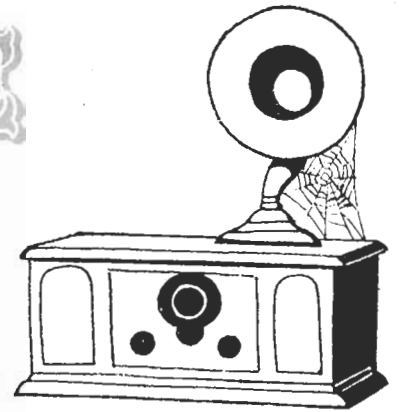


ANTIQUE RADIO CORNER

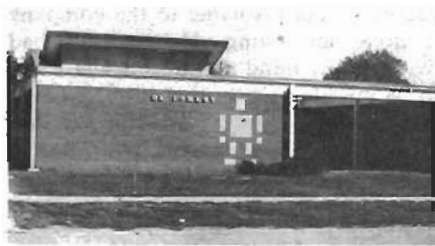


by James A. Fred

□ Hello out there in Radioland! Spring is here and the long winter months of restoring radios are over for a while. Perhaps it would be wise to look at your collection and make a list of what you want to concentrate on this summer. Most collectors seem to drift along without any definite idea of where their collection is headed. Why not make a list of all your collectible radio items, assign values to them, and put a copy of the list in your safe deposit box. Burglaries, fires, tornadoes, and other hazards are destroying collections monthly. Are you going to be the one without a list when it comes time to file an insurance claim? All insurance companies now require a complete inventory before they will pay for your loss. It might also be well at this time to get out your insurance policy and read it carefully. If you do not understand the coverage you have, call your agent and talk it over with him. I remember reading about a collector in California who had most of his collection destroyed in a fire and he had no insurance. This kind of heartbreak you don't need.

Prevention—The Best Medicine.

Along these lines I am going to mention several things you can do to safeguard your collection. One is to rent a post office box so that no packages of antique radios or parts are delivered to your home. Another is to arrange to have all packages of this sort insured against loss before they are mailed. I have had packages lost in the mail sev-



Arthur Trauffer was instrumental in getting elementary school in Council Bluffs, Iowa named after Dr. Lee DeForest, inventor of the triode tube.

eral times in connection with books I have sold. I've sent books to one man in particular on two separate occasions, and he never received either shipment. I sent them by book rate without insurance so there was no way the post office could trace them. I felt obligated to replace them or refund his money. About the only safe thing to do when shipping by Parcel Post is to insure every package. You don't have this problem with UPS because every package must be signed for before the delivery man will leave it.

A New De Forest Museum. As you will recall from reading an old Antique Radio Corner column, Art Trauffer, the well known writer for ELEMENTARY ELECTRONICS, had the de Forest Museum established in his apartment in Council Bluffs, Iowa. I just received a letter from him which says in part:

The Union Pacific Railway donated their big beautiful Union Depot in Omaha, Nebraska, to the city of Omaha, and the new Western Heritage Society is converting the Depot to the Western Heritage Museum.

Most of the de Forest items in the Lee de Forest Memorial Museum in Council Bluffs, Iowa have been donated to the Omaha Western Heritage Museum for display. The de Forest artifacts are displayed in four glass-enclosed display cases in a prominent place in the museum. In fact, the de Forest collection was the first display in the new museum. The museum was opened to the public on November 22, 1975, and nearly 3000 people attended the first two opening days.

Art Trauffer saved a few of the de Forest items from his collection for display in the Lee de Forest Building at the new Iowa Western Community College in Council Bluffs, Iowa.

Each de Forest item on display has a card giving some information about the item, and giving credit to the person who donated the item. Art is the Curator of the two displays, and anyone wishing to donate de Forest memora-

bilia to either of the two displays may contact Arthur Trauffer, at 120 Fourth Street, Council Bluffs, Iowa 51501, or phone 712-322-6278.

Crosley Meeting Held. As you can see from the photographs, a very informative meeting of the Indiana Historical Radio Society was held at Vernon, Indiana.

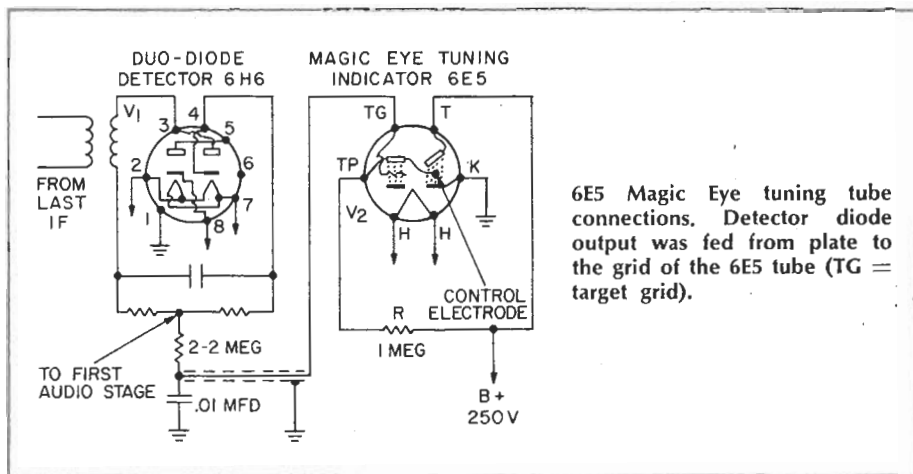
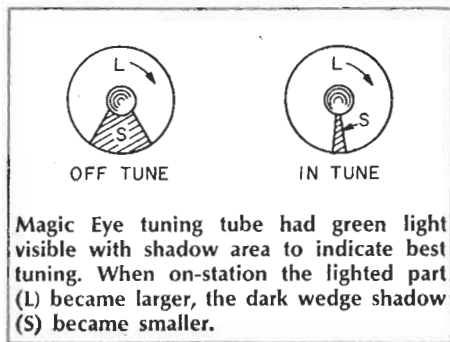
Vernon is a small town located southeast of Columbus, Indiana just about twenty-five miles north of the Ohio river. Powell Crosley's estate was located just a few miles from Vernon, Indiana. In 1958 the greater portion of the farm land was sold to the Indiana Department of Conservation. The land was to be used for hunting and fishing, and was named the Crosley Fish and Wildlife Area in Powell Crosley's honor.

