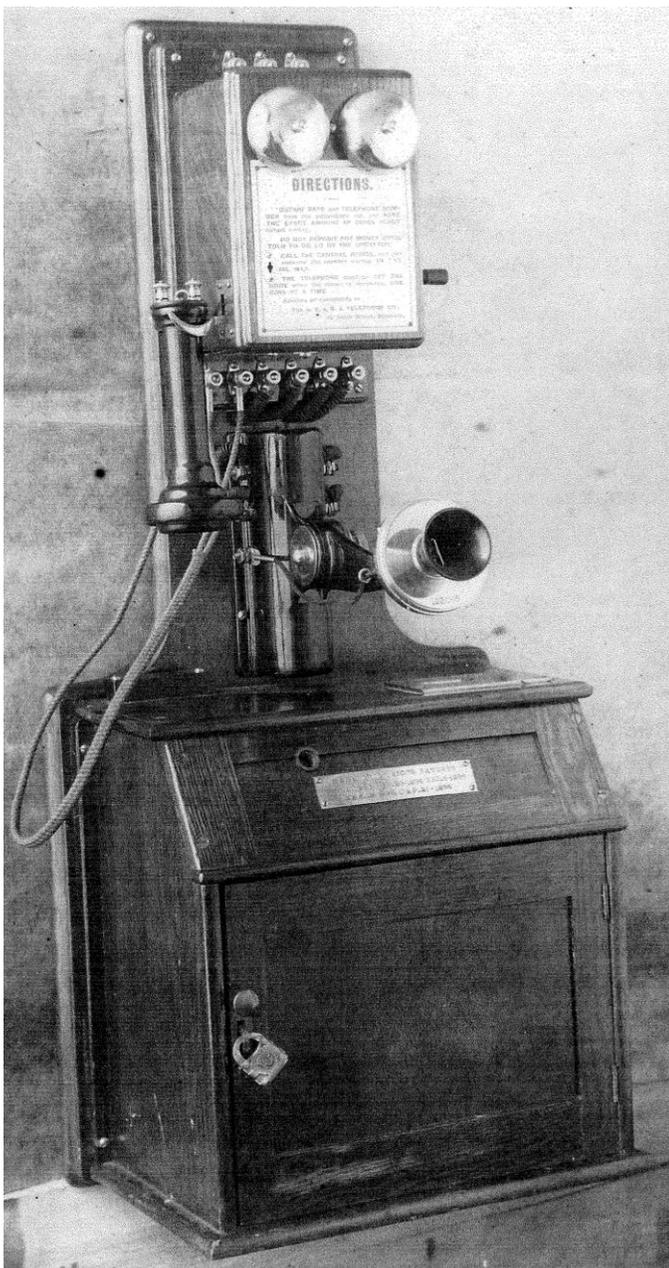


## 1890's Western Electric Type 21 Telephone with a Henry C. Root Toll Collector

By Tom Adams ATCA #213

The New York & New Jersey Tel Co. operated from 1883 to 1909. Their territory included what had been the city of Brooklyn (today's borough of the same name) and a vast number of towns in today's boroughs of Queens and Staten Island, as well as the rest of Long Island and a big portion of New Jersey. They served pay telephones from the same exchanges that served subscribers' phones.



From what limited research material I have been able to find, these Root Collectors were used

exclusively by The New York & New Jersey Telephone Company. They were manufactured in at least 3 sizes, Nickel only, Nickel, Dime, Quarter, and Nickel, Dime, Quarter, Half Dollar, and Silver Dollar boxes as seen in this original NY & NJ Tel Co. photo.

Patents issued to Henry Root for Toll Collectors.

