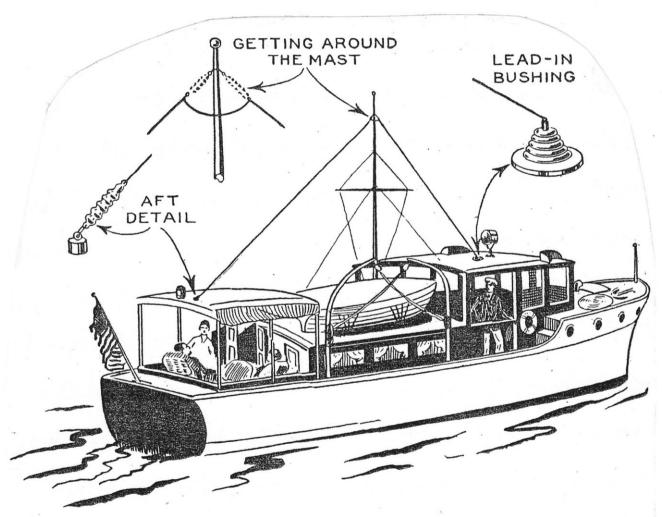
2016 PDF edition

Old Familiar Strains

a newsletter for collectors of radio strain insulators and related items Volume 8 No. 2 April, 2001



AN ADEQUATE RADIO ANTENNA INTERFERES IN NO WAY WITH EITHER THE LOOKS OR THE OPERATION OF THE SMALL CRUISER

The DeJur 105 Lightning Arrester

By Phillip Drexler and Dan Howard

DeJur, a familiar name in electronic controls, also sold at least one lightning arrester in the 1920's.

Sensory, Frost, Barkelew, and other manufacturers from the 1920's utilized visible spark gap designs. Of these, the DeJur 105 certainly appears the most "economical" in construction. Instead of a conventional porcelain base, the base is molded in dark gray hard rubber. Fahnestock clips take the place of binding posts. The mica lens is held in place by a friction-fit nickel-plated ring. Despite ad and box illustrations to the contrary, all markings are recess-embossed on the unit. The base measures 2-1/2" in diameter and the window, about 1-3/8".

Many air-gap arresters use pointed electrodes like those in the DeJur ad. Pointed electrodes are often favored because they ensure lower breakdown voltages. Again unlike the ads and box illustrations, all of the DeJur arresters we've seen actually have blunt electrodes! While blunt electrodes would be less likely to arc-over or burn out than pointed electrodes, a conservative radio owner might actually prefer the lower breakdown voltage of the pointed electrodes, rather than risk lightning damage.

The only ad we have for the DeJur 105 is from a 1928 catalog, confirming our speculation of an early manufacture.

De Jur Lightning Arrester Moulded of a high heat di-

electric material. The accepted commercially used air gap is incorporated in this arrester. It is weather proof outdoor and indoor use under condition. Transparent casing

arrester. It is weather proof and is intended for both outdoor and indoor use under any climatic weather condition. Transparent casing covers the air gap. Connections are made to large Fahnestock clips. Approved by Underwriters Laboratories.

Dejur ad from 1928 RASCO catalog (courtesy of Phillip Drexler)



Close up of DeJur 105 arrester with the cover removed (note the blunt electrodes)

Having a Blast with Masts

By Dan Howard

Like peacock blue pin insulators or ruby red lightning rod insulators, certain items have universal appeal drawing appreciative looks not only from knowledgeable collectors, but also from the public at large. I must say that I'm as much a sucker for "beauty queens" as anyone.

