

SHORT HISTORY OF

CLAPP-EASTHAM CO.

CAMBRIDGE, MASS.

by ALAN DOUGLAS

Transmitting Sets
Receiving Sets
Transformers
Condensers
Spark Gaps
Oscillation Transformers
Wave Meters
Tuners
Keys

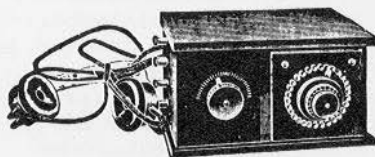
The story of the Clapp-Eastham Company begins with Melville Eastham in Oregon, where his father was instrumental in setting up the first electric generating system. In 1905, at the age of twenty, he came East to work for the Ovington X-Ray Company, whose chief engineer was William O. Eddy, with J. Emory Clapp, a sales engineer.

In 1906 the three decided to go into business for themselves, manufacturing X-ray equipment; Clapp financed the venture, and they moved to his home at 100 Boylston Street. Eddy recognized that the time-honored method of rating induction coils solely by spark length was badly suited to X-ray and wireless work, where substantial current capacity was necessary, and his coils were particularly good for these classes of service.

In February 1908, Eddy left, and the company became the Clapp-Eastham Company, with \$10,000 capital. They added other wireless components to their line, and concentrated more and more in this area, to the exclusion of their X-ray business.

Clapp, whose primary interest was in X-rays, sold out in 1910 to O. Kerro Luscomb, but the company remained Clapp-Eastham, and they moved to Kendall Square in Cambridge.

By 1915 Melville Eastham was restless, too. Envisioning a large future market for radio measuring instruments, he and Luscomb formed the General Radio Company with three other investors. Starting with \$9000 in capital, and a payroll of two, General Radio a year later had thirty employees and was as substantial a concern as Clapp-Eastham. In 1917 Eastham and Luscomb went their own ways, exchanging their interests in the other's company. And the Clapp-Eastham Company employed neither Clapp nor Eastham!

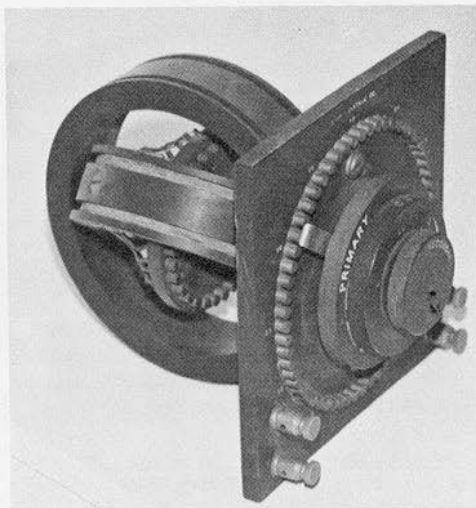


BLITZEN RECEIVER [1913-15]
USING ROTARY TUNER

Their reputation for quality brought them much business from the great wireless inventors of the period, but they went after the ham business too, advertising regularly in *Modern Electrics* after December 1908.

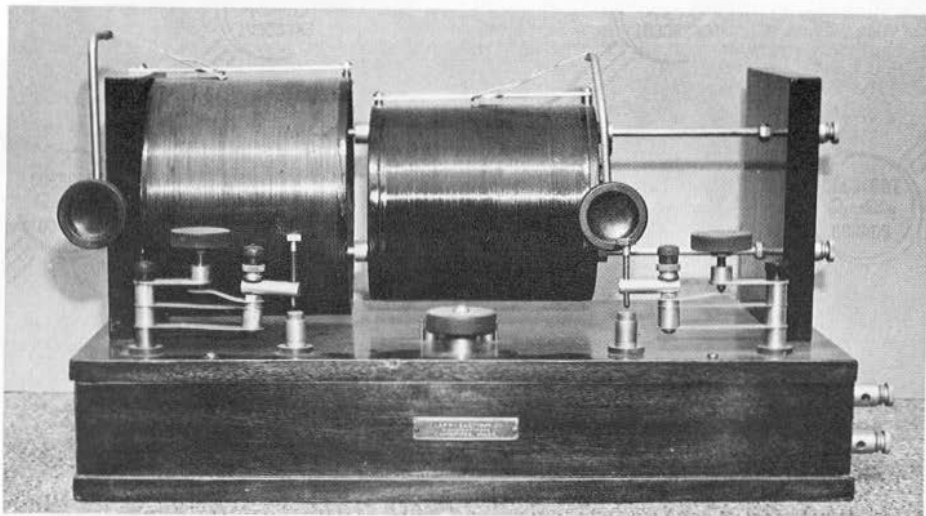
Since it is impossible to cover all their equipment here, I am concentrating on their receivers and tuners, the first of which was advertised in August 1909.

