



ATCA
P.O. Box 1252
McPherson, KS 67460

Chartered
1971

AN INTERNATIONAL
ORGANIZATION ASSOCIATED
WITH THE MUSEUM OF
INDEPENDENT TELEPHONY OF
ABILENE, KANSAS

Official ATCA Web Page: <http://www.atcaonline.com>

VOLUME 36, NUMBER 12

NEWSLETTER

December 2007

Another successful Regional CA show by Gary Goff

Our fifth annual San Jose show was a big success for many reasons, but I believe personally that one of the highlights, if not the most notable in scope and quality, was the display constructed by John Dresser of Salinas and John Hui of San Jose, with a great deal of non-collector assistance from Jerry Hui. JD came to the show in his fifth wheel, loaded with prized possessions as well as all the lumber to build the display structure. We were unable to enter the church facility until 10PM Friday night because of a meeting that was taking place, so it was long into the wee hours of the morning to assemble the structure and mount the phones. John and Jerre brought half of the phones displayed and the three of them did all of the work. JD and his wife Linda slept in their fifth wheel to ensure the safety of the collection. There were many guesstimates on Saturday as to the current value of the displayed sets.

Another collector/member, Rod Lanthier of Southern California, and my traveling companion, created a display of AE three slot payphones in all the original colors, 12 of them, manufactured and installed by Automatic Electric over the years.

There were 30 tables covered with telephone items of all kinds and I suspect that sellers and buyers were generally pleased with the end results. In closing, I would like to say that without the very generous collector/buyers who attend these shows, there would be little reason for most collectors to come with items to sell to others. John Dresser and John Hui are two collectors who are always at the CA shows and who bring items to show/share with others with little thought about selling, just sharing. I'm indebted to them for enriching the two annual shows that I enjoy sponsoring for our fellow collectors.

And last but not least, I would like to publically thank the long distance folks who attended: Russ Cowell from Virginia, Jon Katz from New Hampshire, and Mike Neale, aka "Kellogg Mike" from Texas.

So you have a friend in the telephone business and you are trying to decide on an unusual gift for Christmas that will catch his or her attention..... a year's subscription to ATCA will only cost you \$35....

Just send the name, address, and phone number, to Cindy and she will include a card from you with the first issue.

If you have not already, please send in your renewal. Regardless of what part of the world a member lives, all pay the same \$35 to belong to ATCA. The Board has also approved a youth membership of \$10 for anyone under the age of 18. A spousal membership remains at \$10.

What??? You need a telephone related gift for Christmas.... here is at least one idea.



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

Wanted

AE Sunburst Dial.

Eric Harding

ATCA # 3490.

Email eric.harding@aliant.ca

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.huckeby@insightbb.com**

*Antique Telephone
Collectors Association
Since 1971*

Board Chairman

Mike Davis
mvtel@verizon.net
Levittown, NY
516-735-9765

Board Members

Roy Basci
Brooklyn, NY
call380@msn.com
718-331-3102

Art Bopp

atca3844@optonline.net
Levittown, NY
516-579-7920

Barry Huckeyby

Columbus, IN
barry.huckeyby@sbcglobal.net
812-376-8285

Don Price

New Brunswick, CA
ve1au@NB.SYMPATICO.CA
506-466-2208

John Stambaugh

Dallas, TX
214-368-7481

President

Jeremy Walters
Vallejo, CA
jeremywalters@sbcglobal.net

Vice-President

Bill Provencher
Barre, VT
802-476-7189

Secretary-Treasurer

Cindy Goldsmith
McPherson, KS
office@atcaonline.com

Listserv Manager

Chuck Eby
webmaster@atcaonline.com

Editor

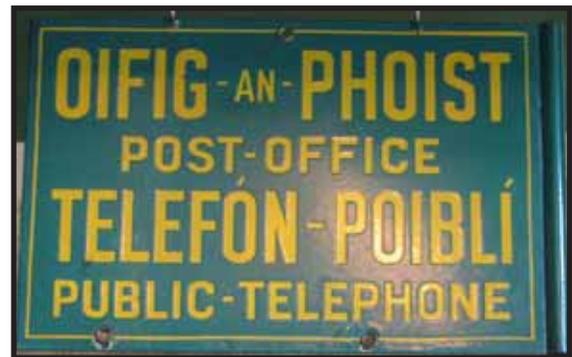
John Huckeyby
New Castle, IN
j.huckeyby@insightbb.com
editor@atcaonline.com

Signs of the past

I have been traveling the globe the past few months looking for unusual signs.

That is why you have not heard from me in a while. I wish. I have just been working too hard and not finding the time to do anything fun. Here is a cool sign I found

in a great little Irish Pub. No the pub is not in Ireland but Philadelphia, PA 19127. It still fits into my travel theme. It is a very cool sign. As you can see, it is in Gallic and English. Now I do not speak Gallic and my wife says I do not speak English too well also. So I can not say for certain it is Gallic. But anyway it still is cool about 16 by 12 or so. Hard to measure after one beer. I tried to buy it but they only would take pounds. Happy Hunting.. Mark



While traveling in Ohio recently, I came across this American Toll telephone hanging on an office wall. It is still there as my offer did not get their attention. On the same trip, I encountered a couple who had over 100 different character telephones, but had never heard of the any collecting clubs.



As usual, when Tom Adams restores a telephone, he is meticulous



Dirty Viaduct phone before Tom began



The finished phone is just fantastic

What is going on with Cindy??

