This entire issue is devoted to one of the popular Ham News departments—Tricks and Topics. Here you have the pet ideas of twenty-six different amateurs from the United States and Canada. I hope that you will be able to use some of them to save time or money in your amateur radio work.

—Lighthouse Larry

Contents

300-ohm Twin-lead Connector ........................................ page 2
Repainting Panels ......................................................... page 2
Inexpensive Shielded Plug-in Coil .................................. page 2
Neutralizing Condenser for Tetradets ............................... page 2
Waterproofing Mobile Antenna Cables ............................... page 2
Mounting Filter Condensers—No. 1 ................................ page 3
Mounting Filter Condensers—No. 2 ................................ page 3
OSS Cord on Your Car ................................................ page 3
Multiple-connection Terminal Strip ................................. page 3
Color-code Memory Rhymes ........................................... page 4
Tricks with a Soldering Gun .......................................... page 4
Hairbrush Improvement ................................................ page 4
Drilling Window Glass ................................................ page 4
Removing Miniductor Taps .......................................... page 5
TV Herringbone Pattern ................................................. page 5
Ceramic Coin Form Terminals ....................................... page 5
Drilling Panel Holes ................................................... page 5
Mounting Trimmer Condensers .................................... page 5
R. F. Ammeter Switch ................................................ page 6
Tube Carton Source .................................................... page 6
Relay for A.C. or D.C. Use ........................................ page 6
Making Meter Shunts ................................................ page 6
Sweeping the Spectrum .............................................. page 7
• That Old Net and Bob Trick ...................................... page 8
• Parasitics ............................................................ page 8
300-ohm Twin-lead Connector

It is quite simple to make a chassis socket for 300-ohm transmission line from a regular female connector. The sketch, Fig. 1, gives the details. First, drill and tap the female connector for one or two machine screws so that it may be mounted on the underside of the chassis. Next, file a slot in the chassis so that the female connector just protrudes slightly. If desired, you may drill two oversize holes for the two pins rather than filing a slot, although the slot makes a neater job.

Geo. Trefy, W2FUG

Figure 1

Mounting Side

Neutralizing Condenser for Tetrodes

Here's my solution to a pair of adjustable caps for neutralizing the beam-power tetrodes in my final amplifier, Fig. 2.

The ordinary open-circuit jacks are mounted on a piece of insulating material, such as myrox or poly, and installed so the rods are about three-fourths of an inch from the tubes. The rod is a piece of one-inch brass or aluminum or any metal. The core connector of the jack gives five spring tension and holds the rod in any pre-adjusted position. The body and tip connector on the jack is wired to the grid of the opposite tube.

CJH Dow, WA8B

Waterproofing Mobile Antenna Coils

To the mobile-minded hams that want a waterproof housing for the loading inductance in a vertical antenna—such as the Mastermount or similar types—here is my solution. Even when the antenna is buried with a metal housing, many hams discard this feature because of the moisture. Look around at your favorite five and ten-cent store and you will locate plastic glasses. These are made in various sizes, and you can pick the size that suits your particular loading coil. Be sure you get the type that has a clear-fitting cover. You can use one glass, or, if your loading coil is large, you will have to use two glasses.

If one glass is all that you need, mount in the manner. Cut a hole in the bottom of the glass large enough to accommodate the portion of the loading coil that screws into the bottom portion of the antenna. Remove the loading coil and cut a small hole in the cover, and slip the cover on the upper portion of the antenna. Now, place the glass in position, fasten the loading coil in place, and slip the plastic cover down on the glass. The fit is usually good enough between cover and glass that no waterproofing is needed at this point. After all, the plastic glasses are made so that liquids may be carried in them even when the glass is upside down. However, use clear cement where the antenna goes through the cover, and attach to the point where the loading coil fastens on the bottom of the glass.

If you use two glasses, you can cut them to length so that they just cover the loading coil, and are fastened at each end of the loading coil by means of the loading coil hardware. In this case, the two glasses face each other with their mouth touching, and holes are drilled in the strong portions of each glass, one hole being at the bottom of the loading coil.