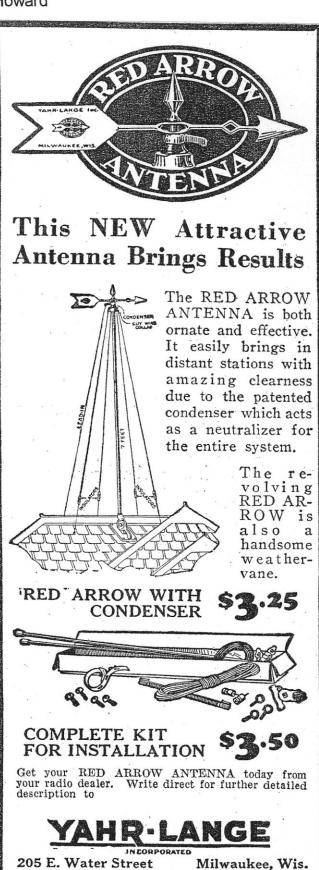
A similar thing happens when I'm doing insulator research. It's often the really "weird" looking stuff that catches my eye and ends up getting copied into my files. Here are a few that have come my way recently.

Red Arrow Antenna

A few years ago¹ we looked at Yahr-Lange's Super Ball antennas. I've always been fond of those neat chrome mast toppers. Yet, they are relatively common when compared to the recently-discovered **Red Arrow Antenna**, also from Yahr-Lange Inc. I've only this one ad for the Red Arrow Antenna, and I've never seen the antenna itself. The table below summarizes what little we do know.

When I first saw this ad, I immediately thought of those impossibly rare weather vanes with the ruby red glass tails. Though this makes a poor second to those beauties, I must say that it would be a terrific addition to any collection.

Another Yahr-Lange product is featured at the end of the article.



¹ See OFS 4/97.

Red Arrow

Yahr-Lange, Inc.

Advertised

Mast length

1930 7 feet

Base insulator

Mfg by:

Yahr-Lange patent

Lead in connection wiping contact

The Super Mas TennA

Another "super" offering is this Super Mas TennA by the Gustin-Bacon Manufacturing Company. Like the Red Arrow, this unit incorporates a tall mast. In this case, a telescoping mast is used with upper and lower guy wires. Unlike the Yahr-Lange unit, an insulator at the base of the mast makes the mast, the arrow, and part of the guy wires function as the antenna. As such it functions as a rod antenna and would likely give good omni directional reception.

Note how the company's G C trademark is incorporated into the sheet-metal arrow stamping. I assume that, like the Red Arrow antenna, the arrow is free to turn as a weather vane. Of course in this installation the entire mast is insulated so there is no need for wiping contacts to connect the arrow to the antenna circuit.

Little is known about Gustin-Bacon, a Kansas City, MO company, but more information is always welcome.

Super Ball

Yahr-Lange, Inc. 1926 – 1930 10 feet Yahr-Lange patent binding post





Brings Good News to the Radio World!

A Vertical Aerial

Gets stations, increases the selectivity and signal strength.

Approved by Prominent Radio Engineers

Sold by large Jobbers and Dealers Write for FREE BOOKLET

Gustin-Bacon

Manufacturing Company

Dept. 1128-N

Kansas City, Mo.

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Tele-Vanes

The Ward Products Corp. of Cleveland, OH, had a long and interesting history that I'm sure we'll revisit in the future. For the time being however. I wanted to highlight their Tele-Vane antennas, the Circle-Vane and the Dymon-Vane. What makes them of interest here is their unique styling. The boom of each antenna is shaped like an oldfashioned hunting arrow - complete with arrowhead and tail. In that way they resemble the weather vane style radio antennas that we looked at earlier. Beyond that, additional ornamental scrolls, finials, etc., make these antennas real standouts.

The Ward Circle-Vane antenna: Ward's Circle-Vane antenna (model TV-300) was the first in the Tele-Vane series, introduced in 1952 or early 1953. It is a traditional Yagistyle antenna with a series of 10 parallel elements.

Ornamental circular reinforcements are used where the boom crosses the mast. To me, the circle makes it look like the arrow is piercing the heart of a target!

According to Ward, the Circle-Vane's enhanced gain (especially on channels 2 through 6) makes it more suitable for rural areas. Such an antenna would be well suited to use with an antenna rotator for maximum effectiveness.

