

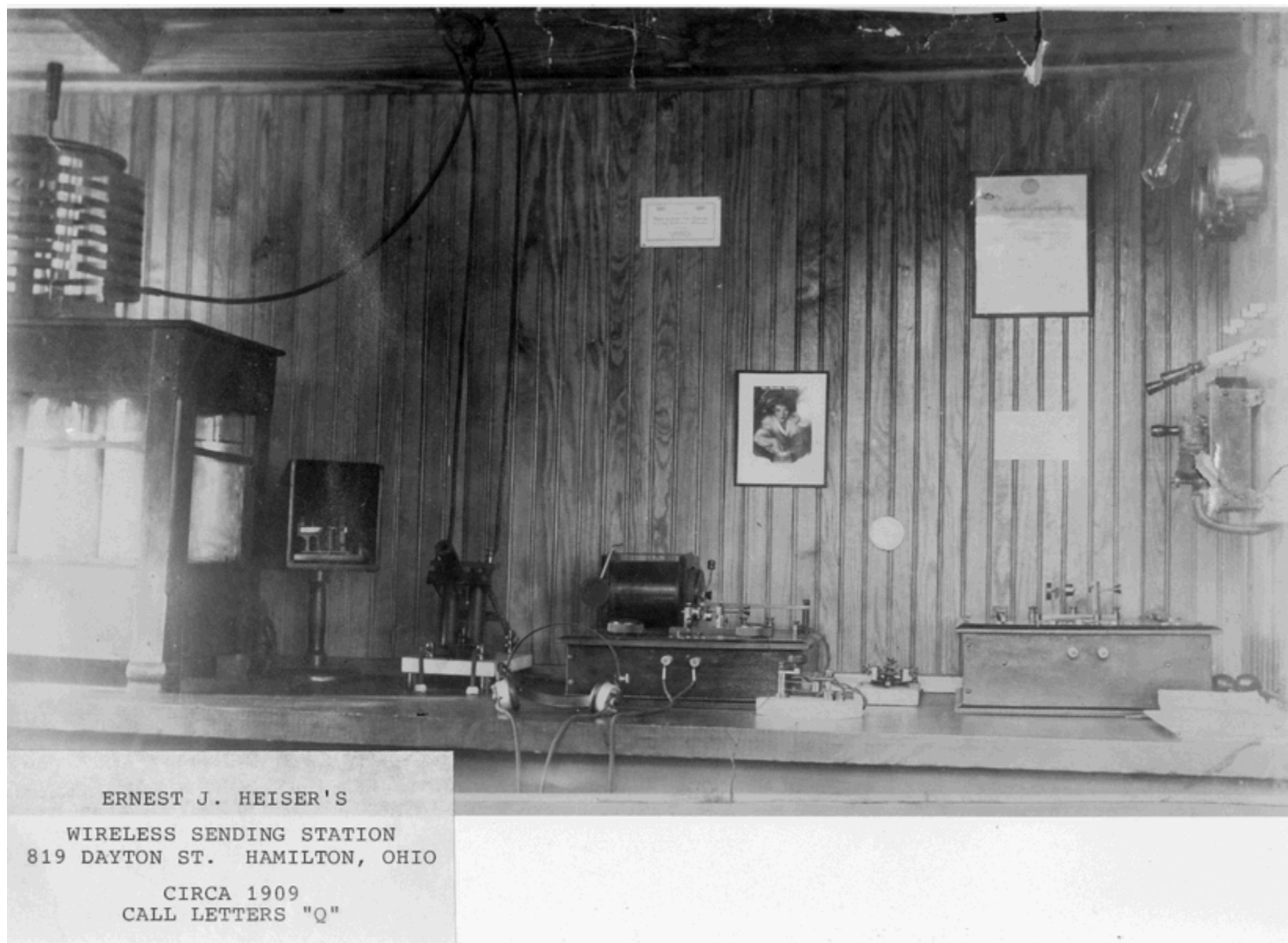
**Shuler and Joseph Doron
The Doron Brothers Electrical Co.**