Repainting Panels

I have been interested in reading how various amateurs refresh their crackle-paint panels, and I have yet to see anyone mention my favorite method, which I think is extremely simple. For years I've solved the problem by simply dipping a cloth into one of the usual jars of crackle paint you buy at a jobber's, and rubbing it well into the rusty old panel (after cleaning, of course!) No heat is applied, and when the paint is spread this thin it dries quickly with that new sparkle. Of course there are no brush marks and no brushes to buy or clean. The best of paint as the original, it blends well, and if you miss a spot it isn't noticed. No spray gun, no mess—all, almost, just your fingers.

Chen. E. Spitz, L2Z (W7JHN/W5OKM)

Inexpensive Shielded Plug-in Coil

Recently while working on a mobile rig I decided to use plug-in coils. I needed quite a few coils, and decided that buying the shielding plug-in units was too expensive, so I came up with this idea.

Use the aluminum film containers that are sold with 35 mm film. The top can be punched with a 1/4-inch punch, and a standard octal base from a metal tube will fit in snugly. This octal base can be removed from any defective metal tube. After the octal base is inserted, the aluminum can be pressed with a screwdriver into the four slits on the base, to prevent the base from rotating in the metal.

Some of the 35 mm film cans have no threads, and in this case you will find that the can itself is a snug fit on the metal shell of a GT type base. When this type of can is used, it is unnecessary to drill a hole in the top cap, and the cap is discarded.

Edson R. Snow, W328N

Figure 2

Figure 3

Figure 4

Figure 5
Mounting Filter Condensers — No. 1

Now and then an amateur will acquire some of the metal-can filter condensers that are perfect in every respect except that the mounting clamps are missing. I solved this problem and at the same time ended with a rather neat-looking assembly (see Fig. 3).

Holes are drilled in the chassis through which the condenser feed-through insulators are placed. A piece of thin insulating material, such as bakelite or fiber is cut to size and drilled and then fastened to the condenser by the nuts on the feed-through terminals. Finally, the radiating piece is fastened to the chassis and the job is complete.

Mounting Filter Condensers — No. 2

After I purchased some rectangular-can filter condensers I was troubled because no mounting straps were available. However, I overcame this problem in the following manner.

Take two small bolts and remove the heads with a hacksaw. Place these in position on the sides of the condenser and solder them in place. It is wise to tin the bolts before soldering. Arrange the bolts so that they extend over the bottom of the condenser far enough to go through the chassis. The bolts may be placed on either the top or bottom of the condenser, depending on whether you mount the condenser right side-up or right side-down.

It is surprising how easily bolts may be soldered to those condensers. I have used this idea for many years now and have never had a bolt come loose.

OSL Card on Your Car

I have one of those new-fangled cars with the license plate space built into the bumper, and many a place to hang one of those nice cast aluminum call-letter plates. This concerned me on our trip to Florida, even more so when we went along and I saw mobile ham jobs on the highway.

In Miami, I found it was to do something about the situation. I made a trip to the local 5 and 10 and bought a plastic body cover—which as used by people to protect their new books—and a roll of transparent tape. Total cost, thirty-five cents. Using a pair of scissors I cut a rectangular piece of plastic slightly larger than my QSL card. With the tape I attached the whole station to the car (see Fig. 4).

This is not a permanent job, of course, but when I came home after two weeks of tropical rain, really hot sun, some snow, and a good car wash, my call sign was as bright and colorful as ever.

A sign of this sort readily gets results. The first day I baud it on a filling station man directed me to the house of WW8, where my wife and I had a nice visit— including some grapefruit and avocado right off the tree.

Multiple Connection Terminal Strip

Here is an idea for an unusual type of terminal “strip” computable to use in an already crowded receiver chassis. See Fig. 5.

This strip requires a single mounting bolt, which, in many cases, can also be a tube socket mounting bolt. The screw is a 6-32 machine screw which is cut to the desired length, depending on the thickness of the filter washers and the number of terminal posts desired. This screw is covered with a piece of light-fitting spaghettis, then the washers and soldering legs are alternately piled on the screw.