They made a variety of tuners (loose-couplers), some lasting in their catalogs until 1922. One of their successful designs was the rotary tuner (vario-coupler) with small coils of fine wire wound on hard rubber rings. These were made in two sizes, the Blitzen



TYPE "D" TUNER [Thorn Mayes]

SUPERB CRAFTSMANSHIP



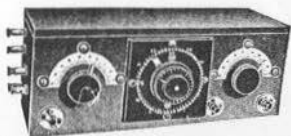
This beautiful loose-coupler type receiver in the AWA Museum was made by Clapp-Eastham in 1913. Note the two crystal detectors.

and the Type D, the latter having many more switch taps, and a marble base. These rotary tuners were also built into complete receiving sets, the most elaborate of them selling for an incredible \$550 in 1914.

Type "A F" Receiving Set



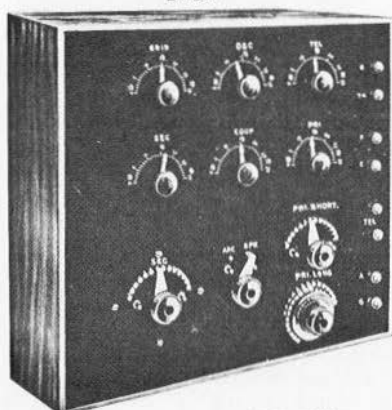
This receiver sold for \$550 in 1914. The large rotary type tuner had 72 primary and 30 secondary contacts. It tuned from 200 to 7000 meters.



**TYPE D
RECEIV-
ING SET**

1920 brought a marked change to their product line, when they received the first post-war Armstrong regenerative license on April 28. (Adams-Morgan and A. H. Grebe had been making Armstrong sets pre-war, since 1915 and 1916 respectively).

**TYPE "ASA" RECEIVING SET
1916**



FOR DAMPED AND UNDAMPED WAVES

**TYPE S RECEIVING SET
1916**



For the period April through June their 5% royalty payments to Armstrong totaled \$12.60, and for July through September \$5.06

They were among the lucky companies who were ready to cash in on the broadcast boom: their model HR receiver was reasonably priced at \$35 (oak cabinet) and \$40 (mahogany) and was actively pushed by distributors all over the country.



H-Z 2-STAGE AMPLIFIER [1922]

The HR and its matching two-stage amplifier HZ were soon combined in one cabinet as the RZ, and from here on it is hard to keep track of their models, they changed so fast. For one month they advertised a horn, the Electro-Ampliphone, that used a specially-made Baldwin driver with two mica diaphragms; the second one was located between the driven diaphragm and the horn throat but was not connected to anything (don't ask me!).

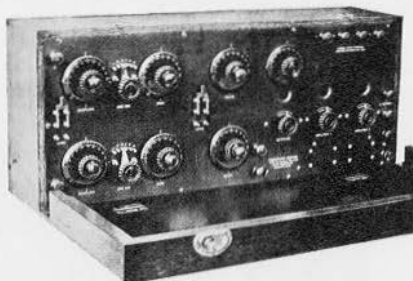
Late in 1922 they began using the trade mark RADAK in addition to Clapp-Eastham. Incidentally, if I had a nickel from every old timer who says 'Clapp-EastMAN for 'Clapp-EastHAM' I could buy a 1-KW Hytone spark transmitter !

Their last big seller was the one-tube R4 in late 1923; this was also sold under the name 'Unico Special' by the United Cigar Store chain.

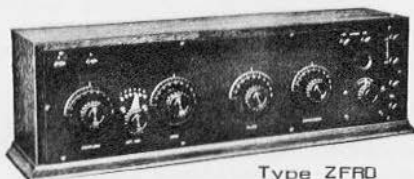
My best friend in high school



TYPE HRF REGENERATIVE RECEIVER



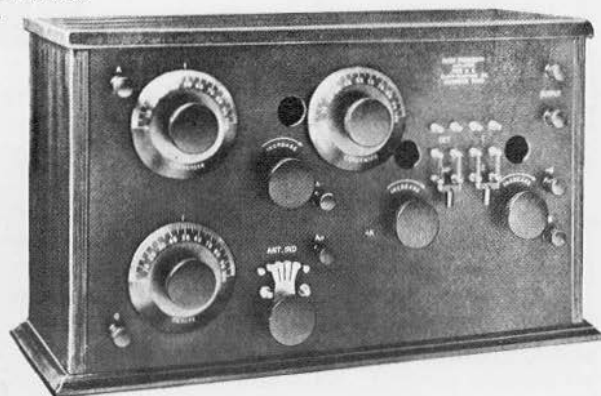
TYPE ZR DOUBLE



Type ZFRD

found one in his grandmother's attic (it turned out to have been his father's) which we got working, and I have it now after having lost track of it for nearly twenty years.