US 440,118 dated November 4, 1890

US 515,170 dated February 20, 1894

US 525,623 dated September 4, 1894

US 536,100 dated March 19, 1895

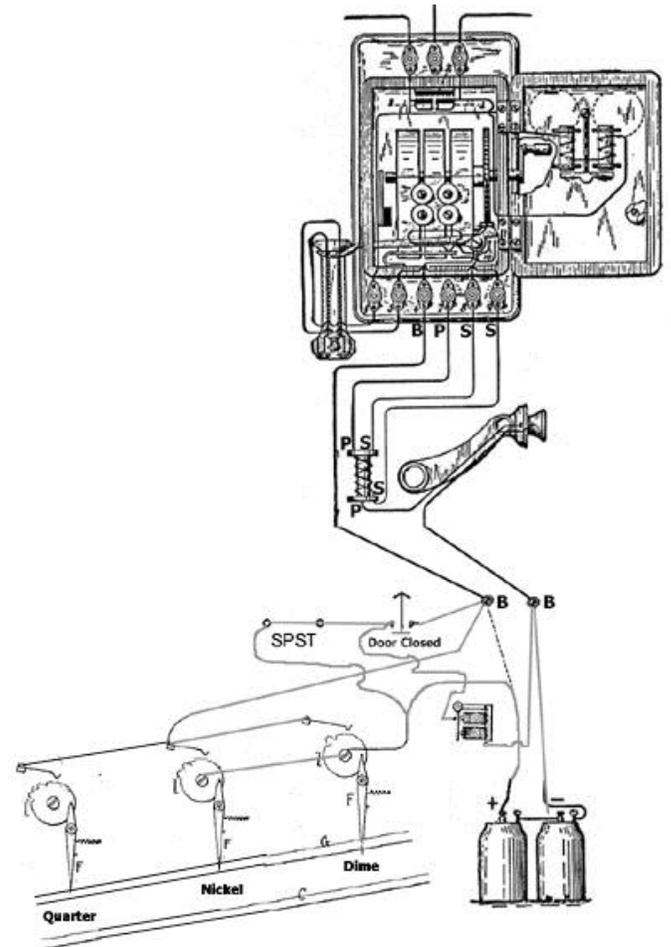
US 553,361 dated January 21, 1896

When I obtained the phone, it was in various states of disrepair. The locking mechanism on the coin box had been busted out and a small strip of pine about  $\frac{3}{4}$ " wide had been inserted on the left side of the door. The phone had been upgraded from a Type 21 to a Type 240 phone and a small No. 250 transmitter arm took the place of the large No. 239 transmitter. The coin mechanism had been badly abused but lucky for me with the Patent information in hand, I was able to return it to its proper operating condition. The wooden case was filthy and the porcelain finger pointing hand was badly damaged. After a lot of thought, study and advice from other collectors, I decided to clean the wood case as best as I could and return the phone to its Type 21 configuration. The door lock was duplicated using traces left on the wood case and original photos showing the lock.

I sent the damaged porcelain hand to Van Kannel Sign Restoration in Loris, SC for restoration.

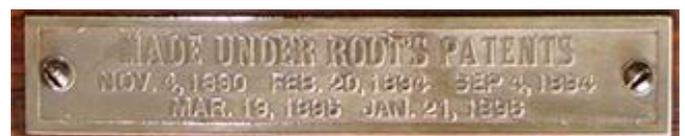


Not everyone would agree with my decision to return the phone to its original configuration considering in all likelihood it was a Factory upgrade but I like it the way it was first put into service which was obvious from the wiring grooves and transmitter mounting holes left behind.



Coin sounds are transmitted in a closed circuit through the battery, primary of the induction coil and to the transmitter and thus to the operators headset by make/break wheels with different numbers of cogs driven by clock springs that have to be wound periodically. A five cent piece would break the circuit once, a dime twice, and a quarter three times. The distance of the ends of the coin contact arms from the chute runway are cut so as to be stuck only by the appropriate size coin. This releases the make/break wheel which has stops that will engage the spring loaded contact arms after the appropriate number of make/break sounds have been sent. I suspect that this complicated mechanism caused many service calls and the system was short lived. The buzzer on the inside of the collector is an alarm that sounds when the door is opened. There is a slide switch inside the collector allowing the buzzer to be turned off in order to collect the coins or service.

This is a photo of the telephone when I purchased it and prior to restoration. The pony receiver was cracked in numerous places and beyond repair.





Both the Type 240 top box and front edge of the Root Toll Collector box were stamped N.Y. & N.J. Tel. Co. I had a nice original oak Type 21 top box but needless to say, the door was not stamped and did not have a Direction Card frame on it. Since the doors are interchangeable I elected to swap out the doors in order to keep both the original frame and stamping on the phone. All parts have original finish with the exception of the top box door and the 3/4" strip of pine that I removed and replaced with a matching piece of oak. I cleaned the dirt and grime off the wood using household ammonia, then gave it a good coat of paste wax. I did elect to add the Red Cross mouthpiece and a new green cloth receiver cord to jazz it up a bit.

The next page will show the telephone restored along with excerpts from an 1896 New York & New Jersey telephone directory. I found the special notice and calling directions, most interesting. If anyone has any additional information on or about these pay-stations, I would love to hear from you.