Many variations of the basic idea are possible as regards length, number of separate tie points, radial arrangement and spacing.

```cpp
#include <iostream>
#include <vector>

int main() {
    std::vector<int> condenserPositions = {1, 2, 3, 4, 5};
    int chassisDimensions = 10;

    for (int i = 0; i < condenserPositions.size(); i++) {
        int position = condenserPositions[i];
        int calculatedPosition = position % chassisDimensions;
    }

    return 0;
}
```
Color Code Memory Rhyme

Here is a trick which I have found to save me much time and freedom from extrapolating. There are many colors which a hose needs to be particular reminder or condenser and he has a handy on hand, but, no color code chart handy. He may vaguely recall the colors, and with this information he tries to pick the proper resistance. Maybe it's the right value and maybe it ain't. To clear away those doubts, here is a simple rhyme which will help you remember the condenser-resistor color code:

G 0 1 2 3 4 5 6 7 8 9
Better be Eight Or Your Great Gig Venture Goes Wrong
L R E R L R H
A O A G U I
C W N L E L Y T
K N L N M I
E N T

Joseph A. Bartlowicz, WEIDC

Tricks with a Soldering Gun

If you happen to use one of the so-called soldering guns, you may be interested in several handy tricks. The first concerns demagnetizing. If you have any tools that are magnetized, they can be easily demagnetized in this way. Turn on the gun and insert the tool into the space between the heavy supports to the soldering element. Leave the tool in a few seconds, then turn the gun off. It will then draw the tool out of the gap and away from the gun at right angles until it is held at arm's length. Turn off the gun. The a.c. field which the heat has exposed to will destroy the residual magnetism in the tool if the tool was not too strongly magnetized.

This same method can be used to demagnetize a watch. Watch is held in a magnetic field which affects its operation and at times causes it to stop completely. I have a soldering gun for this purpose and it does the job nicely. It can also be used with a soldering gun also. Hold it in the gap between the secondary terminals, as before, and quickly trigger the gun. After each triggering check the tool for magnetism. Several attempts may be necessary, and, results are not as satisfactory as using a permanent magnet to magnetize the tool.

The field of the transformer of the soldering gun may also be used as an aid in trouble-shooting. When held near a transformer of the type which is not shielded against external magnetic fields, the gun may be triggered and will induce a signal into the circuit through coupling effects. For example, the gun may be held near an audio interstage transformer or audio output transformer to induce a signal which may be heard in the loudspeaker, providing the circuit is functioning normally.

H. Paul Bahlender, W5VVS

Harmonizer Improvement

A very useful improvement can be made to a Harmonizer (G-E Ham News Vol. 4 No. 6) if a standing wave indicator is added. The sketch (see Fig. 6) shows how these neon bulbs are placed in the circuit and wired across each junction of the network. When all three neon bulbs glow with equal brilliancy the mismatch is nil. Any difference in glow between the bulbs indicates that a mismatch is present.

Mechanically, the bulbs must be placed inside the Harmonizer box so that the box remains completely shielded. I accomplished this by using small screened holes through which the neon bulbs could be observed. The series resistors indicated in the circuit diagram are of a value which will allow the neon bulbs to light normally and not burn out, and this value depends upon the type of Harmonizer used and the power of the transmitter used.

F. L. Taylor, W8AW

(Editors' Note: There are six types of neon lamps that will operate in this type of circuit. Two of them are NE-2 and NE-11 and are 2-watt lamps. Four of them are NE-17, NE-35, NE-88, and NE-95 and are quarter-watt lamps. The following list gives the correct value of resistance to use with each of these lamps, depending on the voltage in the Harmonizer:

Lamps NE-2 and NE-11: 750,000 ohms for 20-100 volts; 1,000 megohm for 300-375 volts; 1.5 megohm for 375-450 volts; 1.6 megohm for 450-600 volts.