The meeting was a tribute to Crosley and the radios he manufactured. A large collection of Crosley radio receivers was on display and a half dozen former Crosley employees were on hand. Some of the employees had worked on the Crosley estate and some had been employed by the radio factories. Several former employees gave short speeches about Mr. Crosley and related interesting episodes in their relationships. Meetings of this type are important to collectors because they present an insight into the real lives of the radio pioneers that we can get in no other way.

"Magic Eye" Tuning Indicator. One of the most popular resonance indicators used to be the Magic Eye vacuum



Some very old radio tubes and light bulbs seen at Winston-Salem, N.C. AWA Southern radio meeting.



6E5 Magic Eye tuning tube connections. Detector diode output was fed from plate to the grid of the 6E5 tube (TG = target grid).

tube. This is really two tubes in one envelope, one a triode section and the other a cone-shaped target at the upper end of the tube which has a green fluorescent coating.

The tube has a common cathode. The lower part supplies a stream of electrons for the triode section, and the upper part of the cathode supplies electrons that bombard the fluorescent coating on the target. The electron stream illuminates the target area with a greenish glow. A small ray control electrode (connected to the plate inside the tube) placed in this electron stream exercises a control over the area of the target which is struck and illuminated by these electrons. A fan shaped shadow appears where electrons do not strike it.

The detected signal voltage is applied to the triode control grid, and as the radio receiver is tuning in a station, this grid becomes more negative with respect to the cathode. Since this decreases the plate current, there is a smaller voltage drop through the one megohm plate resistor, and the positive voltage applied to both the triode plate and the ray control electrode increases. When the station is tuned exactly to resonance this increased positive voltage on the ray control electrode causes the shadow on the target to narrow down to a thin line. As one tunes away from the station the shadow widens.

This tube was made available in several versions; e.g., 2E5 with a 2.5 volt filament, 6E5, 6U5, 6AB5/6N5, 6AF6G, and the 6AL7GT with two targets, one for tuning AM and one for

tuning FM stations. All these tubes whose numbers start with "6" have six volt filaments.

The magic eye tubes seem to lose their brightness quite rapidly. In the socket assembly there is a one megohm resistor. Often this resistor will open up and the green glow will be absent. This resistor is well hidden unless you know where to look.

There were other schemes used to indicate when a receiver was tuned to resonance. Wayne Beever of Palmyra, MO wrote me about one in his General Electric radio. This tuning indicator was called Colorama Tuning by General Electric and was used in models E-126, E-101, E-105, and E-106. This system consisted of 4 red dial lights and 3 green dial lights. The dial would change colors as the stations were tuned in.

In Memory of P. R. Mallory. On December 16, 1975 Philip Rogers Mallory passed away at the age of 90, at his home on Fishers Island, New York. There surely isn't anyone in the radio-electronic industry that hasn't heard of the P. R. Mallory and Company, Inc. There are very few companies founded 60 years ago that have survived with the original founder's name still intact. Mergers, depressions, and death have taken their toll of family owned corporations.

Mr. Mallory incorporated the company bearing his name on April 10, 1916. The first factory was located in Port Chester, New York. Their main product was tungsten wire used as filaments in electric light bulbs. However the General Electric Company owned the basic patents on the light bulb and slowly forced all but a few of the independent light bulb makers out of business. Some of the larger ones were sold licenses by GE with the provision that they must use wire supplied by GE. At this point, The Mallory Company ceased to be a supplier of tungsten wire for light bulbs.

They then entered the toy electric motor business and later bought the Elkon Works from General Electric, in



Collectors looking over goodies at Indiana Historical Radio Society are, left to right, J. Anderson, A. Collins, Ed Taylor, and your columnist, J. Fred. (Photo-Betty Cull)

Weehawken, New Jersey. Elkon material was an alloy of tungsten and molybdenum. It was used to make contact points, X-ray targets, parts for vacuum tubes and welding electrodes when further alloyed with copper. As business improved the Mallory Company outgrew the facilities in the east and a search was made for a plant large enough to house all their activities. An empty, nearly new, building was found in Indianapolis, Indiana and in 1929 the entire manufacturing operation was moved there.

They soon became heavily involved in manufacturing radio parts, such as capacitors, resistors, switches, jacks, plugs, TV tuners, timers, vibrators for auto and home radios, and many other products that Radio-TV repairmen use.

I have been employed in the Engineering and Reliability Departments of a subsidiary company for nearly twenty years. I have seen and heard Mr. Mallory speak several times. His reasoning behind giving his name to the company is quite interesting. He said, "I had made up my mind that this business was to be my life's work, that it had to be a success, that it must stand for the best in its line of endeavor, and that it should be operated under business principles in which all associated could be proud."

So long for now. We will be back with you in two months with more news, helpful hints on restoring radios, history of radio pioneers, and other things of interest to radio and wireless collectors.



Part of collection of Steve Meyerkorth, Omaha, Nebraska. Note directional antenna atop the console.