By studying a blown up size of the original Company photo, I'm pretty sure the large Direction plate said:

**DIRECTIONS**  
 OBTAIN RATE and TELEPHONE NUMBER from the SUBSCRIBERS LIST. HAVE THE EXACT AMOUNT OF NICKELS, DIMES, OR QUARTERS READY BEFORE CALLING.  
 DO NOT DEPOSIT ANY MONEY UNTIL TOLD TO DO SO BY THE OPERATOR.  
 CALL THE CENTRAL OFFICE and give exchange and number wanted IN THE USUAL WAY.  
 THE TELEPHONE must be OFF THE HOOK when the coins are deposited ONE COIN AT A TIME.  
 Address all Complaints to:  
 The N.Y. & N.J. Telephone Co.  
 16 Smith Street, Brooklyn

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**LIST OF SUBSCRIBERS**  
 OF THE  
**NEW YORK TELEPHONE COMPANY**  
 AND  
**THE NEW YORK & NEW JERSEY**  
**TELEPHONE COMPANY.**

**SEPTEMBER 1, 1896.**

ISSUED BY THE  
**NEW YORK TELEPHONE COMPANY.**

**CHARLES F. CUTLER, President**      **JOHN H. CAHILL, Secretary**  
**WM. R. DRIVER, Treasurer.**      **U. N. BETHELL, General Manager**

**Executive Office, 18 Cortlandt Street.**

**SPECIAL NOTICE.**

Under a running heading on each page will be found the subscriber's name, the name of the Central Office with which his wire connects, and the subscriber's number. Subscribers are particularly requested, in calling for connections, to announce, first, their own central office and number, then the central office and number of the subscriber with whom they wish to be connected.  
 All complaints in relation to service should be made *by wire* to the Office Manager or Chief Operator, or *by mail* to the General Manager, 16 Smith street.  
 Changing wires necessitates changes in subscriber's numbers, and they should be carefully noted in each edition.  
 Subscribers will be known to our operators only by central office name and subscriber's number, and not by subscriber's name.  
 The use of your telephone by others is an injury to you as well as to all regular subscribers, and is prohibited by contract.  
 Subscribers are requested to notify the Company, in writing, of any errors there may be in this List.

**TO CALL\* †**

Turn the crank briskly; unhook the listening telephone (receiver) and put it close to your ear, when Central Office will inquire: "What number?" Give **Central Office your number and number of person wanted**; when the operator repeats back the number hang up the receiver and wait till your bell rings, then place the receiver to your ear and address person called. If you do not immediately hear his voice, the delay—except in rare cases—is owing to his failure to promptly answer the call. Therefore, hang up the receiver and ring again, then put the receiver to your ear. Speak in a moderate, clear tone, with the mouth three or four inches from transmitter. Loud speaking jars the mechanism of the instrument and produces a confused sound. When through do not fail to hang up the receiver, and call off, pressing the button and turning crank briskly. If you wish to call for a subscriber before disconnection is made, hang up your receiver, press in button, and turn the crank as before; then immediately place receiver to your ear and Central Office will answer.  
 If subscribers will respond quickly when their bells are rung the service will be much improved.  
 \*In some bells a button is used. Press the button and turn the crank simultaneously.  
 †Do not fail to ring off when through talking.

**LONG ISLAND DIVISION,—PAY STATIONS.**

For the convenience of transient customers, and to prevent intrusion on subscribers for the telephone service, we are establishing pay stations at convenient points, to which all transient customers should be directed. Those now open are as follows:

**PAY-STATIONS IN BROOKLYN.**

- Atlantic avenue, No. 404..... Herman Itho, Drug Store
- Atlantic avenue, No. 596..... Louis de Casse
- Bedford avenue, new No. 433..... L H Slocum
- Broadway, E D, No. 412..... Thos E Hardgrove
- Broadway, E D, No. 1016..... J A S Simonson
- Clinton street, No. 300..... Hugh Stevenson
- De Kalb avenue, No. 324..... Geo W Carrougher
- Fifth avenue, No. 445..... Wiggins & Lamson
- Flatbush avenue, No. 353..... Brooklyn District Tel Co (Limited)
- Fulton and Washington streets..... John F Morrisey Jr, Fulton Pharm'y
- Fulton street, No. 423½..... H Seidenberg
- Fulton street, No. 698..... American District Telegraph Co
- Fulton street, No. 1160..... American District Telegraph Co
- Fulton street, No. 1187..... New York & New Jersey Telephone Co
- Gates avenue, No. 533..... Oliver Cotter
- Hamilton avenue, No. 71..... W U Telegraph Co
- Hewes street, E D, No 247..... Herman Boeker
- Marcy avenue, No. 947..... Albert T Pall
- Montague street, No. 191..... American District Telegraph Co
- Myrtle avenue, No. 49..... Ernest Rohlf's Drug Store
- Myrtle and Waverly avenues..... People's District Telegraph Co
- Seventh avenue, No. 108..... American District Telegraph Co
- Third avenue, No 1012, cor 40th st..... J Schaefer
- Third avenue and 65th st..... Brandt & Co
- Tillary Street, No. 3..... Isadore Aschner
- Willoughby street, No. 5..... John Ickes