Bureaus throughout the East.
10. The Gold & Stock Telegraph Company (owned by Western Union) then introduced the Self-Winding Stock Ticker which was invented by George B. Scott of Gold & Stock & W.P. Phelps of the Philadelphia Local Telegraph Co & Mr. Barclay & Mr. Page in 1902. This Scott-Phelps-Barclay-Page ticker became known simply as the Self-Winding Ticker.
11. In 1923, Western Union engineers with the help of George B. Scott improved the original Self-Winding Ticker and the official designation was the Western Union Automatic Self-Winding 1-C Stock Ticker. Minor improvements were made to it including more efficient magnets and an ink box which housed two ink rollers. Models designations ranged from the 32-A to the 35A. The Self-Winding is the model that most people associate with Wall Street.
12. Western Union introduced a new, high speed ticker in 1930 called the "Black Box" 5-A Ticker. It was made for them by the Teletype Co.
13. The New York Quotation Co. introduces the last of the mechanical stock tickers in 1960 called the Series 900.