I paid my dues and the label on my newsletter still has /07!

All collectors who paid before November 26, will have /08 after their ATCA number on the label. Collectors who paid after that will still show /07. Cindy updates the list each month, but if you pay after the date she emails the address labels, then your change will show next month. Thank you to all who have already paid.

If you have not paid yet, please send in your dues of \$35 soon.

Hopefully we will see many of you in FL on Jan. 19th at the Maitland show.

Sent to any address in time for Christmas.....

Colbalt Blue paperweight, made by Fenton Glass (now closing) 646 of these were made in 1996 to commemorate the Silver Anniversary of ATCA. When the stock is gone, it is gone..... no more will be made. Shipped to any address for \$24 including the postage.



Send check to John Huckleby
2440 W. CR. 150 N.
New Castle, IN 47362

Just in time for Christmas! Color Laser copies of my collection of phonebooth ads. The kind that fit in to the metal frame that mounts on the wall of your phonebooth. They are \$9 each to your door. Or three for \$25 to your door.

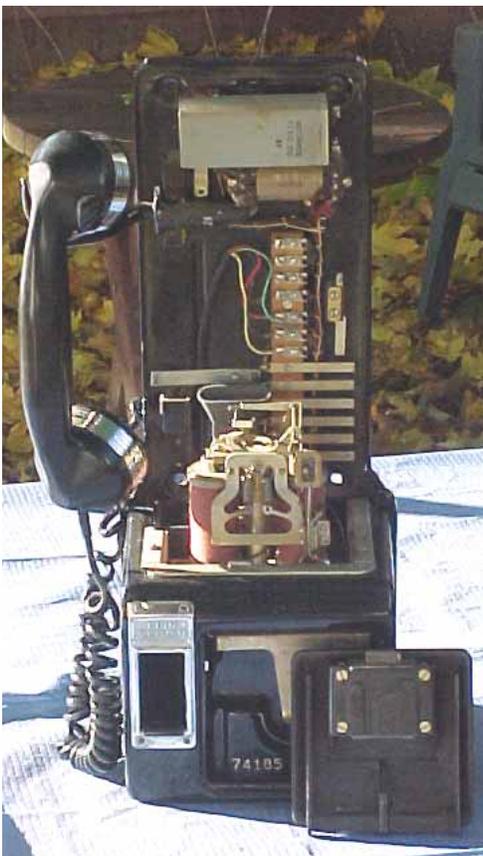
Ron Christianson #822 541.592.4123

Visit "Cyber Telephone Museum"

<http://www.museumphones.com>

Mike's Vintage Payphone by Mike Davis

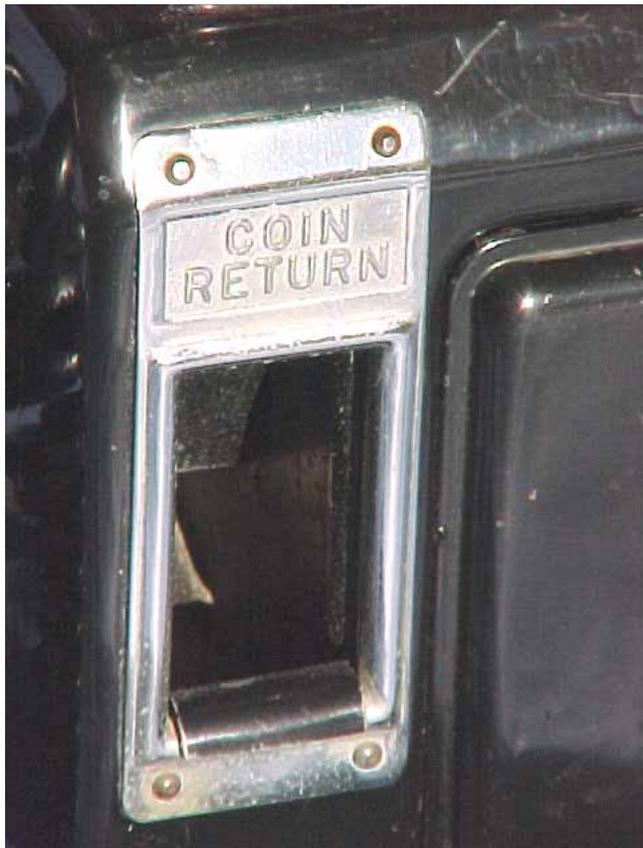
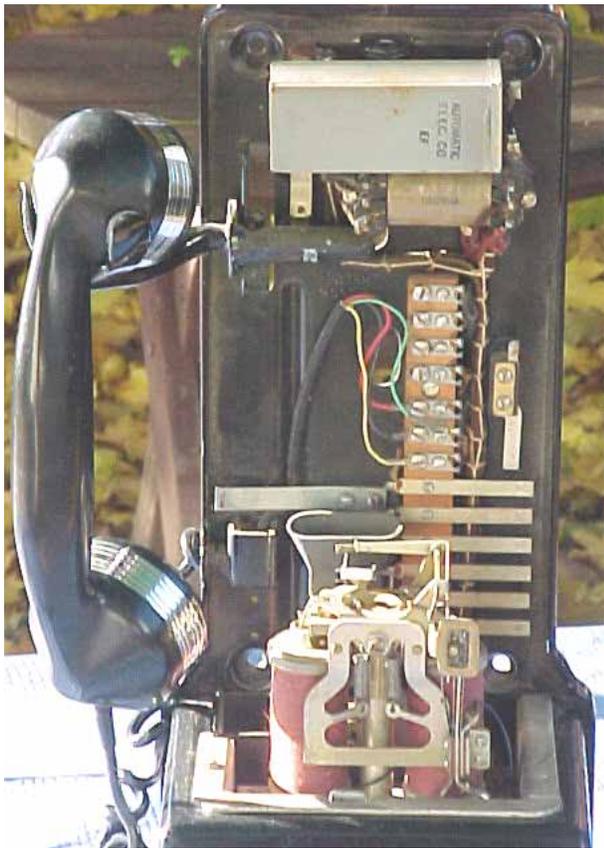
We will be looking at some more AE payphones over the next few months. There are many, many different variations to be found among the AE's. Now we are looking at a code 62-55 which is a pretty early AE model. This particular phone belonged to an independent, "Continental System" in California. The phone is prepay and was set up for ten cent operation. It has the standard AE lead chute and a double coil relay. The terminal strip on the inside is made of wood. I would guess the phone came from an upscale location being that it has both a chrome finger wheel and also chrome plated bands on the AE 40 type handset. The dial faceplate has the daisy as some of the late Grays did, the shroud is bakelite. The handset hook has a slight bend in it. The type that took the AE 40 type handset were made that way, the later hooks were straight. The upper housing lock is a 29S and the vault lock is a 10L. The vault door does not have the usual AE circle impression around the key opening, the later models did. This one is the same as a Gray vault door. This phone has the open coin return, no bucket, and it has the earlier style escutcheon as was used by Gray.



