Kellogg's Push Button Telephone
Made for use with Kellogg's Divided Multiple Switchboard

By Tom Adams ATCA #213

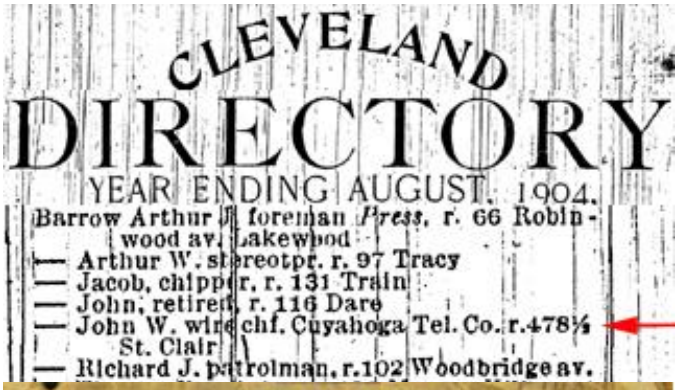
Sometimes you get lucky and a rare telephone just falls into your lap. This past October while surfing eBay, I spotted this telephone box with pushbuttons on the front door and Kellogg parts, it had a buy-it-now price and had only been listed on eBay a few minutes with only 4 other lookers. Knowing that I had never in my 40 plus years of collecting seen anything like it, I immediately hit the buy-it-now button winning the phone. I then started searching for information. Within a few days I had found reference to the phone in the 1900 Kellogg #1 bulletin. Next I discovered an article in the April 1990 ATCA Newsletter by one of our deceased members, Stanley Swihart, author of "Telephone Dials and Pushbuttons". He describes the phone in the 1990 article and in his book published in 2009 as a "**demi-automatic telephone, i.e., a system where the subscriber started the call by some mechanical process of dialing, or pressing buttons, but where an operator completed the call." He further indicated no instruments or photographs are known to exist of the early telephone instruments used in Cleveland's Divided Exchange.**

Note: The top box has the outline of the early Kellogg batwing name plate underneath the instruction frame along with other early Kellogg parts. The ringer is Viaduct and must have been used by Kellogg on some of their very early phones as there is no evidence the ringer has ever been changed and the entire top box is near NOS including the original finish. It is made from old world mahogany and stained bright red.

I also found this bit of historical information which in my opinion further confirms Kellogg's use of Viaduct parts, at least on the Kinloch system and most likely the Cuyahoga system.

January 19, 1907 The American Telephone Journal "FOR SALE—1,000 Kellogg magneto telephones; Viaduct Mfg. Co. ringers; Wabash Cabinet Company's back boards and battery boxes. Good condition, almost new. Will sell singly or in lots, for particulars, write Kinloch Telephone Company, C. W. Shands, Purchasing Agent, St. Louis, Missouri. 755"

What makes this telephone even more special is being able to identify the original owner and the specific address where it was installed, due to the C 411 number tag on the top box. This telephone belonged to **John W. Barrows**, the **Wire Chief** for The Cuyahoga Telephone Co. and was installed at his residence, 478 1/2 St. Clair (a street in downtown Cleveland, OH) In 1906 Cleveland renumbered and renamed the streets.


CLEVELAND
DIRECTORY
YEAR ENDING AUGUST, 1904.

Barrow Arthur J. foreman *Press*, r. 66 Robinwood av. Lakewood
— Arthur W. stereotpr. r. 97 Tracy
— Jacob, chipper, r. 131 Train
— John, retired, r. 116 Dare
— John W. wire chf. Cuyahoga Tel. Co. r.478½ St. Clair
— Richard J. patrolman, r.102 Woodbridge av.

Thanks to Steve Flocke, a TCI member for obtaining the excerpts from the 1903 Cuyahoga Telephone Company Directory & the 1903 Cleveland City Directory from The Western Reserve Historical Society, Cleveland, OH - Call No. F34ZNT C993D April 1903.