The Ward Dymon-Vane antenna: Introduced in late 1953, the Dymon-Vane conical antenna (model TV-310) is advertised as a good general-purpose antenna.

Ornamental trim at the center adds rigidity and gives the antenna its "Dymon" (diamond) shape. The "conical" element design places several elements at the front of the boom, with their ends sweeping forward like cat's whiskers.

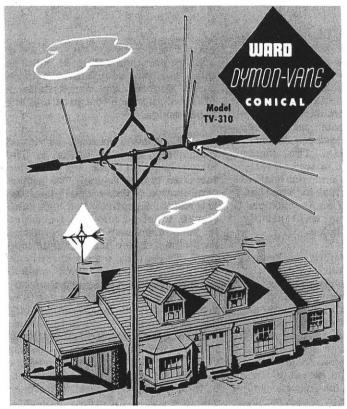
With relatively few elements compared to the Circle-vane, Ward was aiming the Dymon-Vane toward "areas where relatively strong signal strength is available."

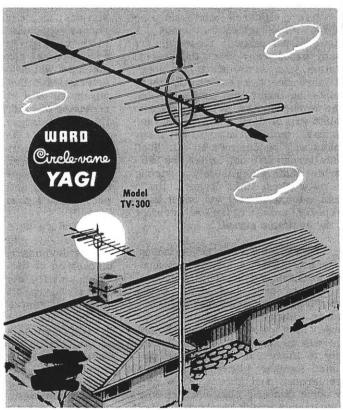
Although both Tele-Vanes were supposedly good performers, many ads touted the "looks" of the antennas as much as their performance. "Wards Tele-Vane TV antennas SELL ON SIGHT because they ADD BEAUTY to the home!" (Now it has been a long time since I can recall anyone complimenting a home on the beauty of its aerial). Of course today the only reason why I would want one of these babies is for looks. I guess that after fifty years we've come full-circle.

In the future we'll come back to Ward. They were an important antenna innovator. If you think that the Tele-vane antennas were "progressive" in design, wait until you see Ward's massive "Rangefinder" antenna. It resembles a radar antenna array from early 1940's!



Styled for NEW BEAUTY on the housetops INCREASED SALES of TV antennas





Sell the antennas that are "selling" for you. Ward is promoting their new line of Tele-vane

> The American Home Architectural Forum Better Homes and Gardens Business Week House Beautiful

Write today for the giant Tele-vane Sales Kit that gives you the complete schedule plus many, many more selling aids. Tie-in with this gigantic selling Antennas right to the consumer with national advertisements in:

Popular Mechanics Magazine
Popular Science Monthly
Time
House and Garden Book of Building
Newsweek

campaign for the newest, most revolutionary idea in TV antennas yet.

THE WARD

PRODUCTS CORP.

DIVISION OF THE GABRIEL COMPANY

1148 Euclid Avenue, Cleveland 15, Ohio



Majestic Eagle

While we were on the subject of unusual antennas, and looking at other Yahr-Lange products, I had to include this fantastic item that I call "the Majestic eagle." Wow. What a beauty!

The Grigsby-Gruno Company of Chicago sold majestic radios from the late 1920's until 1934. Although this item could have been used as an indoor or outdoor antenna, the Majestic Eagle was more likely a promotional item from a store. Obviously a Yahr-Lange product, this antenna was no doubt a contemporary of the Super Ball and Red Arrow antennas from the late 1920's.

The ball appears to be a standard Super Ball. The eagle has a wingspan of 11". Production-run Super Balls would be embossed with the super ball symbol on the top, where the eagle perches on this unit. This unit is embossed Majestic on the top front.

Sources:

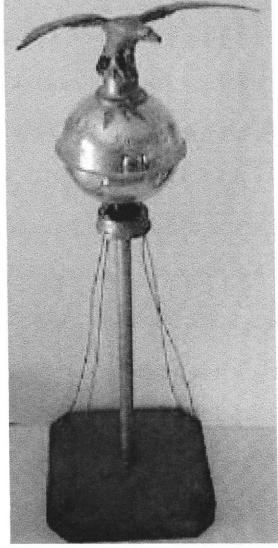
281.