SOUTHEAST REGIONAL PHONE SHOW

Saturday, January 19, 2008
641 S. Maitland Ave
Maitland, FL

CONTACT: Paul Mikula
650 Chapman Ct.
Oviedo, FL 32765



MID-WEST (Nebraska) REGIONAL PHONE SHOW

AT&T Underground Site
Lyons, Nebraska
Saturday, May 17, 2008

Hosts: Wayne Merit & John LaRue
209-498-1321
telephonedirector @handyhoward.net

VIRGINIA REGIONAL TELEPHONE SHOW

Saturday, February 23, 2008
8:00 - Noon (setup at 8 am)
Williamsburg United Methodist Church
500 Jamestown Road
Williamsburg, Virginia 23185
Registration: \$5, spouse, guests free

Tables: \$10

Host: Russ Cowell

Email — WECoguy @ cox.net

Telephone: 757-258-5308

Checks payable to: Russ Cowell

And mail to: Russ Cowell
105 Woodmere Drive
Williamsburg, VA 23185

SOUTHEAST REGIONAL PHONE SHOW

The annual Maitland Florida Winter show will be

Saturday, January 19, 2008
641 S. Maitland Ave
Maitland, FL

8 am - 4 pm (setup 7 am)

Buyer only registration \$5
1st table w/registration \$26
additional tables \$20

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

Plenty of orchard fresh oranges available just two blocks from the show

MIKE DAVIS #2022
30 Ring Lane
Levittown, NY 11756
(516) 735-9765
email mvtel@verizon.net
web site www.geocities.com/mikesvintagetelephone

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. Wanted the payphone coin box pictured will take them with or without the lid.



John Dresser ATCA #406
22584 Veronica Dr.
Salinas, Calif 93908
tel 831-484-1961
fjdress@pacbell.net

WANTED

Burl wood front door top boxes Gilliland & Charle Williams equipment early American Bell telephone equipment. bell tap devices

TOREY MALATIA
7318 S. South Shore Drive
Chicago, IL 60640
Home 773-768-0523
Work: 312-948-4612
E-Mail: tmalatia@chicagopublicradio.org

WANTED

Bottom cap for Burns OST receiver; Perch and transmitter back-cup for WE 40 steel stick with steam finish; Nickel transmitter back-cup and switch-hook fork for Chicago long distance two-boxer.

SELMER LOWE
423-348-6494

WANTED

I'm in need of a small Sumter transmitter with a hole in the backcup for external transmitter wires or just the backcup if anyone has one for sell. Cups with holes for wires usually had one mtg. screw hole in middle of the cup to mount it to the arm. Any help would be greatly appreciated. Thanks and God Bless,

LARRY KOLB
P.O. Box 1244
Haymarket, Va. 20168
703-754-3832 Before 6PM EDT, M-F
larrykolb@comcast.net

FOR SALE

Dial Pulse to Touchtone Converters for VOIP services that do not support Dial Pulse. The unit does not require an external power supply or batteries. Just plug a rotary phone into one jack and the line cord into the other. \$47.00 each. Price includes shipping and handling in the U.S.. Special pricing for orders of 3 or more.

MICHAEL MOENING #2237.

FOR SALE

Antique Telephones For Sale. Please see entire collection at www.mikesoldphones.com. Please send email to info@mikesoldphones.com for prices.

LEE THOMPSON
4290 Lakeside Blvd
Monroe, Ga. 30655

WANTED

Card board die cuts of the Bell, used by Bell companies for various advertising. Also looking for cardboard hand fans used for the same. I'm trying to put some kind of display together using this type of advertising.

BOB KISH
rkish2@verizon.net
315-785-9108 leave message (EST) if not home

WANTED:

48 volt d.c Bodine interrupter motor with extra brushes. Motor must have right angle drive. Complete interrupter with motor and contacts ok. Extra set of contacts even better. All calls will be answered.