Milo G. Kellogg resigned his position as superintendent of Western Electric's Chicago shop and in 1897 founded Kellogg Switchboard & Supply Company to supply telephones and switchboards to the new Independent telephone companies which, with the expiration of the Bell patent, were springing up all across the country.

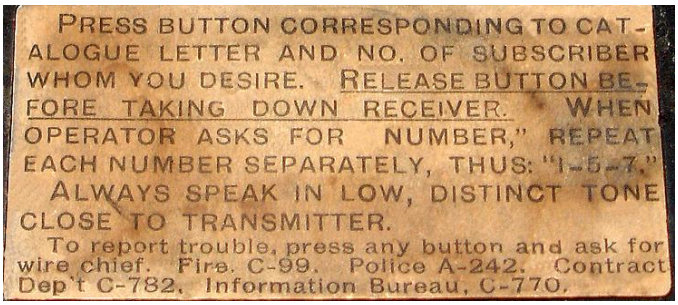
A brilliant engineer, Mr. Kellogg continued to develop new concepts and transform them into successful products to be made by his own company. He was responsible for developing the divided multiple switchboard which made it possible for a single switchboard to handle as many as 24,000 lines. Prior to this, the maximum any switchboard could handle was 10,000 lines. Kellogg's high-capacity switchboard attracted the immediate attention of several new independent telephone companies being organized to compete against Bell in large cities where large-capacity switchboards were fundamental for success. Joining Kellogg in his endeavors were several prominent telephony experts, including Kempster B. Miller, who became Kellogg's Chief Engineer.

His major accomplishment was the so called divided-multiple switchboard, of which two were built. The first one was sold to the Kinloch Telephone Company of Saint Louis and the other one was sold to the Cuyahoga Telephone Company of Cleveland, Ohio. The Cleveland installation boasted 9,600 lines, with an ultimate capacity of 24,000!

The Cuyahoga Telephone Company began business on the morning of January 9, 1900, with just 48 telephones, all that was left of the old Home Telephone Company which had been dissolved. By December 31, 1900, it had 4,981 telephones and a year later the number had increased to 9,516. During 1902 and 1903 the increase was slight and no effort was made to obtain business pending a change in switchboard equipment. This change was made on March 5, 1904, and on that date there were just 10,253 telephones cut over.

There were two main differences between the telephones used by the Kinloch Exchange and the Cuyahoga Exchange. Kinloch used the letters A,B,C, & D and magneto signaling. Cuyahoga used the letters A,C,M, & R and local battery signaling. The letters were changed because many wrong numbers occurred at the Kinloch Exchange due to the close phonetic similarities between the B & D.

A close up of the instruction card on front of the telephone. Note the number for the Information Bureau, what a novel idea for 1900, maybe the springboard for Google!!!!!!!!!!


PRESS BUTTON CORRESPONDING TO CATALOGUE LETTER AND NO. OF SUBSCRIBER WHOM YOU DESIRE. RELEASE BUTTON BEFORE TAKING DOWN RECEIVER. WHEN OPERATOR ASKS FOR NUMBER," REPEAT EACH NUMBER SEPARATELY, THUS: "1-5-7." ALWAYS SPEAK IN LOW, DISTINCT TONE CLOSE TO TRANSMITTER.
To report trouble, press any button and ask for wire chief. Fire. C-99. Police A-242. Contract Dep't C-782. Information Bureau, C-770.

The Cuyahoga Telephone Company, Cleveland, Ohio, has evolved a new idea which will doubtless be appreciated by subscribers. It has established a bureau of information for its subscribers who have questions to ask regarding market prices, ball scores, railway and steamboat schedules, locations of fires, etc. A special operator will take care of the work, to whom all inquiries of this nature will be referred.

Notice that this phone has no magneto and a very unusual push button signaling mechanism inside the top box. It uses the local battery for both signaling and the transmitter.