Lamps NE-25 and NE-37: 83,000 ohms for 200-300 volts; 150,000 ohms for 300-375 volts; 300,000 ohms for 375-450 volts; 450,000 ohms for 450-600 volts.

Lamp NE-17 and NE-88: 14,500 ohms for 200-250 volts; 250,000 ohms for 250-300 volts; 150,000 ohms for 300-375 volts; 180,000 ohms for 375-450 volts; 240,000 ohms for 450-495 volts.

Each resistor should have a wattage rating approximately three times the wattage rating of the lamp with which it is used.

The voltage in the Harmonizer can be computed from the formula given on page 9 of Vol. 4 No. 6 Ham News. Because these neon bulbs will not light when too low a voltage is placed on them, this whole idea is restricted to Harmonizers used with transmitters of several hundred watts output.—L. Houze Lamp.)

Drilling Window Glass

Ever try to bring an antenna lead-in through a window? I was puzzled as to how to get the holes in the glass, when I happened upon the idea of using a BB gun. I took careful aim and "dripped" two holes, an inch apart, in the window.

The holes placed in this method have a diameter of about one-eighth inch. I needed holes one-fourth inch in diameter, but I solved this problem by reaming the holes with a one-half inch taper reamer. I am sure that you will find this trickier way than this for putting holes in glass. If you are doubtful, try it first on a piece of scrap glass.

Donald Valenzuela

4
Removing Inductor Turns

When using the Barker & Williamson Inductor coils removing turns sometimes is a problem, especi-
ally when you want to prune the coil to the correct inductance and only need to remove one or two turns.
I have found it is extremely simple to do in this manner. Merely place a hot soldering iron on the 
wire near the plastic support piece. As the wire 
becomes warm, it will pull out of the plastic piece 
neatly. Repeat this process for each quarter-turn to 
remove as much wire as desired.

Joel C. Cebry, V680R

TV Herringbone Pattern

If you or one of your neighbors are having trouble 
with television interference that you are unable to 
find, check around and see if there are any lamp bulbs 
with carbon filaments in use, either in the immediate 
vicinity or in some of the nearby houses. When these 
lamps are faulty they radiate broad bands of "r.f.
energy. The pattern on the TV screen caused by 
these lamps will usually be horizontal bands, some-
times in the herringbone style and other times just
broader dark bands.

C. D. Birkhahn, WP3PN

(Editable Note: A photograph of this effect, from 
the file of the General Electric Lamp Division, is 
shown in Fig. 7. Television channels 2, 3, 4 and 5 
are the channels most affected by this sort of radia-
tion, with channel 6 receiving the largest part of it — Lightbulb Lamp.)

Ceramic Cell Form Terminals

Many types of slug-tuned ceramic coil forms have 
been available in the past few years on the surplus 
market. Some of these have no terminals on them, 
that is, no place to connect the wire on each end after 
a coil has been wound. It is rather difficult to do a 
neat winding job if you are unable to anchor the ends of 
the wire; so faced with this problem, I came up 
with the following solution.

Pierce suggested a 1 inch thick bakelite, poly or fiber, 
and cut round or square pieces which can be drilled 
with a hole slightly smaller than the diameter of the 
ceramic form. Also drill two small holes to serve as a 
tin point for the wire. Next, cut a slot in the material 
with a hack saw. You will find that the pieces will now 
slide on the ceramic form and make a tight fit. The 
advantage of this method is that the terminals may be 
adjusted to any position on the form, so as to be close 
to the end of the coil winding, regardless of the length 
of the winding. After the coil is complete, the term-
inal pieces may be cemented to the ceramic form.

The sketch gives the details on the terminal points.

See Fig. 8.

Men Jaffee, W28NY

Drilling Panel Holes

The amateur constructor who has to bore a number 
of holes for toggle switches, potentiometers, miniature 
tube sockets and other holes of the same approximate 
diameter will find this trick of saving time and 
skinning knuckles.