FRANK HAGENBUCH #2920
1045 Bonair Dr.
Williamsport, PA 17701
570-326-0932
email fhagenbuch@comcast.net

WANTED

Vacuum tube type amplifiers manufactured by Western Electric, Langevin or Dukane. Western Electric vacuum tubes, speakers, parts and literature wanted also. Please let me know what you have for sale.

WALLY TUBBS

http://home.alltel.net/dt44829
Telephone Collection includes Collection Views, Candlesticks, Wall phones, Payphones, Attachments, and much more.

WANTED

Marked Century nickel transmitter and cup.... will pay or trade parts for this.

MARK TREUTELAAR
[mailto:oldphones@sbcglobal.net]
3424 S. Howell Ave.
Milwaukee, WI 53207
414-769-6782

WANTED

I'm looking for several AE ringers .Type 32 bake-lite subset ringers Thank you

SELMER R. LOWE JR.
 srljr@embarqmail.com
 423-348-6494

WANTED



Does anyone have a DC ringer like the one pictured that they would like to sell. Any help would be greatly appreciated. Thanks and God Bless, Selmer

RON CHRISTIANSON
 P O Box 43
 Cave Junction OR 97523
 Home 541 592 4123
 Wireless 541 287 0169
 Email ron@museumphones.com
 Website http://www.museumphones.com

WANTED



Stationary Receiver Hook as shown in photo.

ALLEN ROCKEFELLER #3642
 24 FAIRVIEW PLACE
 HAUPPAUGE, NY 11788
 631-234-4004
 arock1313@optonline.net

WANTED

- WE A1 in any condition. Repaint, no paint, no handset, no dial ok.....
- AE small transmitter w/cup for stairstep candlestick,...
- SC receiver shell only,....
- NE NU Handset,
- Mercedes dial actuator shunt arm & spring or trashed dial w/contacts.
- American Electric trans cup for candlestick.
- WE dial number plate retaining clips.
- PAX celluloid number card.

DONARD MYERS #242

WANTED

- Ringer Bell - Marked Wilmott Hobbs MFG CO Bridgeport, Conn. MFG-Bells marked on the inside.
- Sumpter Generator 3-4 Bar Mag.

ED HIMMELWRIGHT
 1166 Fishing Creek Rd.
 Mill Hall, PA 17751
 570-726-6695

WANTED

- Black 9 foot spade end 4-cond. Coil Cord S for IHs & Stromberg. N.O.S. or good used condition.
- 1-#2200 IH or Stromberg Ivory T Tone trimline desk phone like new or N.O.S.
- 1-A.E. Styleline Lt. Yellow wall phone like new or N.O.S.

JOHN WILEY #1116
 6642 E. Vanguard St.
 Mesa, AZ 85215
 (480) 924-7062

FOR SALE

- Installation (BSP) handbook, 1930's-40's-50's \$195.00
- W.E. 202 HC Dial \$95.00
- Kellogg wooden wall phone (wired incoming only) \$95.00
- W.E. 211 Space saver \$50.00
- W.E. 509 Receiver (Plastic Cap) \$10.00
- W.E. 509 Receiver (Bakelite Cap) \$10.00
- W.E. 10A-3 Handset hanger NOS/boxed \$10.00
- BSP for 830/2830 AIM phone set \$5.00
- 1947 Sample page of San Francisco and Oakland Chinese telephone directory \$5.00
- Ameritech bag, 14" x 7 1/2" x 8" (NOS) \$25.00
- Nortel Telecom pocket knife (NOS) \$5.00
- W.E. web belt 2" x 68" (NOS) \$5.00
- W.E. 3" bells \$1.00 each
- Wooden cross-arm posts \$1.00
- W.E. Dial cup w/bracket \$5.00
- Illinois Bell Directory binder (green) \$25.00
- W.E. AH Subscriber Register \$5.00
- W.E. number plate ringer for 202/302 \$5.00
- SE-8 Buzzer \$1.00 each
- BSP for U type relays \$5.00
- W.E. 202 Telephone Lead Newspaper Print Block \$5.00

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

FOR SALE



- Embossed Western Electric battery jars, complete with insides \$75 each
- Photo enclosed of my Wisconsin telephone sign from my October ad
- W.E. dial porcelain rings #164C3, black with a white dot in place of the numbers and letters, \$1 each - 50 available
- Columbia Local and Long Distance Telephone sign, porcelain, flange, two sided, eight by sixteen inches, faded and chipped with some rust \$150.
- Embossed glass battery jars Monarch, Novelty Electric, Philadelphia, Burns Microphone Cell, St. Louis, Ostrander, New York, Brooklyn \$60 each

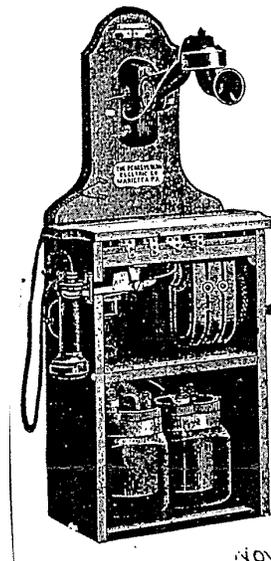
JERRY MORAN MEMBER # 4093
 510-530-9342 or e-mail at nmi@flash.net.
 Visit my web site at www.nmitraining.com

