

Mike Davis  
Board Chairman, [mvtel@verizon.net](mailto:mvtel@verizon.net)  
Levittown, NY 516-735-9765

Barry Hucceby  
Board Member  
Columbus, IN 812-376-8285

Roy Basci  
Board Member  
Brooklyn, NY 718-331-3102

Don Price  
Board Member  
New Brunswick, Canada  
506-466-2208

John Stambaugh  
Board Member  
Dallas, TX 214-368-7481



AN INTERNATIONAL  
ORGANIZATION ASSOCIATED  
WITH THE MUSEUM OF  
INDEPENDENT TELEPHONY

**ATCA**  
**P.O. Box 1252**  
**McPherson, KS 67460**

Official ATCA Web Page: <http://www.atcaonline.com>  
Chuck Eby, Listserv Manager, Manalapan, NJ 732-431-3514, [webmaster@atcaonline.com](mailto:webmaster@atcaonline.com)

John Hucceby  
Editor  
New Castle, IN 765-533-6369  
[j.hucceby@insightbb.com](mailto:j.hucceby@insightbb.com)

Artt Bopp [atca3844@optonline.net](mailto:atca3844@optonline.net)  
Board Member 516-579-7920  
Levittown, NY

Jeremy Walters President  
[jeremy.walters@sbcglobal.net](mailto:jeremy.walters@sbcglobal.net)  
707-554-1014 Vallejo, CA

Bill Provencher  
Vice-President  
Barre, VT 802-476-7189

Cindy Goldsmith  
Office Manager  
Secretary-Treasurer  
McPherson, KS  
[office@atcaonline.com](mailto:office@atcaonline.com)  
620-245-9555

**VOLUME 36, NUMBER 10**

**NEWSLETTER**

**October 2007**



*Antique Telephone Collectors Association*  
*Webpage*

**O**n September 1, 2007 the ATCA webpage celebrated its twelfth anniversary. In 1995 Chuck Eby was introduced to html computer code and developed two rudimentary webpages. One was a "Counseling Resources" page and the other the ATCA webpage. Initially he had webspace on the Buffalo Freenet system until moving the pages to his own ISP when the Freenet became unavailable to non-residents. The pages remained under Chuck's name until [atcaonline.com](http://atcaonline.com) was registered and hosted on the server owned by Bill Meyer of [insulators.com](http://insulators.com).

The [atcaonline.com](http://atcaonline.com) web page has become a worldwide window to our association where a number of telephone collectors have become aware of the association. One popular feature of the site has been the up to date directory of telephone shows. In addition, there have been a number of people who have sold telephones to members through the site's Phone4Sale page. Each available telephone that is identified through the site has been listed with the ATCA listserv (our membership email group) where several of these phones have been purchased.

The webpage is still maintained by Chuck who updates the look of the site fairly often. One of the newest features of the website is a password protected member's only section. Each month the ATCA newsletter, with color pictures, is placed on the website for members to download or print. In addition, the most updated membership directory is available.

If you haven't visited the webpage lately, check it out at [www.atcaonline.com](http://www.atcaonline.com). The login for the members only section is *atca* and the password is *fiddleback*.

**Address change?? Send it to: ATCA, P O Box 1252, McPherson, KS 67460**

Send all ads to: ATCA, PO Box 910, New Castle, IN 47362 **Email ads to [j.hucceby@insightbb.com](mailto:j.hucceby@insightbb.com)**

**Spring Show 2008**

**Indianapolis Marriott**

**Indianapolis, IN**

**May 2: Reception, 6 PM**

**May 3: Show opens, 8 AM**

**May 4: Show closes, 11:59 AM**

As many of you know, the Indy Marriott has hosted some of the largest and best Telephone shows in our history. Our largest one was 177 tables in 1996. Our last one there had over 100 tables and with Interstates 70, 74, 69, and 65 intersecting in Indy, it has great access.