Purchase several sizes of round "rat-tail" files. 
These should cover the range of size from one-quarter 
inch up to the largest size hole you wish to drill. 
The half-inch size, for example, is ideal for toggle-switch 
holes. When these files are placed in a brace and ro-
tated backwards the file boxes a smooth round hole in 
a short length of time. By testing the diameter with 
calipers and then marking the desired points on the file 
with chalk or string, the hole can be made a size de-
sired without removing the file and measuring the hole 
from time to time. A quarter-inch hole can be drilled 
first with a hand-drill or an electric drill to serve as a 
pile hole for the file.

S. L. Peglin, V18N

Mounting Trimmer Condensers

Small compression-mica trimmer condensers are 
sometimes difficult to mount so that they can easily 
be adjusted from the top of the chassis. To solve this 
problem neatly, I solder the condenser terminals to 
the terminals of an octal socket, in such a way that the 
adjusting screw on the condenser is aligned with the 
hole in the socket. The socket is then mounted on 
the chassis in the usual way. Or, if you desire, the 
socket can be mounted under the chassis and a hole of 
the proper size to take the shaft of the screwdriver 
can be drilled in the chassis directly over the socket. This 
is an extremely rigid support and is far superior to any 
other method of mounting with such ease of acces-
sibility.

Richard E. Corrlera
R.F. Ammeter Switch
It is possible to employ only one R.F. ammeter to measure the antenna current in both sides of the transmission line if care is taken to maintain a balanced and symmetrical line. My solution to this problem is as follows:

Use a triple-pole double-throw ceramic wafer switch. See Fig. 9. A switch of this sort, when not switched under load, is capable of handling 5 amperes with no difficulty. If a greater current capacity is required, use two switches in parallel.

Note that the wire from A-1 to C-1 and the wire from B-1 to C-1 are in parallel with the motoring wire from B-1 to C-3. Regardless of where the meter is placed, those two wires should parallel the motoring wires. By running the wires in this manner the transmission line impedance can be approximated and thus prevent an impedance "bump" in the line.

C. Roy Wagner, W3FEN

Figure 9

Tube Carter Source
A few years after getting his license the average amateur has a collection of tubes which includes a variety of types, usually without the protection of the original carton container. I had this problem myself until I found this solution.

Procure several of the corrugated cardboard containers that hold fluorescent lamps. These are the same length as the fluorescent lamp and just large enough to be a snug fit. Cut these into lengths which will accommodate your receiver tubes. Leave enough length so that a flap can be cut on each end and folded over. Seal the flap with a label on which you have written the tube type.

These fluorescent lamp cartons come in different types and sizes depending on the type of tube lamp, and these different sizes will hold practically any size receiving tube, from the miniatures up through the large glass types.

James F. Glennon, W3XRE

Relay for A.C. or D.C. Use
The readers of the G-E Ham News are well aware of the current problems involved in providing suitable emergency communications, whether fixed or mobile, for the many types of jobs that amateurs are doing. Many groups of amateurs agree that the solution to the equipment problem involves the design and construction of good low-power equipment which can be used with a variety of power supplies, whether they be a.c. or d.c. powered.

The weak spot in many units appears to be in providing a good relay switching system for push-to-talk operation, which is a practical necessity for almost any emergency communication gear. Most of us think in terms of low-voltage relays—6 volts or so. Using relays of this type, the situation becomes awkward. If you use a 6-volt a.c. relay it will tend to overheat and burn out quickly, and if you use a 6-volt d.c. relay you must provide a rectifier system when the a.c. voltage is not available.

A simple solution to this problem is to use a d.c. relay which has a high-voltage operating coil. For example, one well-known relay manufacturer makes relays which operate on either 120 or 240 volts d.c. at a power consumption of two watts. Thus the 120-volt relay requires 17 milliseconds and the 240-volt relay requires 8 milliseconds operating current. If the latter relay is used it may be powered directly from the high voltage supply. Most equipment installations can spare 6 volts for this purpose. In the case of the 120-volt relay, a dropping resistor can be used to supply the 120 volts directly from the high-voltage supply. At any rate, whatever the transmitter is powered, a source of high voltage must be turned on, whether the primary source is 120 volts a.c. or 6 volts d.c., and then high-voltage rectifiers can very easily supply operating current to a high-voltage d.c. relay.