The Clapp-Eastham broadcast sets work reasonably well, but their construction quality leaves a little to be desired. As an example, the nameplates on their later models are left-over HR plates, with half of the plate



TYPE RZ [APRIL, 1922]



Type R Z Radak Receiving Set,
Clapp-Eastham's newest achievement
(Licensed under Armstrong U. S. Pat. 1,113,149)

Radak

(Trade Mark Reg. U. S. Patent Office)

Means Simplified Radio

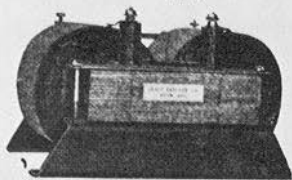
CLAPP-EASTHAM'S long career in engineering and manufacturing has been devoted to Radio exclusively. In all those years its single aim has been to make Radio simple and easy for the novice. In the Type RZ Radak Receiving Set shown above the very highest development of this aim has been realized.

This new set brings in signals, message and music with amazing clearness and loudness, responding to wave lengths as great as 3,000 meters. Especially when used with the Radak Electro Ampliphone, the effects obtained are unsurpassed by any set made today, whatever the price.

CLAPP-EASTHAM COMPANY
141 Main St., Cambridge, Mass.

MODEL RZ [August, 1922]

Wireless Apparatus



Ceco Transformer—Closed Core Type

A 200 watt closed core transformer as powerful as the ordinary 6 in. spark induction coil for wireless work, and costs but \$30. It is especially adapted to tuned transmitting circuits, and can be run from any lamp socket giving alternating current. We also build larger sizes up to 10 kw. capacity at moderate prices. Complete parts for a 50 mile tuned transmitting set consisting of 250 watt transformer, large capacity glass plate condenser, oscillation transformer with adjustable primary and secondary inductances, and adjustable spark-gap making an accurate model of a modern commercial station complete for \$100. Send for our descriptive folder of experimental apparatus for receiving and transmitting, including

Transformers Telephone Head Receivers
Tuners Condensers Oscillation Transformers
Detectors Spark-Gaps Potentiometers

CLAPP-EASTHAM CO.

730 Boylston Street BOSTON, MASS.

When writing please mention "Modern Electric."

reading 'Type HR175-825 meters' simply cut off! Probaby this attention to quality combined with their favoring the regenerative circuit long after it was outdated, greased the skids for them.

Crosley made similar appearing models, with the same regenerative circuit (and the same quality) but he advertised heavily and somehow pulled it off. The Clapp-Eastham Company shrank to practically nothing after mid-1924, and brought out only two new models. Their last model that I have seen was a three-dial, five tube TRF with typically cheap construction: components riveted to a bakelite sub-panel. It had no model number, and I didn't have the foresight to photograph the set before I sold it, but it no doubt exists somewhere still. I don't miss it.



A popular receiver among collectors: the RADAK Type R-4

The notice printed below was from the May, 1926 issue of "Radio Dealer" telling of the company's move from Cambridge to Long Island City, N. Y.

This is hardly the way to end the history of a one-time well known company, but I'm afraid it just peters out, like the company I have been describing. Any information on C-E after it moved to New York would be appreciated.

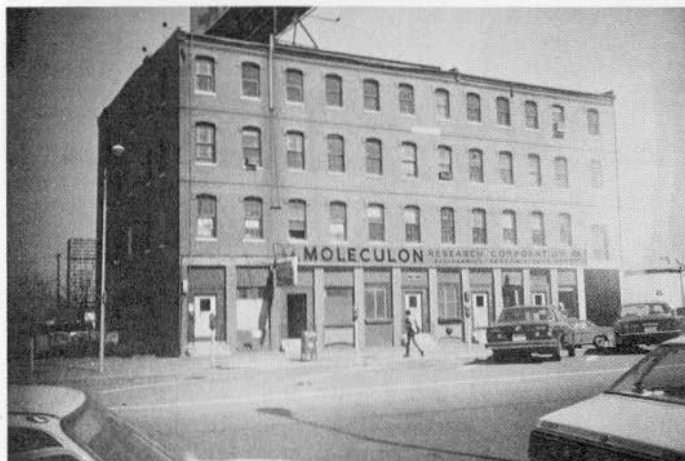
CLAPP-EASTHAM MOVES TO NEW YORK CITY

LONG ISLAND CITY, N. Y.—Clapp-Eastham Co., formerly of Cambridge, Mass., is moving its plant to Long Island City, New York, according to announcement of Verner A. Hendrickson, the president. This move marks the passing of the world's oldest exclusive radio manufacturer from New England. For over 20 years the Clapp-Eastham Co. has been located at 139 Main St., Cambridge. Its new quarters are in the Chiclé Bldg., Thompson Ave., Long Island City. This new location was made necessary to obtain larger quarters, particularly for space, and to secure a national distributing point. The new factory is modern and up-to-date in every respect.