FOR SALE

Telecom 101 Video In Four Parts: A twenty-five minute narrated tour through the Roseville Telephone Museum, one of the finest Telco museums in the country! A thirty-five minute tour through the local loop. Starting in the power room of a central office you see: the ESS switch, mainframe, cable vault, manhole, cross connect box, aerial and buried terminals, and the demark. We go into a Controlled Environment Vault and see a remote switch and a DSLAM (DSL Access Multiplexer.) We visit some wireless sites and the mobile switching office (MSO) including a site camouflaged as a pine tree. A nine-minute video from Corning on the manufacture and use of fiber. A humorous look at an experimental "pole farm." A company at a secret location is growing utility poles that are ready to use as soon as they are harvested. They grow without leaves, bark or branches! Seven minutes. Normally sells for \$79.95 plus \$6.95 S&H ATCA MEMBERS: Only \$40.00 plus \$6.95 S&H Specify VHS or DVD!

JAMES A. GOODWIN #554
 1438 Fawnvalley Ct.
 St. Louis, MO 63131
 (314) 822-8138

WANTED



Complete transmitter assembly for this phone. Will pay cash or trade.

DWIGHT ARMENTROUT # 2248
 68825 Los Gatos Rd.
 Cathedral City, CA 92234
 Switchboard555@aol.com or
 760-831-9016

WANTED

- Does anyone have an extra No. 23 Operators Headset Plug for Stromberg-Carlson Switchboard. (This is a four prong plug.)
- Also looking for a few cords, plugs, or sleeves for the plugs. All are for my Stromberg-Carlson No. 105 Magneto Switchboard. Thanks.

DOUG ROSE #3176
 41 Mayo St.
 Framingham, MA 01701

WANTED



Collectors....I am looking for any information on this sign. A beautiful 60 by 14 porcelain sign with a copper frame. It has the "21" Bell so it's old. I was told it came from a Train Station in Concord New Hampshire. I have never seen a sign like this before, any insight is appreciated....

STEVE HILSZ, #22, Salome, Ariz. has furnished the following article of the month which explains the necessity of including a "network" when rewiring old telephones for use on today's network in order to obtain satisfactory performance. Steve is a charter member of the ATCA and a Telephone Pioneer and states that he is available to offer technical assistance to members who request it. He has also offered to furnish simple wiring diagrams for a small fee.

**UNDERSTANDING THE TELEPHONE INSTRUMENT
THE NETWORK**

A certain amount of confusion has evolved in recent times, regarding the need for a "network" when rewiring or building a telephone set. First of all, let us trace the basic history of the "network" and determine just what we are discussing.

When Thomas Edison discovered the principle of the carbon transmitter, he recognized that it could be used as part of the primary circuit of a transformer. By placing his transmitter in series with a battery, then into the primary of a transformer, he could boost the efficiency of the relatively small signal differences from the transmitter in such a manner as to enable the secondary winding of the transformer to become part of the "line" circuit of the telephone apparatus. The function of a transformer is to convert small voltage to a higher voltage, or vice-versa. Thus, the very few volts from the local battery circuit of the transmitter could become many times more volts by the time the signal was impressed upon the line.

This transformer circuit was given the name "induction coil" and to this very day the small transformer in telephone networks is still identified by that name. Since only alternating-current can result from the output of an induction coil, Edison was able to solve another problem. Since the receiver was in the secondary circuit, in series with the coil and line, it was entirely free from direct-current. Now, there would normally be no problem with direct-current across a receiver, but this stands true only if the voltage is of the proper polarity. As a receiver is basically an electro-magnet sitting near a permanent magnet, it is important that any magnetic field produced by the influence of a direct-current source be aiding the permanent field. Otherwise, a steady demagnetization of the permanent magnet would result. This would cause the receiver to lose efficiency, eventually becoming "dead."

As telephone sets evolved to common-battery (powered from line voltage created at the Central Office), the wiring of the induction coil changed a bit. The transmitter was still in the primary circuit and the receiver in the secondary. But now some kind of blocking device would be necessary to couple alternating-current to the receiver, yet prevent the direct-current line voltage from damaging the receiver. A capacitor inserted between the secondary winding of the induction coil and the line solved this problem.

If you open any older telephone, pre-1950, you will find both the induction coil and the capacitor to be very large and readily-visible items. As technology pro-

gressed, these items were miniaturized and placed on a printed-circuit board, or encapsulated in what became known as a "network." The networks of today perform additional chores, such as balancing the line circuit to provide constant signal strength for the telephone instrument. They eliminate "side-tone," which is the "echo" effect caused when the local transmitter output is impressed upon the receiver during conversation. There are now extra components in the network which stabilize the signal, and guard against transient pulses "clicks" when the hookswitch is operated, and there are suppression networks to keep dial pulses from interfering with local radio reception.