**Northeast Regional Show**

Enfield, Connecticut  
Friday-Saturday, October 12-13, 2007

Crown Plaza-Enfield  
1 Bright Meadow Boulevard  
Enfield, CT 06082  
Phone: 860-741-2211

Bill Provencher at 802-476-7189

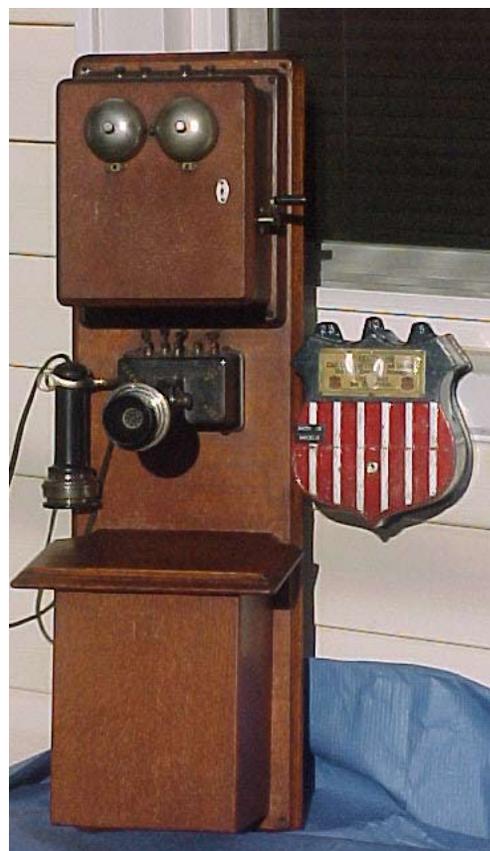
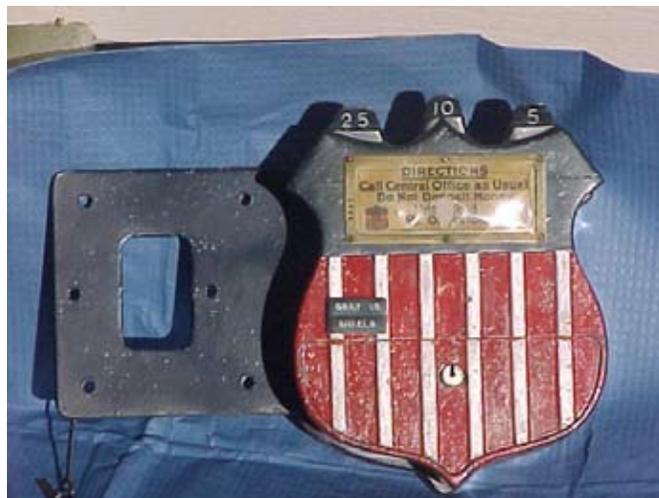
## Mike's Vintage Payphone by Mike Davis

This month we are looking at a Gray #10 also known as the "Shield Paystation." A while back I wrote about a Gray #10A which is basically the same housing. The difference between the two is that the #10A mounts on the front of a phone in place of the transmitter arm and the #10 mounts on a bracket and is situated to the side of a phone. The entire body of the collector is cast iron, the chutes are lead. The paint on this unit is original. It is red, white (sort of a silver) and blue.

As you can see when the drawer is out and the collector is off the mount, the body is very thin and fragile. Like most paystations it dings once for a nickel, twice for a dime and gongs for a quarter.

This paystation was not connected by any wires and was strictly used for manual service. The operator would have requested coins and listened to the chimes through the phone's transmitter. Once a coin was dropped there was no way it could be returned. The collector is attached to a Stromberg 2 box as the one in the Gray catalog was. Several rather heavy but not long screws attach it to the phone's backboard from behind (if they were longer they would come thru the front of the backboard) (see photo). This is of a very nice attractive design and was designed for use by independent telephone companies, not for the Bell System.

\*\*I am still looking for a spare lock that fits the drawer for the 10A I wrote about previously. If you can help me access one please call or email.\*\*



Mark your calendar for the  
May 2-4 show in Indianapolis,  
IN 2008

**NEW MEMBERS:**

Fabrizio Beorchia, 4324  
1705 State Highway 14 North  
Golden, NM 87047  
505-286-1709

Alan M. Goldberg, 4325  
9340 Chestnut Knolls Dr.  
Fairfax, VA 22032-1201  
(703) 978-1511

Mike Zyla, 4326  
2040 Waverly Street  
Philadelphia, PA 19146  
215-732-4084

**RENEWALS:**

Graham Smith, 104  
2013 Midlothian Dr  
Altadena, CA 91001  
626-798-5345

Steve Baldwin, 2479  
18223 SW McConnell Ct.  
Sherwood, OR 97140  
503-625-1488

Alan Lubin, 337

Glenn Loomis, 1629/08

**CORRECTIONS & CHANGES:**

Kevin Shea 4012  
267 Campground Rd.  
Livingston, TN. 38570

Gary R. See  
136 Sandpiper Circle  
Morro Bay, CA 93442-2752  
805-772-4077

Jason Burwell, 3996  
9148 Horseshoe Circle  
Fort Mill, SC 29707-9519  
704-650-6597