Early wireless radio history in Hamilton, Ohio

-April 30, 2008-

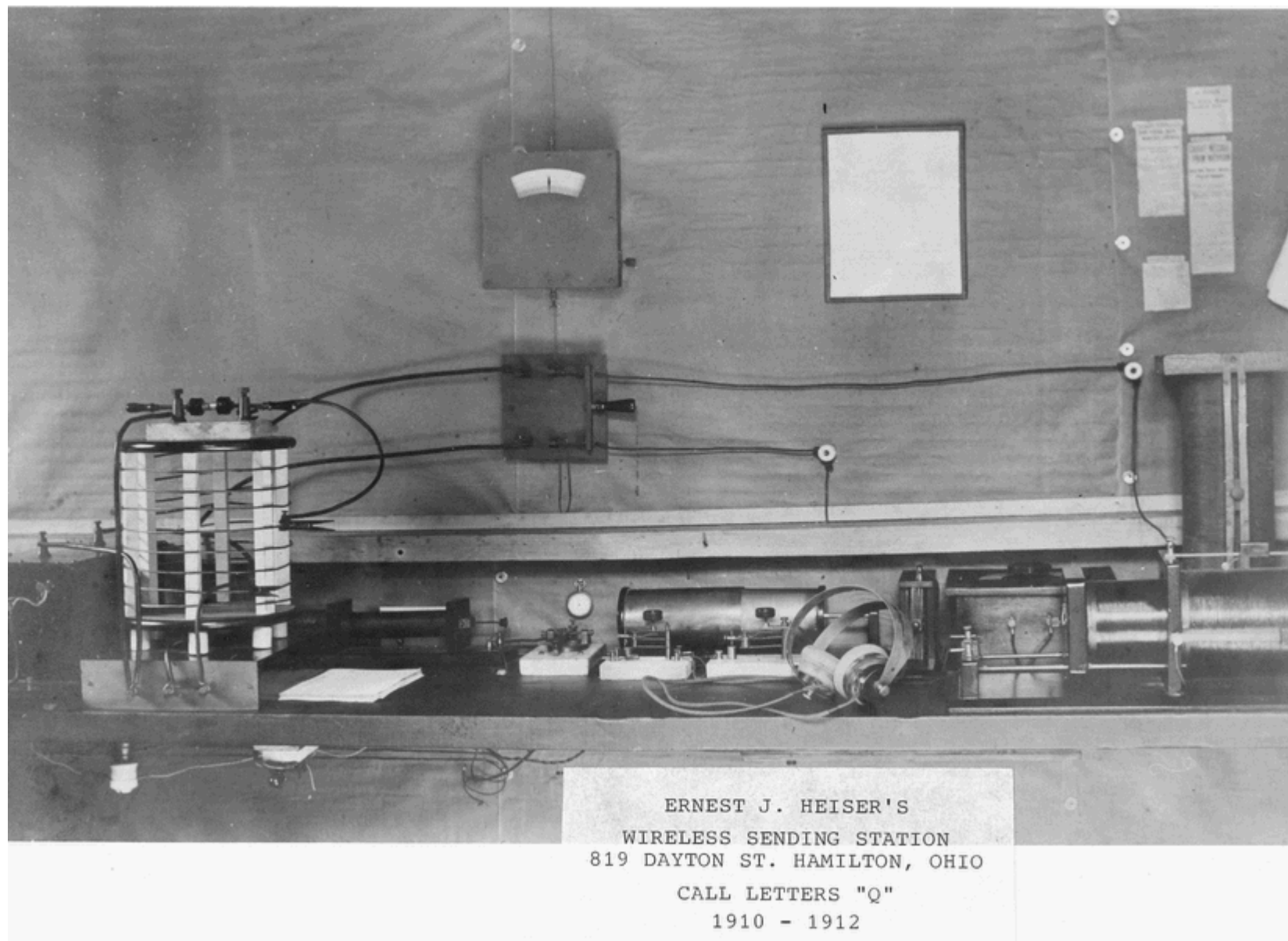
PHOTOGRAPHS SECTION 1 of 2

- THE EARLY YEARS BEFORE 1920 AND STATION WRK -

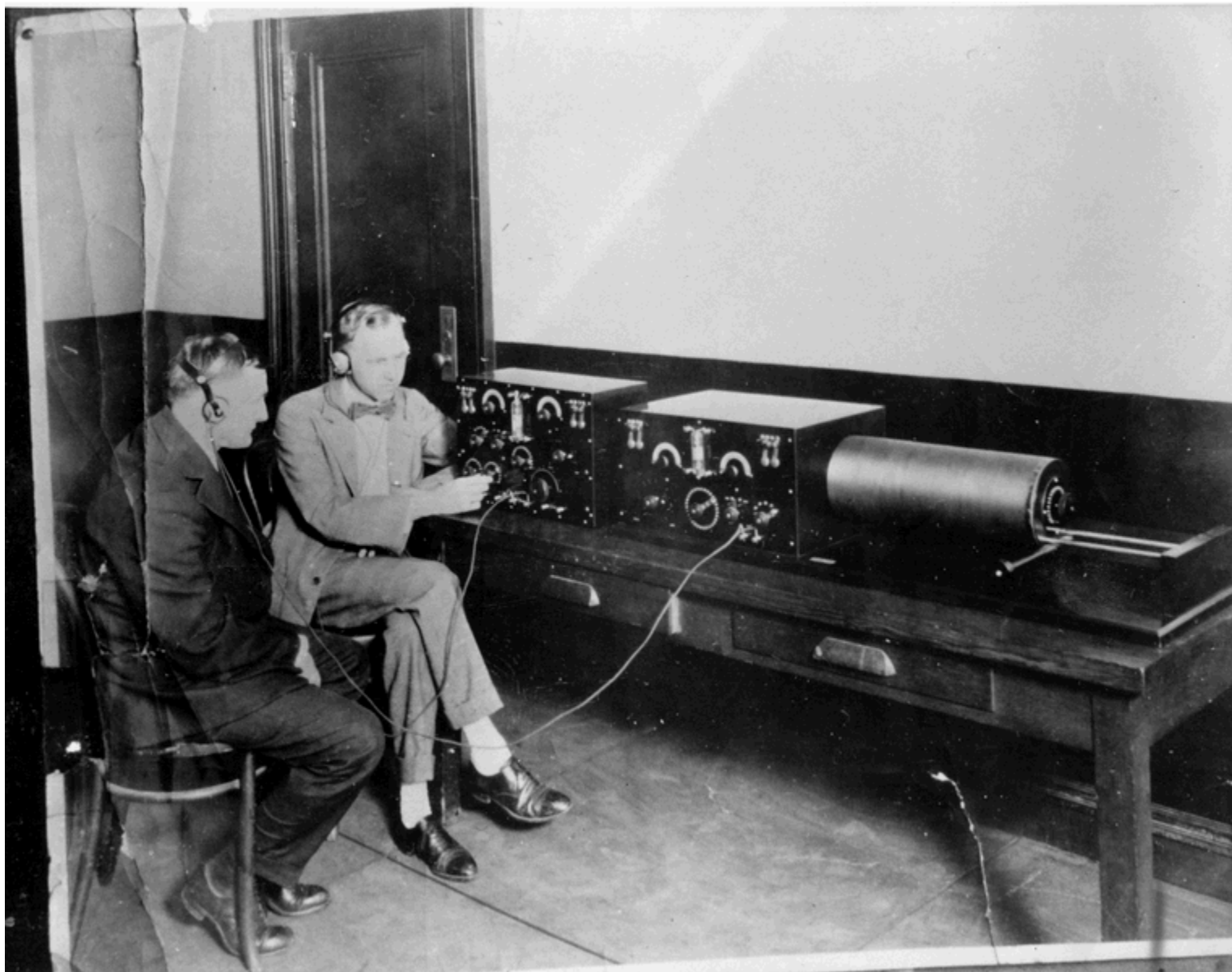


ERNEST J. HEISER'S
WIRELESS SENDING STATION
819 DAYTON ST. HAMILTON, OHIO
CIRCA 1909
CALL LETTERS "Q"

One of the four stations in Hamilton listed in the 1911 Wireless Blue Book was Ernest Heiser's "Q" (Above)



Another photo of Ernest Heiser's station showing more "modern" equipment 1-2 years after the previous photo.