An entire new line will be brought out featuring two handsome models encased in unusually attractive mahogany cabinets trimmed with gold and provided with compartments for the batteries. One of the receivers is designed either for "A" or "B" eliminators. Both sets will utilize the time tested radio frequency circuit with the regenerative feature added, and will be designed to be free from squeals." The outstanding feature of this set is the single dial control which in this case is said to be absolute and positive. The company has been re-organized on a large scale and will go into volume production. It will continue under the direction of Mr. Hendrickson, a well known pioneer in the industry.



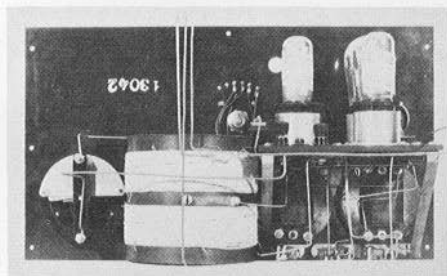
The ELECTRO-AMPLIPHONE horn speaker
(September, 1922)



The old C-E
plant as it ap-
pears today at
139 Main Street,
Cambridge, Mass.

[Photo taken by
Dave Crocker]

MODEL RHM (late 1923)

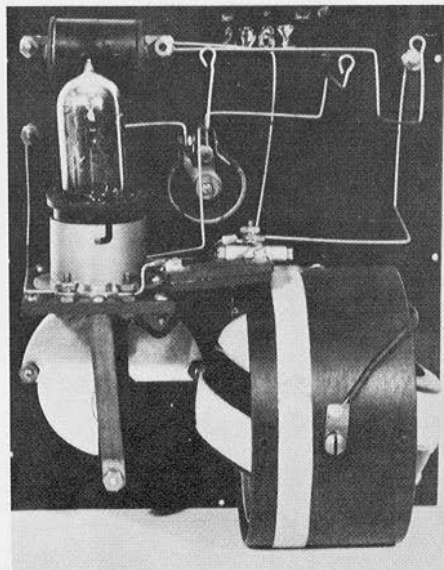


REAR VIEW OF MODEL RHM

INTERIOR of TYPE R-4 (At right)

The Type R4 was sold at United Cigar Stores under the name of UNICO between 1923 and 1925.

In addition to C-E, the stores sold Pacent, Supertran, and other well known products.



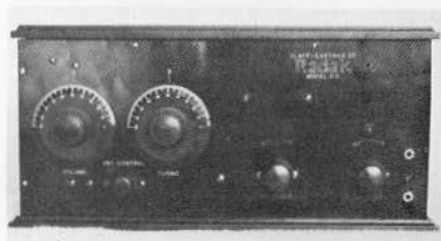
**Make this a
Radio Christmas
Santa Claus
Starts From Here!**

"The Perpetual Present"
THE UNICO REGENERATIVE
"Unico Means Radio"

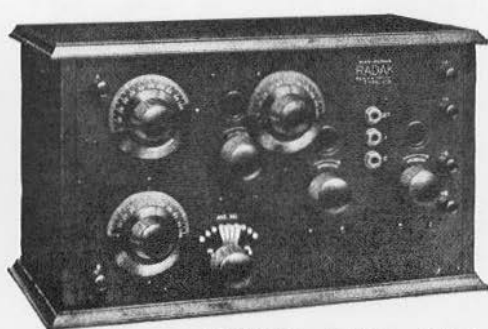
COMPLETE
READY TO OPERATE
NO EXTRAS
\$37.25
SPECIAL! Until New Years, above price includes
an Extra Set of Headphones.



CLAPP-EASTHAM MOD. ZRF [Jim and Felice Kreuzer collection]



MODEL DD [1925]
Dave Brodie collection



Model C3 Radak APRIL, 1923



Limited under American U. S. Pat. 1113148

DEALERS! We offer a proposition that will interest YOU!
You need not experiment with untried Radio Products unless you want to!
CLAPP-EASTHAM has led in the radio field for seventeen years.