Julian Burke  
10509 Sandpiper Lane  
Knoxville, TN 37922

Marsha Corder (#1481)  
1818 Sydney Leigh Lane  
Henderson, NV 89074-5266

Russell Libby  
905 Wiscasset Rd  
Pittston, ME 04345



Ron Christianson  
P O Box 43  
Cave Junction OR 97523  
Website <http://www.museumphones.com>  
FOR SALE: Bell System  
Splicers Cart.  
This comes from a (non-member) visitor to my website, :  
Its located in  
Eastbernstadt, Kentucky.  
Their telephone number is  
606-843-9906.

Frank DeMarco #4261  
50 Paladino Ave, APT 4D  
New York, NY 10035

**WANTED**

I am in need of a W/E  
Perch with the markings of  
152-AB on it.  
(For Headset) Thank you  
for your time.

***“Replica porcelain  
mouthpieces with  
brass threads for  
Kellogg or Western  
Electric transmitters.  
\$60 postpaid. (810)  
610-7043  
damon66@juno.com,  
Damon Atchison, 2122  
Maury Ave., St. Louis,  
MO  
63110-3338”***



*Do something crazy!! Get a flight to San Jose, CA for Saturday, November 10, and go to the 5th annual northern California telephone show.... details on page 4*

# FIFTH ANNUAL

Northern California TELEPHONE COLLECTOR Show

Saint Francis Episcopal Church

1205 Pine Ave., San Jose, CA 95125

## Saturday, November 10, 2007

8am to Noon, ADMISSION \$2 per person

**Table Rentals: \$10.00 ea. (Reserve now with \$\$)**

Send check to: Gary Goff

3805 Spurr Cir., Brea, CA 92823

(714)528-3561 (Gary) (408)377-5864 (Hal)

Simple Directions: Use Yahoo Maps or other internet based map service. The church is located in the vicinity of Hamilton East, past Bascom and Meridian. Hamilton East becomes Pine after crossing Meridian.

Cell Phone Contact day of show: (714) 928-6352

THERE WILL BE A SILENT AUCTION AT 11am. Bring any and all items that you want to donate for the benefit of the two telephone clubs. You may also use the auction for your own benefit.

Coffee and donuts provided. Donations appreciated.



This is an 11" x 11" flanged double sided sign of the first logo associated with this company circa 1904. As far as my records indicate, no single sided LT&T sign of this size and design was ever produced. The one that sold on eBay was marked as a fake, and one can see by the colors chosen for this sign that it truly was a repro. The center field color on an original sign is a 'Robin Egg' blue, and the color behind the orange lettering around the edge of the sign is a deep blue with a hint of purple. The sign is not for sale, just shown for all to enjoy.

### **For Sale:**

In an effort to sell out.  
Large accumulation of N.O.S.  
Ericofone items consisting in  
part of and including 7000 cases  
and 23,3000 caps. These are  
leftovers from the last US manu-  
factuere of Ericofones. Can mail  
or email list with values.

Ron Knappen

608 582 4124

Phonecoinc@aol.com

Mike Davis #2022  
30 Ring Lane  
Levittown, NY 11756  
(516) 735-9765  
email mvtel@verizon.net

### **Wanted**

Unusual payphones!  
Gray paystations, payphones and parts.  
Gray 750 paystation, 50A paystation.  
Early Western Electric payphones and parts.  
Parts or whole WE 1234 touch tone 3 slot  
payphones.  
WE #1 Dial.  
Vault lock for a Gray shield coin collector.

I've got a nice 1960s era oak phone booth for sale. I've owned it for many years, but after a house remodel the booth has no good place to live. The booth is finished on all sides, and has the Bell System logo and "PUBLIC TELEPHONE" etched into the door glass.

