

RADIO IN THE HOME

By HENRY M. NEELY



Here are the best types of stands for using a crystal detector. There are many different makes specializing in these types and their advantages are described in the accompanying articles.

Some Points on Crystal Detectors

It is a perfectly easy thing to sit down and write an article telling how to make a complete receiving set for a dollar. I have been much amused at a number of such articles I have seen and particularly at the ingenious devices evolved to take the place of the usual crystal detector stand. Most of these devices simply use a twisted wire to make the contact with the crystal and you are directed to find the sensitive spot with it.

Instead of telling you to find the sensitive spot they ought to dare you to find it. These things are all right for the experienced amateur who knows exactly where and how to locate trouble in his set, but there is nothing that gives the average beginner more bother than finding—and keeping—a sensitive spot on his piece of mineral.

It is astonishing the number of different types of crystal holders that have appeared on the market since this radio broadcasting craze began. I think I must have personally tested fifty of them and these tests have convinced me that the only type for one who is not skilled in radio is some such apparatus as shown in the illustration. There are many makes on the market using this general principle and the choice may well be left to the one which the purchaser feels fits his hand the best.

This style of stand holds the crystal in a cup or clamp on the base, attached to one binding post. The catwhisker wire is bent at right angles and is mounted upon a ball and socket joint or a pair of swivels or gimballs or some such arrangement to give it absolutely free play in all directions.

The advantage this type of stand has over all others is due to the fact that a difference of pressure applied to the weight of a feather applied to the catwhisker on the detector will cause a vastly great difference in the clearness and strength of the signals. For this reason, all devices which have a spring pressure are bad and those which depend upon a screw and thread are undesirable because, the moment you go to screw in or out, you are almost certain to take the end of the catwhisker off the sensitive spot and you may have a heap of trouble finding it again.

And this leads me to another point about galena which does not seem to be generally understood by beginners. This is the fact that, while a piece of galena may be a very fine detector, it may have all of this ability stored in one particular spot no bigger than a pin's head and be absolutely dead all over the rest of its surface. Once you get your catwhisker away from this tiny efficient spot you may have your own troubles finding it again.

I have had a number of pieces of galena which had this peculiarity and I have found that, in nine cases out of ten, scraping the surface quite deeply with a knife blade would uncover many more sensitive spots and even break-

ing up the crystal into three or four pieces with a hammer gave me three or four excellent detectors in the place of one, even though these detectors were smaller.

If you do this you may be puzzled as to how to mount these small pieces in the detector stand. This is quite easy. Simply embed them in a ball of tinfoil from a pack of cigarettes or a piece of chocolate and clamp the tinfoil in the detector stand.

I once got excellent results from an experiment I tried with four or five pieces of galena upon which I could not find a single sensitive spot. One of these pieces was mounted in the usual cup so I simply indented the composition away with my soldering blowtorch, replaced the empty cup on the stand, ground up all of the supposedly dead crystals into a fairly fine powder and filled the cup with it. Thereafter I found plenty of sensitive spots and, if there was any difficulty in finding one, I tapped the cup fairly hard with my finger-nail and this usually located what I wanted.

And this search for a sensitive spot leads me to one other phase of the crystal detector which does not amuse me but fairly makes me furious. This is the failure of beginners to use buzzer testers. It reminds me of my first assignment as a ship's operator. I sailed on an molasses tanker for Cuba on an hour's notice and found that the old-fashioned set with which I was to ship-tunes had no buzzer tester. Two days north of Miami, Fla., the "old man" filed a message for that station and I called them on a powerful two-kilowatt set and listened for an answer, but there was none. It was my first commercial message and I was determined to get it through so I sat up all night calling Miami every fifteen minutes without success. In desperation I spent all of my time in the wireless shack hurling "WST" through the ether with no result.

Late the next afternoon I heard them answer me and tell me to go ahead. I shot my message, got my receipt and rushed up to the "old man."

"I got it through," I said triumphantly.

He sneered and pointed silently to the Florida shore not five miles west of us. There were the great towers of the Miami station which had been heard regularly all the way across the Atlantic Ocean and I was proud of having heard them five miles! I learned later that they had heard my very first call and had acknowledged it, but, having no buzzer tester to tell me that my point was not on a sensitive spot of the detector, I could not hear them and I wasted two whole days and must have interfered with dozens of important messages by my wild-calling every fifteen minutes.

Be all means put a buzzer tester on your crystal set or, if you don't, don't blame the apparatus.

Copyright, 1922, by Evening Ledger Company

PRISON POET EXECUTED: SAYS SPIRIT WILL RETURN

Was Oldest Man Ever Legally Put to Death in New York

Ossining, N. Y., June 30.—Michael Rossi, the aged poet of the deathhouse, was put to death in Sing Sing Prison late last night for killing Anthony Orlando in Tuckahoe, N. Y., in 1919. Rossi was sixty-five years old.

During his imprisonment of twenty-six months Rossi wrote many poems and kept up a regular correspondence with his wife. In a letter mailed to her Wednesday night he said: "I'm going to be transferred from here, and when I get to my new destination I will communicate with you. So you need not go to the trouble of coming here on my last day."

He had made several appeals to Governor Miller to commute his sentence, and yesterday afternoon told a keeper that he shot Orlando in self-defense. He was the oldest man ever executed in this State.