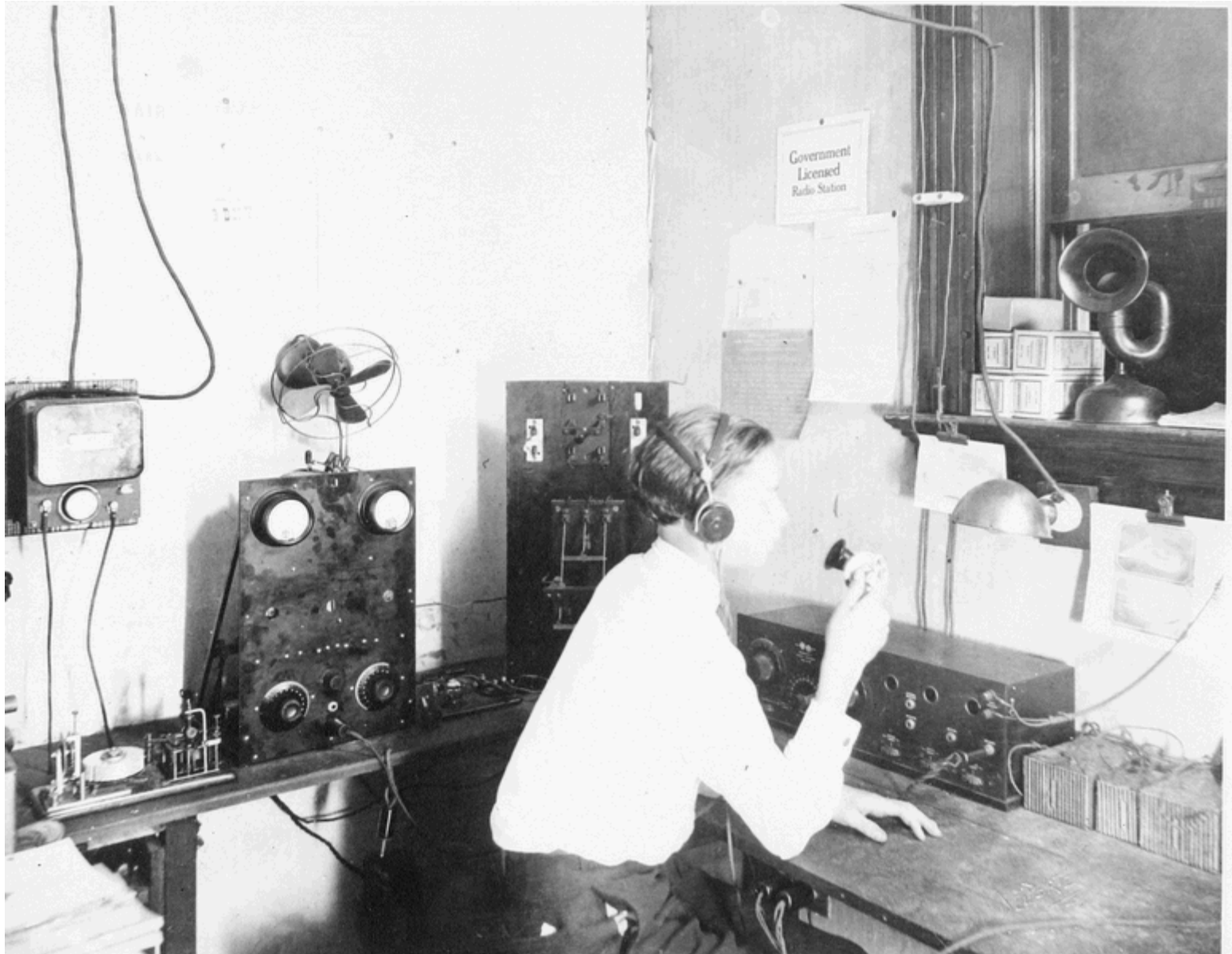
The long wave receiving setup built by Shuler Doron for the Cincinnati Amateur Radio Club. (circa 1912).