S. G. Drape, W3FEN

Making Meter Shunts
Many amateurs, from time to time, want to make higher-range milliammeters from lower-range units. These low-range meters may have basic movements anywhere from 0.1 to 5 mills and by appropriate shunts these can be adapted to read almost any current.

The calculations of resistance value for a shunt to make a given meter read 0-200 mills, for example, are not too difficult. However, the answer usually comes out to be a fraction of an ohm. Everything is just too small to arrive at a reasonably accurate way of measuring such small resistance. This is the reason for another idea. Look in a wide type and there, in plain sight, it says, "The 100-ohm wire has a resistance of 0.035 ohms per foot. With a rule and some arithmetic the problem can be solved."

I've been through all this many times, and in my hands, the problem is solved almost exactly accurately. Upon comparison with a good meter, my shunts are usually off by two to a dozen scale divisions. This may be due to methods of fastening the shunt to the plug or binding posts on the meter, or the size or composition of the wire may be not-uniform, or maybe it's just part of the general conundrum of things.

Now, I think I've got the problem licked by this device: I cut my shunt a little too long so that the return strip is on the side of the meter reading too high (which means the wire is longer than is necessary). The 50-ohm wire in series with mine gets the meter in line with the meter and all in series with a dry-cell and a resistor that will give about mid-scale reading. I run a little solder from the lug out on the shunt wire itself, thus lowering the shunt resistance. This process is repeated until the two meters give equal readings. Before you try this stunt, make sure that the shunt is mounted per- manently on the meter, as you don't want to change anything after you get the shunt exactly the right resistance.

Milton I. Schwalbe, W4PV

6
It has been a difficult job picking the winning entries for this issue of the Ham News. Each of the Tricks and Topics entries that I get is the pick of some clever amateur, and most of the entries deserve publication. So my job has been to select the "excellent" four among the "very good."

Unfortunately, I believe there are no really new ideas, so some of you may find tricks that are old to you. If this is the case, congratulate yourself, because you were clever enough to have thought of the idea first. On the other hand, maybe you shouldn't be so proud, as you might have sent the idea to me and received that ten dollars worth of tubes yourself.

Speaking of money, I still need a lot of good ideas for future Tricks and Topics columns. How did you solve that last problem that almost stumped you? Whatever the idea is about tubes, antennas, or circuits—long as it concerns amateur radio—I would like to hear about it. For each "trick" published you will receive a certificate entitling you to $10 worth of G-E tubes.

Mark your letter "Entry for Tricks and Topics" and send it to Lighthouse Lorry, Bldg. 267, General Electric Co., Schenectady 5, New York. (In Canada send it to Canadian General Electric Co., Ltd., Toronto, Ontario.)

I have been utterly amazed by your imaginative G.E. Ham News bound volume. It seems that everyone wants one! As you may recall, when I announced the idea for this column, Ham News was not at all sure that the idea would work. Since I was in charge, I signed the contract with the Ham News Syndicate. I was really rather nervous about the idea, but prepared only a small number of books. These were sold in the first few weeks.

Since then, we've had trouble keeping up with the demand. Many of you who sent money in those early days have not heard from us. We are extremely sorry for this delay, but the wait was occupied by troubles at the hotel.

When this column appears in print the bound volume situation should be well in hand, and I will be happy to create more orders. The binding volume, when it is completed, will contain all copies of this Tricks and Topics column from Vol. 1 No. 1 through Vol. 5 No. 6, and only for $25.00 per copy. Address your order to Lighthouse Lorry, Bldg. 267, General Electric Company, Schenectady 5, New York. Please make remittance payable to General Electric Co.

On September 13 the General Electric Company sponsored a Civil Defense Conference at Electronix Park in Syracuse. Present were more than 200 people, representing 3 countries, 20 states and 75 cities. Many of those present were either city mayors or local civil defense heads. The purpose of the conference was to give municipal government heads the opportunity to get the latest information on civil defense from speakers knowledgeable in government, industrial and amateur circles.