Gustin-Bacon ad, *Radio News* 11/28 pg. 508.

McMahon, Morgan E., "A Flick of the Switch 1930-1950" (1975: Vintage Radio, No. Highlands, CA).

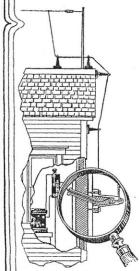
McMahon, Morgan E., "Radio Collector's Guide" (1974: Vintage Radio, Palos Verdes, CA). Ward ad, *PF Index 2/54* pg. 30. Ward ad, *PF Index 6/54* pg. 14. Ward ad, *PF Index 9/54* pg. 4. Yahr-Lange ad, *Radio News 9/30* pg.





PARKELEW

Porcelain Pedestals



A N insulator with a rigid clamp for the lead-in wire.

A pedestal mounting for Ground Switches, Lightning Arrester Switches or Lightning Arresters.

An insulating spacer for mounting free of table or wall, any other piece of apparatus.

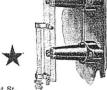
In all cases it spaces the apparatus 5" clear of the mounting surface.

This brown glazed Porcelain Pedestal has so many different applications that it at once becomes a fast moving stock article.

Two wood screws 2'' long are furnished with each pedestal.

For full description see our Radio Catalog No. 32 atyour dealer. If he hasn't his copy, we have one for him.

The Barkelew Electric Mfg. Co. Middletown, Ohio, U. S. A.



BROWN GLAZE

No. 611 Price \$.40 ea.

CHICAGO, 15 Clinton St. DETROIT, McKerchey Bldg. DENVER, Denham Bldg.

NEW YORK. 157 Chambers St. WASHINGTON, D. C., Mills Bldg, MINNEAPOLIS, 1017 Lumber Exch.

SAN FRANCISCO, 75 Fremont St. LOS ANGELES, 443 S. San Pedro St SEATTLE, 1041 Sixth Ave., S.

Barkelew Electric Mfg. Co.

By Dan Howard

In a recent "PIN" column², **Elton Gish** retold a little of the history of the Square-D company and I'll leave the telling of that story to Elton. However, one aspect of Square-D's history remains to be told in this column.

On November 22, 1967, Square-D acquired Barkelew Electric Manufacturing Company of Middletown, OH. In 1968, ground was broken in Middletown for a new Square-D plant and the company is located there today.

Barkelew Electric Manufacturing Company began manufacturing electrical switches in 1900. In 1904 the company was incorporated and moved to larger quarters. During the 1920's, antenna switches, standoff insulators, and lightning arresters were added to the line that now also included auto parts.

At the time of the company's sale to Square-D in the late 1960's, Barkelew was making heavy-duty industrial switches for power companies and others.

Insulators

Barkelew advertised at least three insulators for radio work, none of which they likely made.

611 "Porcelain Pedestal"

To me, the 611 standoff insulator is the most interesting of the three advertised insulators, if for no other reason than it appears to be a style unique to Barkelew. To my untrained eye, the others appear to be standard pin insulators that were adapted for use as feedline insulators.

A few weeks ago, I acquired several

² See "Porcelain Insulator News" *Crown Jewels* of the Wire 2/01 pg. 15.

of the 611 standoffs. All are unembossed dry process porcelain. The colors of glaze range from a dark chocolate brown to a lighter caramel color. A bolt hole runs through the top of the unit. Besides the obvious purpose (holding a bolt), the hole also makes it possible to use the insulator as a feed through or a lead-in insulator.

A flat, square, copper nut fits into a square recess in the top of the insulator and retains the bolt. A thick washer and small hex nut complete the assembly.

When viewed from the side, the top of the insulator slightly resembles the castle-style glass insulator. And, like the castle insulator, the thin "teeth" are vulnerable to chipping. Fortunately, on my examples, most of the chips occurred on inside surfaces, so the insulators still display well.