Cuyahoga Telephone Company of Cleveland, Ohio

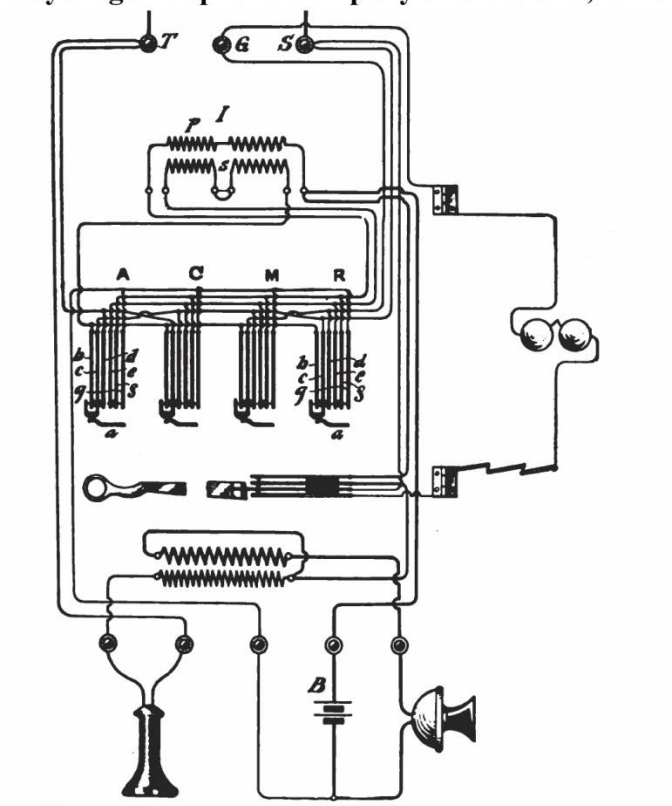
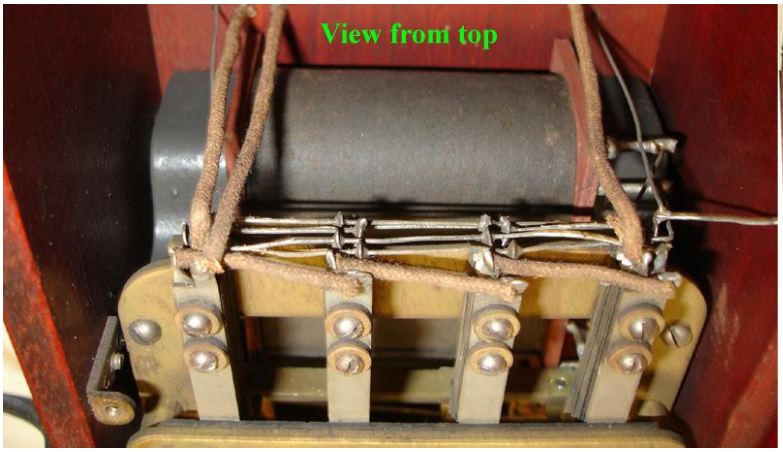


FIG. 299.—CIRCUITS OF SUB-STATION APPARATUS FOR FOUR-DIVISION SYSTEM.



These type telephones were only used for about 5 years and then replaced by the common battery system as stated at the annual meeting of the stockholders of the Cuyahoga Telephone Company on February 1, 1904. (Ref. Vol. 7 No 3 Telephony, March 1904) “NEW SWITCHBOARD The new switchboard is being rapidly put in place and we still expect to have it in running order by the first of March next. This new board is what is known as the common battery full multiple type equipped with the latest and most approved devices It will enable us to abandon the old button system which has been so annoying to our patrons the exchange being notified of the subscriber's desire to talk by simply removing the receiver. The ultimate capacity of the board will be 18,000 lines or would supply that number of main line telephones. As we will however offer to the public two and four party line service with the latest improvements we may possibly calculate that our average will be two

telephones to each pair and thus our ultimate switchboard capacity would enable us to take care of 36,000 subscribers. This switchboard is the largest in existence in any exchange but one the new board lately erected in Buffalo being of the same capacity. Our sub exchanges will add nearly five thousand telephones to our total. That you may understand how difficult and exacting a labor it is to install this switchboard, I may call your attention to the fact that it requires in the exchange 1,473 miles of copper wire and 995,000 soldered connections are necessary to take care of our present development."