PRAISE MRS. HARMON

Vare and His Lieutenants Laud Chief Woman Aide

Receiver of Taxes W. Freeland Kendrick drew loud applause last night from 300 guests attending a dinner at the Adelphia Hotel in honor of Mrs. Archibald R. Harmon, when he offered to support her for any office that the Women's Republican Club might back her for. The dinner was given by the club.

Congressman Vare expressed his appreciation for her support.

George A. Welsh, nominee for Congress, styled the group of women the most representative in Philadelphia and declared that women will have to be recognized on an equal footing if the Republican Party is going to keep up its progressive policy.

Mrs. Caroline A. Moore, better known as "Mother" Moore, was one of the speakers.

MEN'S SUMMER CLOTHES CLEANED & DYED

WOMEN'S CLEANED & DYED

An expert service based on improved master methods backed by many years' experience in serving the most exacting people. Suits or dresses given a rebirth in all their original freshness and form. Charges most moderate.

Barg's Phone Poplar 7660
for Auto to Call
Philadelphia's Quality Cleaners and Dyers

Main Office and Works: 1616-28 N. 21st St., Philadelphia
Branches: 1113 Chestnut St. and 5557 Germantown Ave.

MEN'S SOLID LEATHER BELTS
NO STITCHING \$2.00

Made of the same LEATHER as our Highest-Grade Riding-Bridles

MARTIN and MARTIN 1713 CHESTNUT, PHILA., PA.
SADDLERS AND LONDON

ALSO - SOLD - BY
Strawbridge & Clothier, Wm. H. Wanamaker, Wm. Hopkins Co., Bowker & Bowker, Walter G. Becker, Geo. Marshall.
Ask for "THE SADDLER'S BELT"
A Saddle (trade mark) stamped on every one of them.

INDIGNITY IN HAITI ALLEGED

Missionary Asks \$100,000 of U. S. for Arrest by Marines

Washington, June 30.—One hundred thousand dollars "reparation" for alleged cruelties and indignities suffered at the hands of United States Marines and local military authorities in Haiti is asked by the Rev. L. Ten Evans, of Wyoming, Pa., former Baptist field missionary and superintendent in Haiti, in a petition filed with the State Department and brought to the attention of members of Congress.

Senator Pepper and members of the Pennsylvania congressional delegation, including Representatives Coughlin and Kelly, have been requested by Dr. Evans and church officials to press the claim.

Boy Bitten by Dog

Jeffery Powers, thirteen years old, of 121 Sibley avenue, Ardmore, was severely bitten in the leg by a dog yesterday in a yard near Glen and Wister roads, Ardmore. The boy was selling tickets for the Lower Merion fire company's benefit. A woman called the dog after he bit the boy and said the animal was thirteen years old and never had liked children. The boy was treated by Dr. Samuel Sturgis.

LATEST IN RADIO

Every development in this rapidly developing field of science and amusement is announced by Wm. G. Ellis, former radio expert U.S. Navy, regularly in the **PUBLIC LEADER**. "Make It a Habit" to read.

NO BETTER WAY TO CELEBRATE

Than to read aloud from

THROUGH THE SHADOWS

By Cyril Alington

"As dashing a bit of comedy as has appeared in a long time."

\$1.75

At all bookstores or from

THE MACMILLAN COMPANY
64-66 Fifth Ave. New York

Take 10 years off your age

The healthy woman who looks her age is either stupid or lazy. Here's one woman of 38 who looks 28, and she does it without quacks or rouge or hair dye. You can do it too—read "Why Grow Old?" the first article in a sensational new series.

Do you know your own son? He is a puzzle as baffling to parents as is the jazz-mad flapper. What will you do with him? Read what Sarah D. Lowrie says.

Don't miss the beginning of "A Ticket for Adventure," a thrilling mystery serial by George Weston. Besides these there are pages of new summer styles; scores of hot-weather recipes; vital, compelling articles; clean, vivid stories—more than 30 fact and fiction features in the big July issue of

THE LADIES' HOME JOURNAL

15¢ a Copy
From Any Newsdealer or Boy Agent

\$1.50 a Year
By Mail Subscription

Is being cool a matter of interest to you?

You can be cool, but not unless you stop wearing hot clothes.

Palm Beach Suits are cool, light and comfortable. You cannot wear a hot suit and be as cool as you will be if you wear a Palm Beach Suit.

So make up your own mind what you are going to do. If you are really interested in being cool, buy Palm Beach Suits.

You can get Palm Beach Suits that are as carefully and skillfully tailored as you want them to be. You can get Palm Beach Suits in your choice of a variety of patterns. The cloth is all the same quality, all the same weight, but it is made in many patterns and shades, from severe dark tones up to the familiar light colors.

Every Palm Beach Suit made of genuine Palm Beach Cloth bears the Palm Beach label.

Golf Knickers made of Palm Beach are cool and good-looking—practical and durable.



Palm Beach
This Label Identifies the Genuine

THE PALM BEACH MILL CO. 1111 N. 11th St. PHILA., PA.
Sole Agents: A. Beckwith, 1111 North Avenue, New York City

PALM BEACH SUITS

at Good Clothing Stores