Col. W. M. Tallon, Director, Attack Warning and Communications, Federal Civil Defense Administration, gave a very stirring talk on Federal Planning and War Systems. Brig. General Jacob E. Smart, Vice Commander, Eastern Air Defense Command, told of the part that the civilian must take in aiding the military in civil defense.

A very interesting continent came from Major General Kerle B. Lawton, Deputy Chief Signal Officer, Dept. of the Army. He said the aim of civil defense is the "safe" persons who refuses to do any- thing for civil defense. It's better every radio club has one or more of these people in its ranks. I wish that you might have been there. I believe you would have been convinced of the importance of the news now by this country. As General Lawton said, conspicuousness on the part of the American citizen is important in these times.

The new General Electric movie on civil defense entitled And a Piece Shall Be Heard, prepared by The March of Time for C.G.E., had its preview at the conference. This movie is a story of civil defense in Champaign County, New York. The opening shot was a view of a man an amateur working on his equipment. While the film is not primarily concerned with amateur com- munication, it did show the importance of this work to the country. It is capable of taking in work is accurately pre- sented.

Copies of this film are available on loan to organizations wishing to show it. The running time is approximately 26 minutes and the film is 16 mm sound. Address requests for a copy of this film to your nearest General Electric office.

A report issued recently by the Bureau of the Census states that 50 per cent all homes have radio sets and 12 per cent of all homes have television. Looks like radio is here to stay and television is increasing in popularity. How's your TV?
As you Ham News readers may recall, I started something of a pet project when I mentioned a favorite trick of mine in one of the machine nuts on bolts that were in out-of-the-way places, and ever since then I have had other acquaintances sending in their pet ideas on the same subject. The latest group of letters included these four ideas.

— Lighthouse Larry

After reading in Ham News about how the boy put a nut on the end of an inscrutable screw, I would like to tell you how I do it. I use a pencil without any lead, and screw the nut on the pointed end, so that it just holds. Then I place the nut over the end of the screw and push the nut off onto the screw with a marker. The pencil is held against the screw until the writer is used to start the nut on the screw threads.

Charles Affleck, W7MYX

I thought surely that my pet idea for holding and placing nuts would be published by now, but as long as it hasn't been, here it is. Instead of using a marker, as W2AKQ does, I use a screwdriver. Lay the nut on the bench and force the bit of the screwdriver straight down through the first thread. (An ordinary kohb screwdriver fits No. 6 nut to a "T"). As you force the bit in you will hear a slight snap as the bit goes through the first thread. Use the screwdriver as a wrench, and as you screw the nut on, the screw will come through the nut and force the screwdriver out the rear. It's worked for me for years.

Jack Wern, WS5YQ/W8G6I

Why use any of the ideas in the March-April 1951 Ham News for inscrutable screws? Why not make yourself a tool for that very purpose? Here is how I made one. Get a small alligator-type spring clip and bend the jaws into V and an inverted V so that the nose will fit on a machine nut. Next get a length of flexible spring and solder it to the rear of the clip. Finally, take a screwdriver which has outlived its usefulness and solder the spring on the back end of the screwdriver. The screwdriver will now serve as the handle for your tool. Clip the nut into the jaws of the alligator clip, and push the nut to any corner of the chassis you desire.

G. E. McEwaine, W9JUS

My favorite method of starting a nut on a screw which I can't reach with my fingers involves the use of a pencil. Remember the pencil pencil with the tapered round? That's the type I use. The nut can be twisted on the eraser end, and then placed right on the screw. In most cases the eraser will not come completely through the nut, so that the screw can be started while the nut is still on the eraser.

Dave Blasier, W8LMD

PARASITICS

This is more of a clarification than a correction, and is pertinent to the circuit diagram on page 2 of the September-October 1951 Ham News. The connection from the top of S4 does connect in pin 2 of the 6AK5, despite the fact that no dot is shown at the connection point.

Dave Blasier, W8LMD