The ad on page 9 shows the side view of an antenna installation. Note how the 611's are used in a fashion similar to the Chamber's patent lightning rod insulators.

The 611 was also advertised for use as a standoff to hold antenna switches and lightning arrester away from the house wall. Believe me, the units are plenty stout enough for the job - the foot is 1-1/8" thick and the mounting holes are 1/4" in diameter.

The insulators are 5" tall, 4-1/4" wide at the base, and 1-1/4" in diameter at the top. The top of the insulator has two channels crossing it at right angles. Although the

channels are large enough to hold a good-sized conductor, the bolt tends to be in the way, making it best for small conductors only.

612 and 613 "lead in" insulators

I can't say much about the company's two pin type insulators, no. 612 and no. 613. Perhaps some of the porcelain collectors in the group can write me with the "U" numbers of these units. I would also like to hear your suggestions about who might have manufactured these insulators for Barkelew. The wooden insulator pins are interesting in that they are apparently fitted with hanger bolts and mollies for mounting on walls.

Lightning Arresters

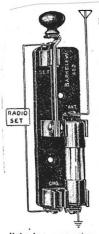
Barkelew cataloged two styles of lightning arresters, both using a cartridge style arrester element.

602 Lightning Arrester Switch

The 602 arrester incorporates a single-pole double-throw knife switch. The early version of the 602 is shown on page 11. It has a base of "ebony asbestos wood" that measures 8" x 2-1/2". The unit pictured on page 12 was introduced in 1924. It has a dark brown glazed white porcelain base that measures 6-1/2" x 1-3/4".

Ads say that a patent was applied for, but I don't know if one was ever issued. Regardless, the company apparently dropped out of the radio parts market and may have had little reason to enforce its patent, had one been issued.





LIGHTNING ARRESTER SWITCH

For Receiving Stations Patents l'ending

A combination on one base of a Radio Ground Switch and a Vacuum Tube Lightning Ar

A distinctive device for those who know and demand the best

lightning protection.

Approved by the Underwriters Laboratories.

Catalog No. 602

Price \$3.00



Required on the antena of every Receiving Station Approved by the Underwriters Laboratories. Catalog No. 606 Price \$1.50



606 Vacuum Tube Arrester

The 606 arrester uses the same cartridge style arrester as the 602 but it does not incorporate a knife switch. The 606 sold for \$1.50. The ad on page 11 shows what I believe is an ebonite base. Perhaps it was sold with a porcelain base as well?

L.S. Brach³ and others also sold replaceable cartridge arresters. Cartridge arresters seem to have been more popular with telephone companies and railroads than with the consumer market. I don't know if Barkelew sold similar units in the commercial market, but it would not surprise me if they did. They

certainly marketed their knife switches and auto parts to industrial consumers.

622 Vacuum Arrester Tube

Both the 602 and the 606 use an arrester element that resembles a glass fuse. The arrester is simply a small gap in a vacuum environment. Barkelew sold the arrester elements separately as replacement cartridges. They were cataloged as Part 622 and sold for \$1.00.

Ground Switches

Although they manufactured many styles of knife switches, in the 1920's Barkelew advertising two models for specifically for radio work, the 600 and the 601. Both are single-pole. double-throw style switches. The 600 has a rated capacity of 60 amperes and sold for \$2.50. The 601 has a rated capacity of 100 amperes and sold for \$3.15. I've not seen these. Hopefully they are marked with part numbers; else I'm not sure how one would differentiate them for ordinary knife switches.

Sources:

Phillip Drexler Alan Hohnhorst Barkelew ad Radio Broadcast 1/25 pg. 566.

Barkelew ad Radio News 6/23 pg.

Barkelew ad Radio News 11/24 pg. 751

Thanks to Sam Ashworth, the director of Middletown Historical Society, for the information on Barkelew's history.

³ See OFS 10/95.