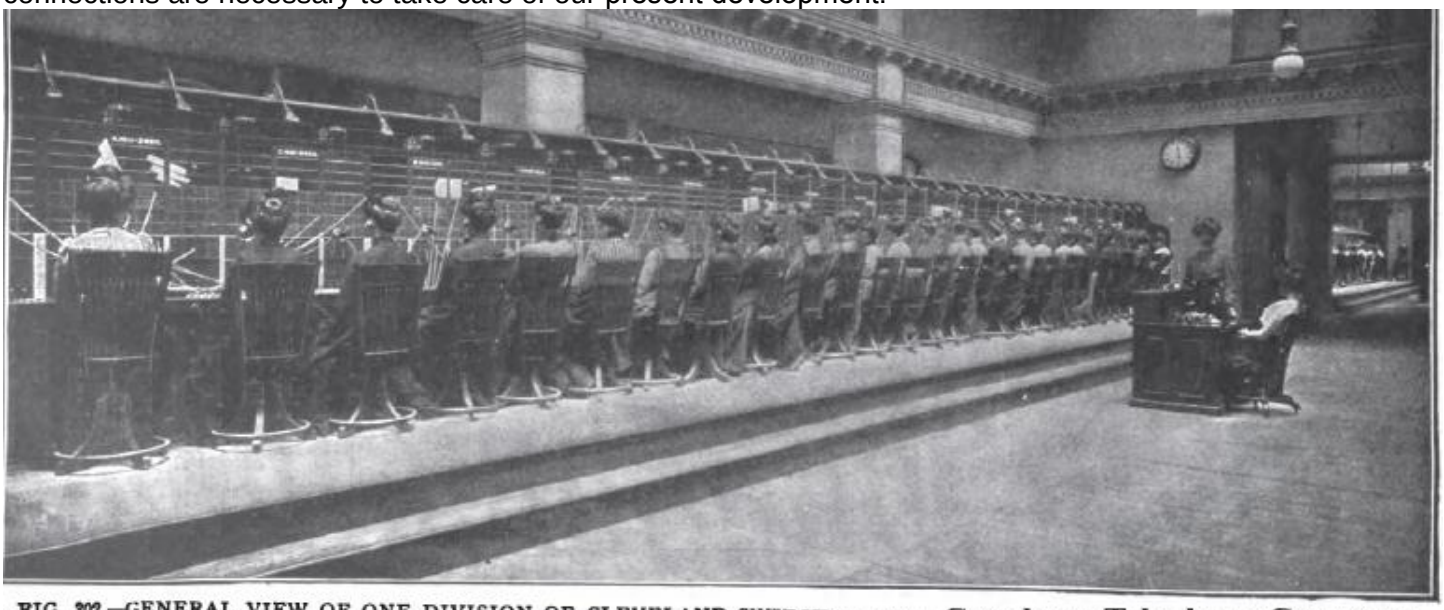


FIG. 302.—GENERAL VIEW OF ONE DIVISION OF CLEVELAND SWITCH-BOARD. **Cuyahoga Telephone Company**

Telephones used by the Kinloch Exchange, St. Louis, MO

FIG. 6.—SUBSCRIBER'S INTERCOMMUNICATING SET.

FIG. 7.—DESK SET AND WALL TELEPHONE SET.

Other Sources: January 6, 1900 Electrical World and Engineer "The Kinloch Telephone Co. Exchange"
Kempster B. Miller, "American Telephone Practice," 1905 Edition