If you intend to build or rewire a telephone instrument, it is essential to use a network. Here is what you can expect to encounter if you "direct-wire" a set:

1. You will cause damage to the transmitter because it will have the line voltage across it at all times. The carbon granules will heat up, and change their electrical nature in such a manner as to cause "frying" noises, and eventually the carbon granules will no longer conduct properly, with a "dead" transmitter as a result.
2. The receiver, unless it is properly polarized, will demagnetize, and you will lose sound quality, eventually the receiver will be "dead."
(If you will examine an old external-terminal receiver, you will sometimes find the letter "Z" stamped next to one of the terminals. This was done to inform the user that the terminal marked "Z" was to be connected in a battery circuit with that post on the Zinc terminal of the battery. The zinc terminal is the negative post of the battery. While it was never a good idea to use the receiver in a battery circuit, nevertheless some circuitry called for this method. Thus, the explanation for the "Z" on the top of some older receivers).
3. Without a dial suppressor, your telephone will emit "clicks" as pulses are created across the telephone line.
4. Without a network, your instrument will "load" the line. All other instruments will lose efficiency as the line voltage drops. Output from your instrument will be erratic, in the form of a pulsating direct-current instead of a superimposed alternating-current signal.
5. Without a network, the receiver cannot be properly protected with a "varistor." A "varistor" is derived from "variable resistor," and is essentially a direct short until voltage is impressed across it. When you go on-hook or off-hook, you cause a "spike" of energy to be impressed across the receiver. The varistor absorbs this spike. Such spikes of energy can cause the receiver diaphragm to be held back by the direct-current and then suddenly released. The resulting "click" might be sufficient to cause damage to the eardrum of the user.

It does not take much longer to install a network than to "direct-wire" a telephone instrument. The main connections are the two line wires, the dial pulse and shunt leads, the receiver and transmitter leads. The benefits you will derive are many, and you will be protecting the telephone system as well.

AUTOMATIC ELECTRIC 1-A

by Roger Voeller, No. 1185

By the mid 1920's, the faithful old candlestick phone was starting to look a little old fashioned, and while it wouldn't disappear for another 25 years, subscribers were starting to ask why they couldn't have handset telephones like the ones they saw in movies and in Europe. In response to demands by both subscribers and operating companies, all manufacturers tackled the problem of designing efficient handsets using up-to-date materials and technology.

About 1925, Automatic Electric responded by putting a cradle rest on a standard candlestick base so it could hold a new bakelite handset. The resulting telephone set was christened the 1-A "Monophone." In fact, "Monophones" would continue as A.E.'s trade name for all its handset telephones into the 1960's.

The round base of a 1-A may be made of either metal or bakelit. Inside are eight consecutively-numbered screw terminals arranged in a semicircle. The bottom cover is secured by a single screw, and is usually covered with brown felt, although some sets came with a rubber cushion ring instead. 1-A bases and candlestick bases were identical; both had the same part number in an A.E. catalog of the late 1930's.

Early 1-A's had a cradle rest mounted on a rather tall neck, but later versions were shorter. The cradle itself may be either metal or bakelit, and usually has a single "compound-acting" plunger which operates the hookswitch. The compound plunger was designed to assure operation of the hookswitch if the handset cord accidentally fell across the cradle during hangup. A thin metal plate forms the "floor" of the cradle, and usually is clearly marked "MONOPHONE — Automatic Electric Company".

Handsets used on the 1-A were officially designated "type 38" and are characterized by their weight and large mouthpiece. Mouthpiece and receiver caps are secured to the handle by threaded brass bands which are often very difficult to remove. The bands were usually painted black, but were sometimes chrome or gold plated.

However, they were never left bare brass, polished or otherwise.

1-A's were made in colors other than black, and many of them can be seen in movies of the 1930's and 1940's. Today, these color sets are highly prized by collectors all over the country.

A.E. made a great many dials of differing design, but the one most usually found on 1-A's is the type 24, introduced about the same time as the 1-A. Fingerwheels of A.E. dials were usually painted black, but like handset bands, brass fingerwheels were never left bare.

Like all sets of its type, the 1-A needed a separate subset containing a network and ringer. A.E. made two different anti-sidetone subsets know as "Metal" and "Type 32."

METAL: The metal type is easy to recognize because of its large size and "stretched oval" pattern stamped in its front cover. Induction coils (three winding type) in metal subsets may be marked with part number D-281901-A, and should have six solder terminals numbered 1, 5, and 3 on one end, and 4, 6, and 2 on the other. A 1MF condenser and a ringer complete the set. Connections to the line and four-conductor cord are made on a terminal strip mounted on top of the induction coil with screw terminals numbered 1 through 7 and 8.

TYPE 32: The type 32 is smaller than the metal set, and is made of heavy bakelite. Its front cover is held on by two screws with large chrome-plated heads. Its induction coil has large square bakelite ends which hold screw terminals numbered 2, 10, 5, and 4 on one end, and 3, 8, 6, and 1 on the other. This induction coil was also used in the later type 34 desk set. As in the metal version, a bell and 1MF condenser complete the set.

HOOKUP

Connection of a working 1-A to a working subset of either type is very simple. Terminals 1, 2, 3, and 4 in the desk stand (base) connect via a four-conductor cord to the same-numbered terminals in the subset. A.E.'s original color code was: orange to #1, red to #2, brown to #3, and black to #4. Type 32's usually have separate terminals marked L-1 and L-2. In the metal type, line wires should be connected to terminals

#4 and #5. Some 1-A's have four-contact hookswitch and some have a five contact hookswitch, but either type will work with either subset if wired properly.