Radak Model C23

JULY, 1923

- 1 stage radio frequency.
- 2 stages audio frequency combined with regenerative detector tube.
- Vernier tuning controls.
- Single knob vernier rheostat.
- No binding posts on front.
- Heavy bus wiring.
- Back connected.

Price \$125.00



Models R23 and A23 Radak
MARCH, 1923

CLAPP-EASTHAM COMPANY

The dates with the photographs are those from the catalog (or ad) of the publication. Further research could extend the date in either direction.

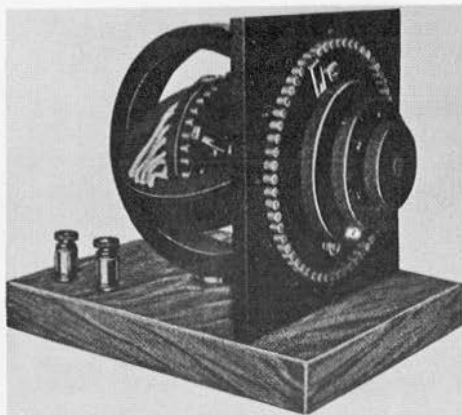
Dates for the 1920 models are for the first advertisement, for the most part.

References:

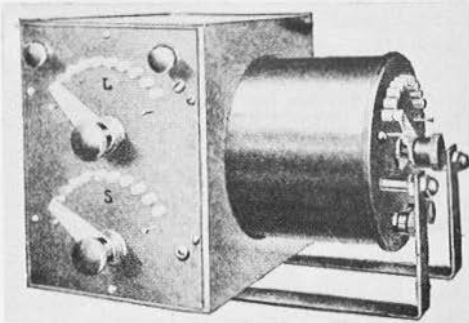
1. 'A History of General Radio Co.' (pub. in 1965)
2. Clapp-Eastham catalogs "S" printed in late 1914 and "W" in November, 1915 "X" in Nov. 1916, "Y" in June 1919, "R" in Sept. 1919, "Z" in Jan. 1920, "F" in May, 1920, "ZR, FR" in 1921, "FZ" in 1922 (Thank to WØOEM for loan of catalogs.)
3. 'Man of High Fidelity' page 132
4. 'Electrical World': Dec. 22, 1906; Feb 2, 1907 and Feb. 15, 1908

Approximate date for equipment:

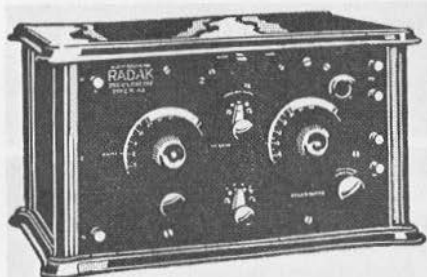
Blitzen tuner: 1912 - 1915
Type "D" receiver: 1913 - 1915
Blitzen receiver: 1913 - 1915
Type AF receiver: 1914
Radion loose-coupler: 1914 - 1919
Radion receiver: 1914 - 1916
Type D tuner: 1914 - 1922
Lodge receiver: 1915
Cambridge long-wave: 1915 - 1919
Type X loose-coupler: 1916 - 1921
Type S receiver: 1916
Type ASA receiver: 1916
Radion loose-coupler: 1920 - 1922
ZRF receiver: 1920 - 1921
ZRFD: 1920-1921
ZRFDA: 1920 - 1921 (Det. & 2 audio)
ZR Double: 1920 - 1921
HRF: 1921 - 1922
HR: Dec. 1921
HZ: Feb. 1922
RZ: Apr. 1922
Electro-Ampliphone speaker: Sept. 1922
R23 and A23 units: Mar. 1923
C3: April, 1923
C23: July, 1923
R43: Aug. 1923
RHM receiver: late 1923
R4 (one tube set): Nov. 1923
Unico Special: 1923 - 1924
C64 (5 tube receiver): Nov. 1923
Model DD receiver: Mar. 1925



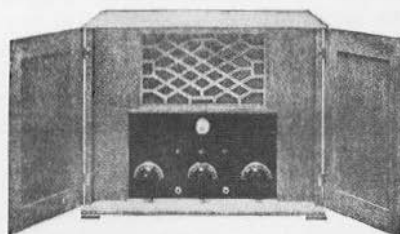
TYPE D TUNER DE LUXE [1914-22]
[Note numerous contacts points]



RADION LOOSE-COUPLER [1920-22]



TYPE "R-43" RECEIVER [Aug. 1923]



TYPE "C-64" 5-TUBE RECEIVER
[August, 1923]