If interested, please check out the information and photographs at:

<http://www.dslextreme.com/~oldphone/index.html>

Phone booth is located in Pasadena, CA

Thanks,

Graham Smith, ATCA #104

628-798-5345

---

Jon Kolger #561

6906 Meade Drive Colleyville, TX 76034

(817)-329-5262

jkolger@gte.net

***WANTED:***

Western Electric PEKIN RED dial blank in good condition, for WE 302. As always, seeking quality vintage COLORED

telephones from all manufacturers, particularly Automatic Electric Monophones, round or square base, desk or wall sets. COLORED Western Electric 302 variants, such as those with the two-line switch on the left front corner. I am in desperate need of a blue 302 with blue plungers, dated 1941 or earlier, to complete a set. Always buying NEW OLD STOCK Western Electric COLORED cloth coiled cords still on their wooden dowels. Still seeking a BLUE North Electric desk set, or any COLORED North Electric wall set. Dark Blue Stromberg-Carlson 1543 as pictured on page 58 of Dooner's blue book. COLORED cradlephones from other manufacturers such as Stromberg-Carlson oval base, Leich, Connecticut, Kellogg Masterphone and Redbar, as well as interesting vintage COLORED foreign telephones. Vintage COLORED cradlephone literature such as catalogs, color charts, samples, etc... COLORED dial blanks for vintage Automatic Electric Monophones such as type 40, 50, etc... Matte gold-plated trim in good condition for vintage AE Monophones. Also always looking for unusual acoustic "string" telephones, particularly those with magneto-signalling and/or speaking/listening tubes. Also seeking primitive, homemade, acoustic telephones, the stranger the better. Wanted to buy acoustic telephone literature such as catalogs, flyers, instructions, etc...

Steve Hilsz  
P. O. Box 429  
Salome, AZ 85348  
928-859-3595

***Best Bargain in Dials***

***All brands of telephone dials re-paired, still six dollars flat-rate plus major parts if needed.***

***Wanted:***

Charles Williams items  
Burl wood front door top boxes  
Box transmitters  
American Elec three box set  
figure eight common battery set by Stromberg Carlson

John Dresser

ATCA #406

831-484-1961

fjdress@pacbell.net

David Kuns, #4030

P.O. Box 1852

Chino Valley, AZ 86323

Cell:928-710-3631

Home: 928-636-1588

Koonzeee@yahoo.com

***WANTED***

Keystone receiver and anything Keystone. Original terminal strip for WE #10; E1 seamless handset in original Gray; WE NOTCHED 132E (#4) dial face in nice condition; WE Type 257 "shelf style" wood subscriber set; Single copper conductor cloth covered cord in brown or green as used in early WE P/B's-repro OK; Ear cap for Swedish Amer brass bottom receiver; SC Type 36 wood wall phone w/o trans or receiver; Coil with nickel retaining clip for inside base of SC oilcan

***Maitland Florida Winter Telephone Show***

Saturday Jan 19th 2008      641 S. Maitland Ave. Maitland FL

8am-4pm (setup 7am)      buyer only registration \$5

1st table with registration \$25      additional tables \$20

Send to: Paul Mikula 650 Chapman Ct. Oviedo, FL 32765

*As usual We will have an "open house" Fri eve 5p-9p at our Oviedo address... Phone-talk, food and refreshment buffet style ...Update/Change: This year Paul Linker will be having a Telephone party at his home in StPetersburg after the Saturday Show 5p-9p this is a change from the previous Sunday parties. Paul has a housefull of great phones, if you've never seen his collections you need to check it out this year.*

Do you need a BAIRD three bar magneto?  
 Contact Norm Mulvey at  
 770-844-6277.  
 You can talk Norm out of it for a mere \$55 plus shipping.

Don Woodbury has managed to secure a number of NOS Northern Electric T-7 catalogs that are still sealed in their original mailing sleeves. These catalogs dates from 1948, and they have been stored in the original cardboard box for the last 60 years. They are in absolutely pristine condition — just like they came off the printing press.

He is offering these catalogs for only \$24.53 each for the first one, and \$21.00 for each additional one in the same order. Shipping to your door in the lower 48 and Canada is included in the price.

You can order these catalogs online through his website at:

[http://www.oldphoneworks.com/antique\\_phones\\_details.asp?currency=USD&Phone=420](http://www.oldphoneworks.com/antique_phones_details.asp?currency=USD&Phone=420)

Paypal, Visa, Mastercard, or Moneyorders are all accepted.