Heinemann Electric (Sensory) Update

A number of interesting items from Heinemann Electric, the manufacturers of Sensory products, have shown up recently so I figured that another update was in order.

Company History

When I prepared the June 1999 feature, I had Heinemann Electric as a Philadelphia company. Newly acquired print material gives a Trenton, NJ, location. Further research is pending. If you can help us place the company at either location, I would like to hear from you.

3019 Glass Insulator

Another glass insulator has been linked to the Heinemann Company. The common 5-ribbed 3-1/4" unembossed clear glass insulator has been found in a Heinemann box. Bearing catalog number 3019, the box appears to be identical to the unit pictured in the April 1999 issue. Neither of the two glass insulators identified so far has been marked, further supporting our belief that someone else was manufacturing them for Heinemann.

3017 (type 4)

The confusion continues. Heinemann's habit of reusing part numbers continues to add to the challenge of collecting their products. Now a 4th type of 3017 insulator has been found.

Most similar in design to the 3096 (type 1), the type 4 insulator is glazed in brown, has 2 ribs and flat ends. It measures 2-7/8" long, with a

maximum diameter of 1-3/16". Unlike most other Sensory products, this unit, and the type 3, have recessed embossing. Others have standard raised embossing marks. The 3017 type 4 has a recessembossed SENSORY on the upper left end, and 3017 on the lower left end. This is the first reported example that does not carry the HECO marking.

It is just speculation, but the style of recess embossing on the type 3 & 4 insulators looks similar to marks used by the PP Inc. family (Knox, Fedco, et al). Perhaps that is a clue to the source of its manufacture.

Sensory 3043 Lightning Arrester
I had previous included the "3043"
arrester among Sensory products
based upon its physical features. No
one has ever seen a 3043 with a
company name or trademark on it.
In December an on line auction sold
one of these common arresters,
however this unit had its original box.
Yes! Heinemann made the 3043.
The box describes the unit as a
GARDASET Lightning Arrester. This
box carries the Trenton, NJ,
company location.

Antenna Kit

For the first time, a complete antenna kit from Heinemann has been found. As shown on page 15, Heinemann's Radio Aerial Kit includes a wonderful selection of Sensory antenna products. The kit starts off with the company's 4-ribbed brown 3017 insulators, then the company supplies white Sensory

screw eye stand off insulators in both lengths (3" and 7-1/4"). Finally, a pair of Heinemann grounding clamps and one of the 3041 lightning arresters provides a path to ground for stray electrical surges. Besides being a terrific item in its own right, the Radio Aerial Kit provides a terrific sampling of the company's parts. I found this information in a 1926 Radio News antenna product review. I can't wait to hear that one of the readers actually owns one of these kits.

Knife Switches

I recently discovered that I had knife switches with the Sensory brand on them. The switches are double-pole. double-throw units on a Philco battery charger panel from the early 1920's. Philco, The Philadelphia Storage Battery Company, went on to make broadcast sets and car radios for Ford. In the early 1920's they made storage batteries for radios and other devices. Perhaps coincidently, perhaps not, they used Sensory switches from Heinemann. another Philadelphia company. The knife switches on my unit are 2" x 4" glazed white porcelain with the Sensory name embossed on the top center.

Center Insulator

A good friend recently found what could be a Sensory center insulator. It certainly uses Sensory parts, but I'm still looking for its actual source. The insulator appears to be a mast-top unit like the antennas that we looked at elsewhere in this issue.

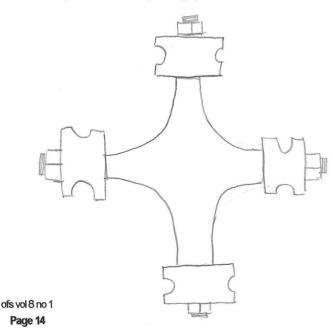
The main body of the unit is a cross.

When installed, the cross apparently lays flat atop the end of a rod. On the back, at the center, the unit has an unthreaded socket that is 9/16" in diameter. A pair of holes in the side of the socket appears to accommodate a cotter pin for securing the unit on a rod.