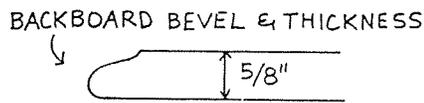
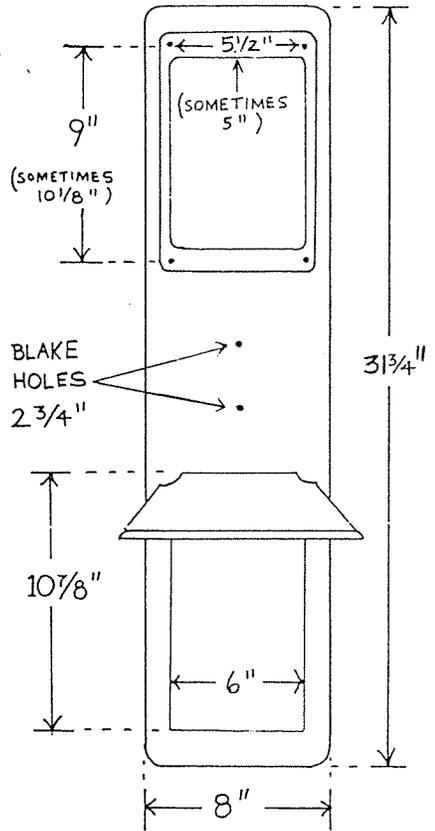
If an A.E. subset is unavailable, a 1-A can be connected to a W.E. subset having a 101-A induction coil if part of the base wiring is modified. A GTE mini-network will not fit inside a 1-A base, so if a mini-network or potted 425 network is used, a five-conductor cord is needed to connect the base to the network. Regardless of the fact that many telephones appear to work when straight-wired without a network, this arrangement is not advisable or recommended for the 1-A or any other telephone.

Overall, A.E. equipment is among the best-designed and most reliable ever made. However, the transmitter in type 38 handsets is often a weak spot. Very early 38's used a transmitter which was only slightly different from the one used in candlesticks, and these are unsuitable for modern use. Later 38's used a capsule transmitter which may be marked with the part number D-38273-A and which has two screw terminals. These capsules may or may not work well enough for everyday use. A.E. also provided a retrofit mouthpiece for 38's which used the capsule designed for the later type 41 handset. Since the type 41 is still in use, replacements are not a problem, but they must be used with the retrofit mouthpiece.

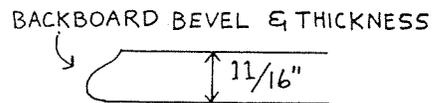
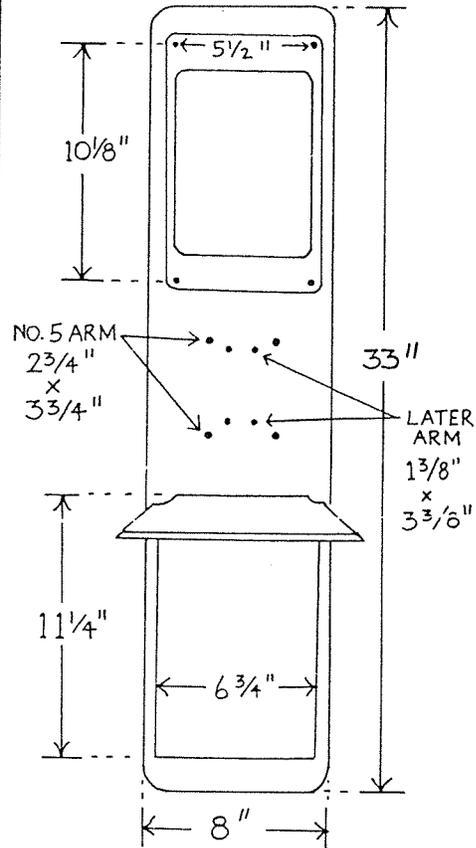
Performance of a type 38 capsule sometimes can be improved by a couple sharp taps with a screwdriver handle to loosen packed carbon granules. By various means, a modern T-1 capsule can be put in a handset of this type, but there will be some sound distortion because the holes in the mouthpiece don't match those in the capsule very well. In the end, it will be up to the user to decide what is or is not acceptable performance from whatever transmitter is used.

Receiver elements in type 38 handsets often "ping" and "pop" in an annoying (and sometimes) painful manner. Two possible remedies are to simply replace the original element with a modern U-1 element and some packing material, or else attach the varistor from a U-1 element to the terminals of the original element. Again, the user will have to decide what is best in each situation.

W.E. 3-BOX



W.E. 2-BOX



This article is intended to help "clear the air" for many collectors who are constantly confused upon finding a piece of Western Electric equipment such as a battery box, a backboard or a top box. The finder usually recognizes the article as a piece belonging to the W. E. Co., but often is confused as to whether it belongs on a 2 box or 3 box (Blake) set.

Before we get into the "meat" of this subject, I want to emphasize once and for all, that I am not a professed expert in this field. These findings are based on sparse early available records plus a study made by comparing with various collectors who are owners of one. Also keep in mind that this set was the very first one that was made for the Bell Company by the Western Electric Co., so some variations may still occur.

BACKBOARDS: The dimensions shown in the sketches are self-explanatory. The big difference in the backboards are the **thickness** and the **bevel** as well as the **length**.

BATTERY BOXES: The outstanding difference is the **length** and the **width**. A good indication is a quick look inside under the shelf. Since the 3 boxer has a shorter length, you will see a hole drilled in there to "clear" the vent for the wet cell battery.

TOP BOXES: The 3 boxer was not stamped with a "type" number nor did it ever contain an induction coil. The 2 boxer most always was stamped with a "type" number so if it was used with a #5 arm, the induction coil was absent. When used with the later type arm, it had to contain a coil.