Don Woodbury 57 Mack St.  
 Kingston, Ontario, Canada K7L 1N8

John Huckleby  
 2440 W. CR. 150 N.  
 New Castle, IN 47362  
 765-533-6369  
 j.huckleby@insightbb.com

**FOR SALE**

Another metat 302, complete, untested, \$72 plus exact shipping... 202 with F-1 handset, \$85 plus shipping... 202 with E-1 handset, \$100 plus shipping... 102 with E-1, no dial, \$145 plus shipping... 7 digit beveled Western Electric transmitter, \$333 delivered... Original shelf for Western Electric walnut 301, \$75... Original steer horn hook for Western Electric type 21 or blake... Western Electric black transmitter face, \$30... Stromberg Carlson receiver, not nickle bottom, \$40... Western Electric bakelite receiver, \$40... Kellogg receiver, \$35... Need parts, write me or email me...

**The North Electric Company**

By Ken Bushell

Originally written for our friends at the Australian Telephone Collectors Society

In 1884, Charles N. North and George W. Drumheller established a small electrical shop for the repair and manufacture of telephone equipment in Cleveland, Ohio. The firm's name was Drumheller and North.

Mr. North and Mr. Drumheller undertook the venture after several years of experience in telephone operating company work. Bringing, as they did, a broad practical experience to the problems of telephone equipment manufacture, the firm's products immediately achieved a place in the field.

In 1889 Charles North succeeded to the company and the firm's name was changed to the North Electric Works.

In 1899, in association with Mr. George C. Steele, he commenced the business as the North Electric Company. Under the management of Messrs. North and Steele, the company forged rapidly to the front and from the small repair shop on a side street, it became one of the prominent manufacturing concerns of Cleveland, employing over 300 workers.

In 1912, they acquired the Telephone Improvement Company and in 1918, the North Electric Company was reorganised under the laws of Ohio as the North Electric Manufacturing Company. The new company acquired, clear of debt, all the property of the old North Company, including a going factory in Galion, Ohio, and a large group of important patent rights covering machine switching telephone systems.

Charles N. North, who for more than 30 years had been predominately identified with the telephone manufacturing business of the USA, remained with the new company as President.

Mr North remained associated with the company until his death in 1926. Due to declining health, however, he retired from the presidency in 1921. His gradual withdrawal from active work during the last years of his life was a distinct loss to the art of telephony and to his host of friends.

North Electric became a member of the Ericsson Group in 1951 and was to become the oldest continuous manufacturer of telephone equipment in the USA.

Ericsson had bought 60% of the shares in the company for US\$1.68million and three years later invested a further US\$0.4million acquiring a two-thirds majority.

North had at that time approximately 100 employees in four factories, the most important in Galion, near Cleveland. Their production was mainly telephone sets, including the American version of the Ericofon, as well as dials and exchanges for the American telephone companies, There were also large orders from the US Government for military telephone equipment. North developed electronic exchanges for the US Air Force in conjunction with LM Ericsson. In 1960, a factory was bought to manufacture power supply equipment for computer and telephone exchanges.

In 1966, the majority of shares were transferred to United Holdings (a holding company for a group of telephone operation companies that had become the third largest in size in the USA after ATT and General Telephones).

Two Western Electric Dial Candlesticks... New Felt.. 5-H dials No Cords With Receivers. \$175 each or \$325 for the pair, plus shipping. One Western Electric 202 set with 5-H dial and F-1 Handset... rubber receiver cord, no line cord. \$65 plus shipping. One Western Electric Pony Receiver Nice, No Chips, or Cracks... Correct Receiver Cap... \$200 plus shipping.  
 One Walnut Western Electric 293 Compact Common Battery Wall phone.. Nice Walnut.. Wiring Incomplete inside, Nickel Hardware, No receiver or Cords... \$85 plus shipping. One Walnut Western Electric 295 Extension Ringer... Dirty Wood.. Looks complete... \$60 plus shipping.  
 One Walnut Western Electric 294 common Battery Fiddleback. No Receiver.. Black Painted Hardware. \$300 plus shipping. One Nickel Western Electric Switchhook for a Single Box wall Phone... No Switch, Just the hook. \$10 plus shipping. One Metal Western Electric 302 Desk Set, old paint, 4-H dial, cloth Cords... \$85 plus shipping. One Western electric 2AB dial with notched porcelain... \$75. thanks for looking Steve Coleatca 210