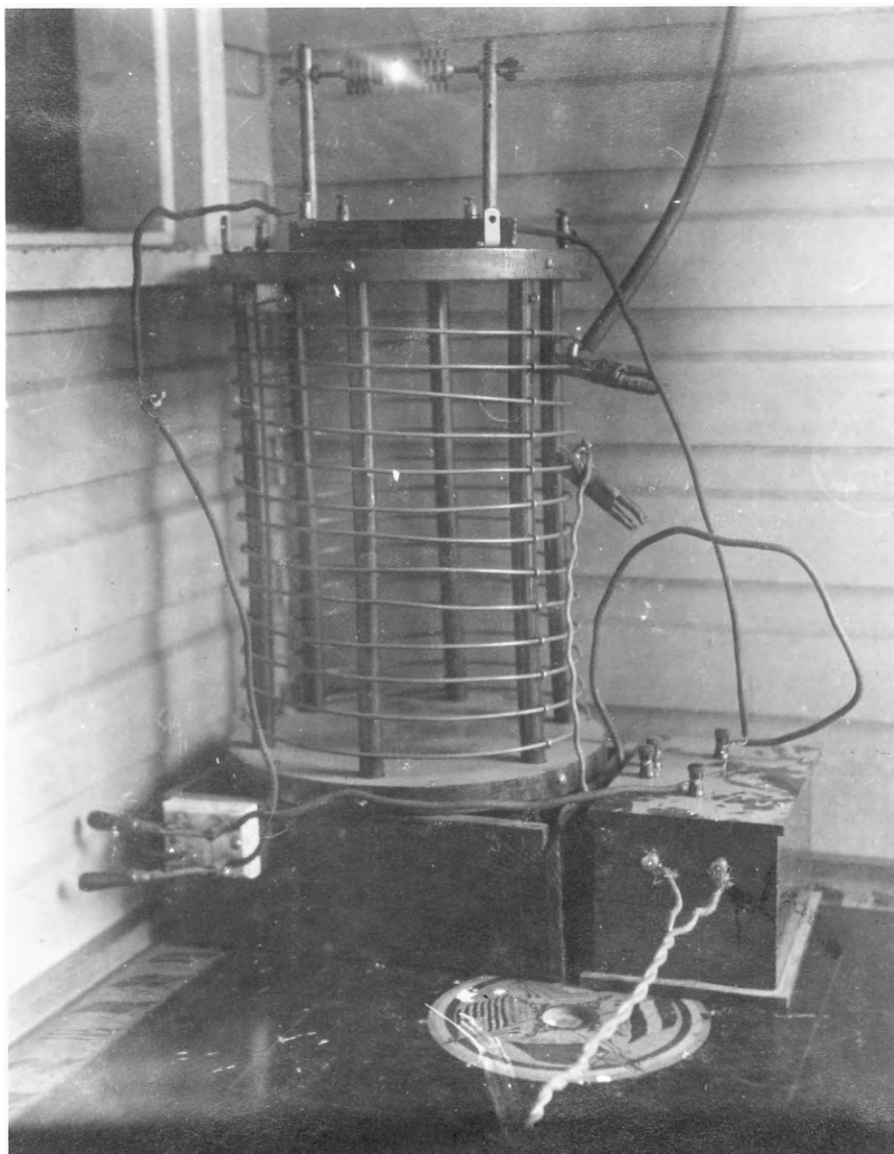
**1912- The Hamilton Radio Club organized by Shuler and Joseph Doron.
(Photo was taken on the front steps of the Doron house)**



The Hamilton Radio Association
Shuler Doron was secretary and chief operator



Young Joseph Doron transmitting from Special Land Station 8ZU building (1915). Note the microphone in his hand which shows the Dorons were experimenting with and using voice transmission in its infancy.



The 500-watt spark transmitter (built by Shuler) on the side porch of the Doron home when Shuler's stations "D5" (pre-1911) and "8AJT" (1912) were located in the basement.

SEE THE SPARK ACROSS THE GAP!!

The 500-watt transmitter was used until around 1913-1914 when it was replaced with the Doron's more powerful 2,500-watt spark transmitter.



**The Doron's Poulsen Arc Generator – Built by Shuler Doron
Saved for history by a private collector in Hamilton, Ohio!**

Poulsen arc generators were originally designed to produce an arc in hydrogen gas in a magnetic field. The hydrogen was obtained by dripping alcohol into the arc chamber which usually had a water-cooled jacket. However, these generators were made in significantly different variations.