The ends of each leg of the cross are threaded to receive a 3/8" hex nut. Each leg is adorned with a Sensory 1-1/8" diameter spool. The top of the body is embossed with "UNIVERSAL ANTENNA PAT APLD FOR." The body appears to be a brass or bronze casting. It has an assembled weight of 14 oz.

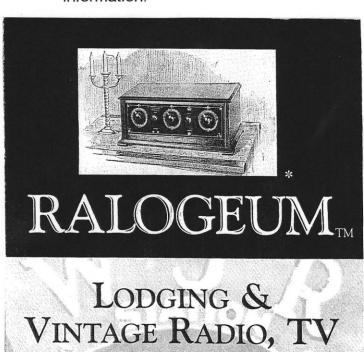
Over the several months that I've owned it, I've spent time trying to figure out just how the thing would have worked. My first conclusion has always been that there had to be a simpler way to get the job done than manufacturing this expensive part (ha ha).

Please let me know what your ideas might be. Maybe one of you has "the" ad or the missing parts that will explain this mystery piece.



The Ralogeum

Long-time reader George Freeman recently sent me a flyer about his new project called The Ralogeum. The Ralogeum is a combination radio museum / guesthouse, located in Madison, IN, not far from Cincinnati. George's outstanding collections of microphones, radios, and insulators are on display to enjoy during your stay. Contact George at (812) 265-6878 or RALOGEUM@AOL.com for more information.



MUSEUM New! IN 2002

Upcoming Show

My next show will be the National Insulator Association's western regional convention. This year it is being held here in Oregon. I hope that you will consider attending as well. The show will be held in Medford, which is near the California border. The early June date means that nearby attractions such as Crater Lake National Park should be open for touring. The show begins on Friday, June 1st for set up and early admission. It continues through Sunday the third. Contact Bill Ostrander (541) 482-7921 for more information or email at: isic@clubs.insulators.com.

Sensory Radio Aerial Kit (see page 13)



A complete aerial kit, including all the necessary equipment for the installation of an antenna system.
Illustration courtesy of Heinemann Electric Co.

Updates

E.F. Johnson Company

When we presented the Johnson story last October, I had seen (but did not buy) a top-embossed No. 62 standoff insulator. This morning I had the chance to go back and buy one of these, and here's the story. The base is perfectly smooth - no markings. The insulator is embossed on the top around the bolt hole E F JOHNSON CO NO 62. Due to the font size, the letters run completely around the hole. The insulator is glazed inside which is also an unusual feature. My other examples are all unglazed underneath. This is the only topembossed Johnson in my collection. Does anyone else have a similarly marked item?

Lapp

I recently found my first example of a Lapp 9025 streamline insulator. As shown on page 26 of the February 2000 issue, the otherwise-ordinary egg insulator is teardrop shaped. This design may have made it more suited for airplane use. The measured drawing is exactly like my example. It is glazed white all over.

Military Insulators

Additional numbers to add to our listings:

NS5B5224 (FSN 5970-284-8420) mfd. 9/61 3" x 3/4" brown steatite rod

NS5W5224 3" x 3/4" white steatite rod

Greene Insulators

The December 1997 issue includes a story about Greene insulators. Mr. O. Watson Greene manufactured center insulators and antenna transformers of his own design in the early 1970's. This morning I added my first Greene insulator to the collection. Unfortunately it is not the neat submarine design pictured in Mr. Greene's design patent. Instead it is T-shaped like units from many other manufacturers.

The insulator, which includes an antenna transformer or "balun," was molded in two halves, both of which are recess-embossed with the word "GREENE."

The front (?) half is a bright pistachio green plastic – I guess that *Greene* did make some *green* insulators after all!

The back half is clear plastic making it possible to see "the works" inside. A coax fitting at the bottom connects to the feed line and tinned copper braids are used to attach to the antenna legs. I'm very pleased to have this new item in the collection.