It is suggested that this article be saved and placed in a binder along with other future monthly articles that will appear. In a short time you will have a good factual book of historical knowledge for future reference.

Dreyfuss Designed W.E. 302

In his autobiography Buckminster Fuller stigmatized industrial design as "the greatest betrayal of mass communication integrity in our era." Some years later, however, he praised Henry Dreyfuss as a leader in "design revolution".

In 1928 Dreyfuss rented an office for twenty-five dollars a month and began executing commissions for such minor articles as snaps, buckles, and doorknobs. These jobs brought in little money and less publicity. When Dreyfuss moved to a new office on Fifth Avenue in 1929, he furnished it with a borrowed card table, folding chairs, and a twenty-five-cent philodendron. He could afford only two employees, secretary Rita Hart and business manager Doris Marks, a Vassar graduate whom he married the next year. Business was unpromising — primarily small things like hardware, plastic cigarette lighters, keys, watches, and canning jars. Most manufacturers who consulted him wanted a veneer of style applied to a product already designed by company engineers, but Dreyfuss's association with Bell Telephone Laboratories proved that he considered himself more than a decorator.

Bell's first desk phone with speaker and microphone in one hand-piece, introduced in 1927, looked awkward (WE 202's) even though engineers had based its design on the head measurements of four thousand people. Seeking a better design, Bell in 1929 offered a thousand dollars to each of ten designers recommended by the Art Center to sketch the ideal telephone. Despite the potential publicity of associating with a national corporation, Dreyfuss turned down the offer because he thought redesign of the phone should be conducted in collaboration with company engineers. A year later, admitting he was right, Bell hired Dreyfuss as a consultant on the desk phone project. Designs furnished by Bell's ten "commercial artists" had proven impractical because they failed to consider functional requirements. Gustav Jensen's model of a set resembling the later Princess phone, for example, had a thin, straight handle, with six sharp angles running its length, which would have been uncomfortable to hold. Before the company retained Dreyfuss, its experience indicated that "the application of art to industrial objects" would fail until it overcame the "handicap" of artists with no knowledge of manufacturing. Dreyfuss's insistence on working with Bell's engineers made him seem

just the man for the job. He began in 1930 to develop a new desk phone. Introduced in 1937, the 302 remained standard until 1950, when another Dreyfuss model replaced it.

Submitted by Marsh Davis

TOM VAUGHN'S SIGN THOUGHTS

Over the years I have seen many 1921 Bell 11x11 signs at shows and in collections (unfortunately I've only seen one on a building). I have grouped the different companies below in order of their rarity. This grouping is only an estimate and might differ from how others might group them.

OBSERVED RARITY GROUPING

VERY RARE: Dundee T&T, Bell Tel. of Nevada, Northwestern Bell Tel., Diamond State Tel. and Delaware & Atlantic T&T.

RARE: Chesapeake & Potomac of Virginia, C&P of VA., C&P of W. VA., C&P of Balto City, and Citizens Tel.

SCARCE: Chesapeake & Potomac, Ohio Bell, Southern New England, New England T&T, Indiana Bell, Cincinnati & Suburban, and Pacific T&T.

UNCOMMON: Mountain States T&T, New Jersey Bell, Wisconsin Tel., Southern California and Southern Bell.

SEMI-COMMON: Southwestern Bell, and AT&T.

COMMON: New York Tel., Bell Tel. of Pennsylvania, Illinois Bell and Michigan Bell.

Most of these signs are identical except for the company names. There are some exceptions. Here are the exceptions I've seen:

- 1.) The Citizens Tel. sign has larger printing of the companies names.
- 2.) Only the AT&T and Dundee T&T signs use the wording: "And Associated Companies".
- 3.) The '21 Bell used in the Bell Telephone Co. of Nevada sign is slightly different than the other '21 Bell 11x11 signs.
- 4.) Some signs have a thin white stripe border and others have a thicker border. The thicker border was used first.

ATCA ROOTS

by Chuck Eby

ORAL WATTS

The first name that comes to many telephone collector's minds when thinking about the early days of the ATCA is Oral P. Watts, ATCA number 1. Oral was the first telephone collector to join the ATCA on September 26, 1971.

Prior to the formation of the ATCA, Oral travelled to LaCrosse, KS, to participate in the annual sidewalk bazaar at the invitation of Clarence Smith, Secretary to the Chamber of Commerce. On Oral's first trip he took a 12 foot trailer and a van filled with old telephones and parts. According to his wife Malone, this created quite an interest in old telephones in the town.

Oral began his interest in old telephones after receiving an oak wall phone from a nephew. After ignoring the phone for several months, he decided to wire the bells to the generator to make the bells ring. He acquired another phone and rewired the two to work together. While working on the railroad he became inspired to collect additional instruments and spent his days off scouting the country side for old telephones. By 1970 his collection became quite large and he formed **The Old Telephone Exchange** as a part time business venture to sell excess telephones and parts.

Oral was very much interested in the ATCA and was elected as one of its first directors. He served in this capacity for two years. Oral was always telling others of the organization and in the first ATCA newsletter wrote a letter encouraging members to locate other collectors in order to increase the membership. Oral remained an active telephone collector in spite of a long illness prior to his passing away on August 13, 1985. His wife Malone maintains an interest in old telephones and is currently an active member in the ATCA.