Unlike spark transmitters, Poulsen arc generators produced “continuous waves” that were better for voice transmission. Depending upon the mode of transmission (telegraphic code vs. voice) the Dorons probably would have switched between their spark transmitter and the arc generator.



1912 - The Doron's north antenna tower (wood) in the rear of a lot adjacent to 404 N D St. when there was no alley between C and D Streets. The north tower was approximately 400 feet north of where we believe the south tower was located on the 329 N C St. property. (Several lots on the hill were still owned by Shuler and Joseph's father during this time)



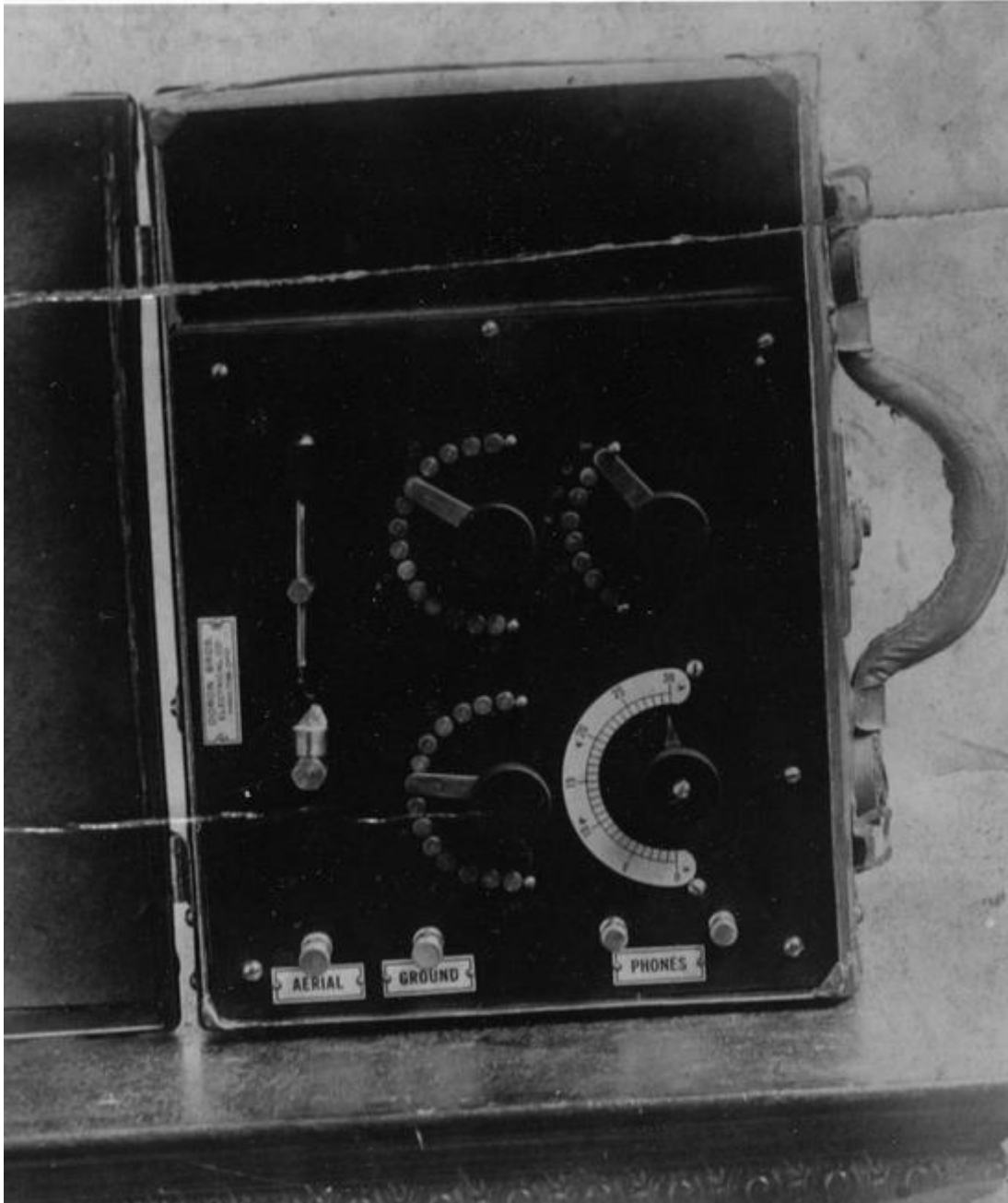
Although the caption says the above tower was at the Doron residence at 329 N C St. we believe this is a 1915 photo of the north tower (3 years after the previous photo) when 402 N D St. was built next to 404 N D St. and the telephone lines were moved between C and D Sts.