DAVID MARTIN #278  
6016 Sheaff Lane  
Ft. Washington, PA 19034  
215-628-9490

**FOR SALE**

□ Photo enclosed of two different hanging sign brackets, the one has its own angular support and the other was help up with cables 36" long □ Black metal rectangular switch boxes, N.E. & W.E., four #6017AP used, and two 6017C new in the box \$6 each □ AUTOMATIC Electric 4055D catalog, telephones, parts, and substation accessories, 60 ppg 8 1/2" x 11' paperback \$50 □ Western Electric Telephone apparatus and cable 1963 340 ppg. 8 1/2 x 11 spirial bound \$55 □ W.E. #6 hardback catalog 350 ppg Telephone apparatus and sulplies \$150 □ Any one need 2 1/2" or 3" gongs or smaller? Let me know, I have extra □ Brass sign "Telephone" 13 1/2" x 2 1/4" with threaded bolt extentions or nuts on the back 11 1/2" apart, old \$75 □ 12" x 18" flange porcelain sign, Telephone Pay Station above a pointing hand, L&LD Bell Wisconsin Telephone Company Connections Everywhere Bell System, rusty edge chips, and a handful of small chips and staining on this side above the hand \$350 □ W.E. oak 6' tall ugling duckling tandem \$2,000.



ED HIMMELWRIGHT #3137

1166 Fishing Ck. Rd.  
Mill Hall, PA 17751  
570-726-6695

**WANTED**

6"x9" Gong Loud Ringing Bells and 20 cycle S. Line Ringers only. Dan Mack, A.E., W.E. New, old stock, or good used all working condition.

ED SELBERG #2832

2918 Neals Lane  
Vancouver, WA 98661  
360-695-0997

**WANTED**

With no damage princess telephones dial or touchtone. Let me know what you have.

JOHN WILEY #1116

6642 E. Vanguard St.  
Mesa, AZ 85215  
(480) 924-7062

**FOR SALE**

□ 3512W Connecticut wooden wall phone 8 button intercom (1905) \$65 □ W.E. 317-N Wall phone (wood) 1907 \$195 □ W.E. 653 Metal wall phone (dial) with F-1 handle \$85 □ W.E. 202 Dial \$85 □ W.E. #5 Dial \$30 □ W.E. 211 HH dial Space saver \$50 □ W.E. 440 HC dial 4-key set \$75 □ Test set Black dial Lineman's test set #1011 \$45 □ Test set Orange dial Lineman's test set #1014-B \$45 □ W.E. 6017-E Key box (metal) \$15 □ LME-35 Ericsson desk set with dial \$50 □ DMT-300 Summary Instruction Manual \$3 □ Phoenix #5575 T-1 Test Set Flip Chart 10 Pages \$5 □ 48v Trouble lamp Clamp on \$15 □ W.E. #11A Receiver \$5

MRS. JACK WILKERSON

1230 Garden Gate Cr.  
Garland, TX 75043  
972-278-5162

**FOR SALE**

As per garage full telephone collection for sale.

RICK ELLIOTT #4113

8410 Oak Stream, Dallas, TX 75243  
rick@grandhall.com

**WANTED**

WE seamless F1 handset.  
I know they are scarce, but there are some out there.

*Western Electric*  
**TELEPHONES—CENTRAL BATTERY**

NO. 1553 TYPE



No. 1553A Type Telephone

The No. 1553 Type Telephone Set is a common battery sidetone wall set with enclosed gongs. It has a metal case finished in black. This set is primarily intended for dial service, but is also intended for manual service in districts where a change to dial service is contemplated.

For dial service it requires a No. 4H Type dial which is not furnished unless specified. Also when specified in the order will be furnished equipped with a No. 61D filter to suppress dialing induction into radio receiving sets.

For manual service it requires a No. 50B apparatus blank which is not furnished unless specified. The leads of the set will be connected for manual service unless sets are ordered equipped with dials.

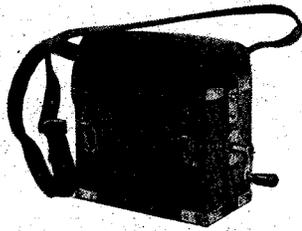
The No. 1553A Telephone is arranged for single party, two-party selective or four-party semi-selective ringing service from central office.

The No. 1553Y is arranged for central battery ringing service as above, and is equipped for local battery talking.

The Nos. 1553E, F, G and H Telephones are arranged for four-party selective or eight-party semi-selective ringing service from central office.