**One of the Doron Brothers Electrical Co. marble-based “spark keys” (wireless telegraph).
Saved for history by a private collector in Hamilton, Ohio**



**The Doron’s call letters “8ZU” for their 1915
Special Land Station embedded with tile in a
concrete step to the station building which is
still standing in the backyard of 329 N C St.**



THE DORON BROS. ELECTRIC CO. FIRST "PORTABLE RECEIVING OUTFIT"

The Doron's catalog stated *"We believe that we are the first concern to place a real efficient Portable Receiving Set on the market at a price that is within reach of all experimenters"*.

(The receiving set was listed on page 35 of their circa 1915 catalog and the set's price was \$15)

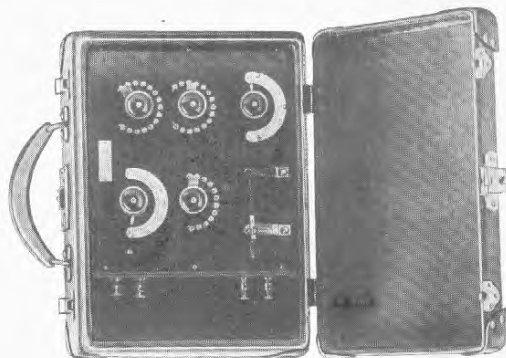
A written note on the above photo stated "portable unit made for the U.S. Army 1916-1917".

If these sets were indeed sold to the Army, they would have pre-dated the commonly known BC-14A portable units that were made for the Army during 1917-1918 by the De Forest Radio Telephone and Telegraph Co. and a handful of other manufacturers that were contracted by the Army to make radios.

(In April 2008 a 1918 De Forest BC-14A sold for \$2,686 on eBay and one from another maker sold for \$710)

(A photo on the next page from their 1920 catalog shows a newer model of their portable receiving set)

PORTABLE RECEIVING SETS



No. 2. Portable Receiving Set

This is an outfit of exceptional merit. Designed for use in National Guard organizations, it has proved more than satisfactory. The set has been on the market for more than five years and has been improved until it is exceptionally efficient.

The case is of genuine cow skin, extra heavy, and will stand the hard service that an outfit of this type receives. The tuner is of the loose coupled type, and will tune to about 2,000 meters. The variable condenser is connected to the secondary for close tuning. Detector is of special construction involving the ball and socket joint. Panel is of polished black formica. A compartment for phones is on the left of the panel. Outfit is furnished with buzzer and piece of tested mineral.

When used in the field this set is usually operated with a kite aerial, single wire, about five hundred feet in length, but it gives good results, also, with the usual field antenna.

The No. 1 Portable Receiving Set is the same as the No. 2 but it is close coupled and has no variable condenser. It is a favorite with the Boy Scout Patrols.

No telephone receivers are supplied with either set at the prices below. Any make of receivers may be used. A double-head set of 2,000 ohms total resistance is recommended.

Net weight: No. 1 Set, 9 pounds; No. 2 Set, 10 pounds.

Shipping weight: No. 1 Set, 23 pounds; No. 2 Set, 25 pounds.

List No.	List Price
1 Portable Receiving Set.....	\$53.00
2 Portable Receiving Set.....	60.00

Portable Transmitting Sets to Order

Portable Receiving Sets – a page from the Doron Bros. 1920 Catalog

As stated in the 1920 catalog, the “No. 2 set” was “Designed for use in National Guard organizations.” and it sold for \$60. For the “No. 1” set it stated “It is a favorite with the Boy Scouts Patrols” and it sold for \$53.



Shuler (standing left) second lieutenant Army Signal Corps WW I