## TESTING EQUIPMENT

### Stewart Test Set

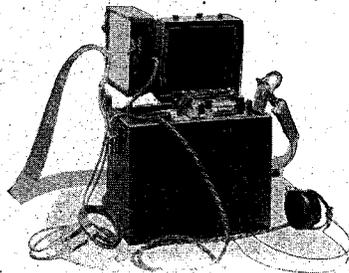


This Test Set tells which way and how far trouble is from the tester without opening the line. Equipped with Detector Coil for use on insulated wire. It is a complete portable telephone, having transmitter, receiver, generator, battery, etc., and talks up as efficiently as a telephone. Comes complete with all cords and clips, full length shoulder strap, and leather top cover.

"Midget" for light service, size 3½ by 5¾ by 6¾ inches, weight 7 lbs.

"Heavy Duty" Midget Type, size 4½ by 6¾ by 8 inches, weight 10 lbs.

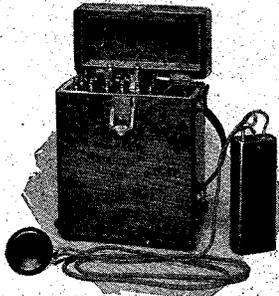
### West Test Set



The Anderson Test Set is a reliable, compactly arranged trouble finder, and is a very efficient portable telephone. Trouble, such as shorts, crosses, grounds, or opens, can be quickly located without cutting the circuit to make the test.

It is especially valuable when used on lines which follow right-of-ways or where they leave the roads, as tests can be made every mile, or at points where the lines can be conveniently reached, thereby locating the trouble within a definite section. Shipping weight, 14 lbs.

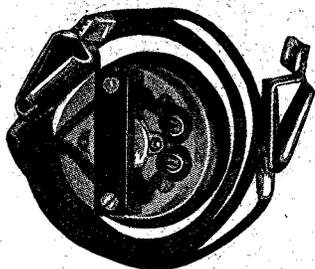
### Telefault-Matthews



The type L Telefault will find wet trouble of high or low resistance, grounds, crosses, split pairs and dead shorts. It will not "noise up" other working pairs. It only sends four volts out on a line. It has a tone test circuit which is more efficient than any other. The exploring coil and

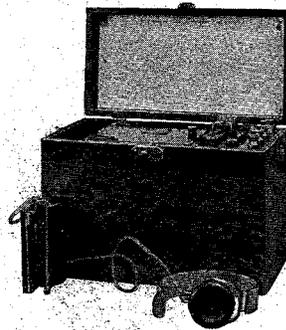
receiver will tell whether power circuits are alive before touching them. Operates on one dry cell. Weight, 8 pounds.

### Stewart Pocket Phone



This Pocket Phone is a combination transmitter and receiver in the same case, to be used as a common battery test set. It talks up as efficiently as a telephone, and when used as a receiver, it is a perfect receiver. Comes complete with cords and clips ready for use. Weight, 4 oz.

### Stewart Cable Tester



Locates shorts, crosses, grounds, and wet spots to an inch.

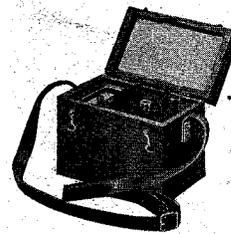
Operates on dry batteries.

As the Exploring Coil is neutral to the tone on the armor the Cable Tester is a success for locating water trouble. This patented feature is found in no other.

This instrument will pay for itself many times each year.

Shipping weight 18 pounds.

### Stewart Detecto-Meter



Stewart Detecto-Meters are the most successful instrument made for locating bad joints, locating low resistance ringers, checking transmitters, receivers, induction coils, etc.

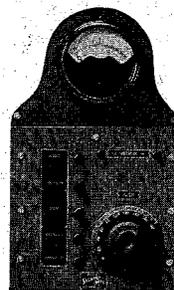
Reads resistance direct in ohms, the same as a volt-meter reads volts. Operates on one dry battery.

The instrument is also a 150-volt voltmeter and a battery tester.

It is portable, only weighing 4 lbs.

A very reliable, inexpensive instrument.

### Stewart Direct Reading Test Cabinet



Reads resistance to trouble direct in ohms. Operates on 30-volts of battery. Can be furnished to operate on 24 volts battery for common battery exchange, if so ordered.

Any telephone man can install it in one hour's time, and anyone can use it. Push button marked Short, and it reads resistance to short. Button marked Ground L-1, reads resistance to ground on one side, and button marked Ground L-2 reads resistance to ground on other side.

Card furnished with each instrument gives distance for each reading on the different sizes of wire.

Furnished with 15-volt or 150-volt voltmeter scale as desired.

Shipping weight, 12 pounds.