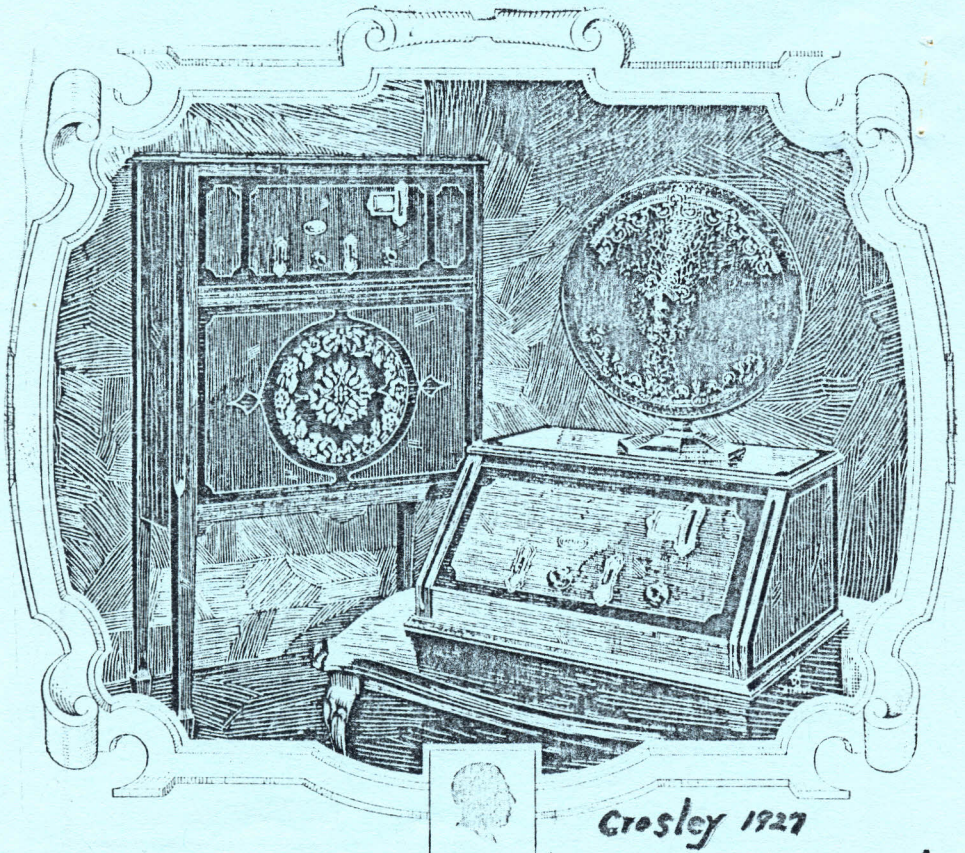


Vol. 5
No. 4



April
1979

CALL LETTER



Notes from the Cuff-----

In order to keep the costs within bounds, and at the same time, keep the printing quality at a respectable level of legibility, we have again tried a new medium of printing. Nuf-sed until all the members have had a chance to voice their various criticisms. Our very capable and dedicated member, Doug Eggert, has made a new approach worth a trial. Especially noteworthy because of a substantial reduction in cost. If this new run of Call Letters is not suitable, then means of raising funds for the printing costs must be considered.

It must be remembered that we are printing only a minimum number of copies of the Letter which cost almost as much as if we turned out five hundred of them. A number of members have clamored for more pictures of our membership activities, collections, etc., but to date I have not found the means nor the expertise to put such a program together!
your Ed.

CALL LETTER

The Call Letter is a monthly publication of the Northwest Vintage Radio Society, a non-profit organization, incorporated in the State of Oregon. Meetings of the Society are normally held on the second Saturday of each month, at ten AM, at the Buena Vista clubhouse, 16th and Jackson Streets, Oregon City, Oregon.

Editor-in Chief..... Tom James
Feature editors include: Hugh and Virginia Ranken, Glenn Gonshorowski, Joe Tompkins, Bob Hay, Bob Campbell, and others.

Advertising space is available. Bob Hay, Ad. Mgr.
Correspondence regarding contents of the Letter should be addressed to:

P.O. box no. 02379, Portland, Or. 97202

Phone inquiries to; 503-235-0581

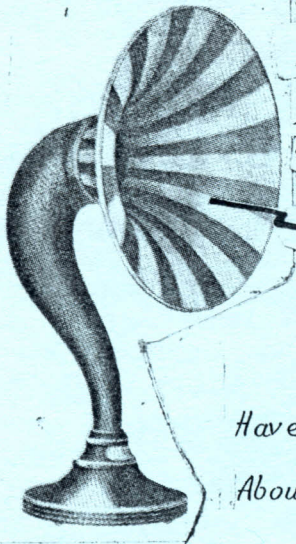
OUR PEOPLE

by Hugh Ranken

THE SWAP MEET is the big news for April. At the March meeting it was decided that anyone participating make a donation of \$2.00. So get your radios, parts, magazines and literature together and bring to the next meeting. The time - April 14th, right after the regular meeting. The place - at the club house, 16th and Jackson Streets in Oregon City. The ladies will provide a tasty lunch.

Several radio related items were shown at our March meeting. These included Don Iverson's radio banks, a radio game brought by Bob Campbell and an outstanding display of old radio posters, advertising aids, slides, books and other items by Glen Bricker. Thanks to all who participated.

Speaking of things radio related - do you remember the remote broadcasts from the old ballroom at Jantzen Beach during the big band era of the 1930's? Emerging from the depression years, people were looking for new entertainment and during the spring and summer such bands as Anson Weeks, Phil Harris, Dick Jurgens, Skinnay Ennis and many others appeared. At air time everybody gathered around the band stand and, as the band did their theme and the crowd applauded, the announcer would say "from the Golden Canopied Ballroom at Jantzen Beach, on the shores of the mighty Columbia River, we bring you the music of". The ballroom is gone, as are most of the bands but the memory of those times still lingers.



ATMOSPHERICA

By J

The Jonah Set

Have you ever heard the tale;
Partly funny, wierd, and sad,
About that jinx Majestic,
That the Jacob's family had?

It came the thirteenth, Friday;
On Sunday they gathered 'round
To hear their favorite service
From a station there in town.

All they heard was a roaring,
The static, a fearful din.
There wasn't a station going
That could drive a signal in!

And yet-- when church was over--
From two hundred miles away,
You could hear the jazz-band playing
From Spokane's K G A .

The thing was temperamental,
And had that evil quirk--
Whenever they wanted a program
It always seemed to shirk.

Papa reached into the back
To adjust a tube, when BOOM!
He found himself a-sittin'
Across the living room!

(continued on page 6)

POWER SUPPLY

by Virginia Ranken

THE SWAP MEET IS COMING - THE SWAP MEET IS COMING to be held after the business meeting, April 14, at the club house in Oregon City. Lunch will be available as usual, courtesy the Ladies Auxiliary. Make your plans to come to the meeting, stay to buy or swap and have lunch.

No actual work has been started yet on renovating the club house but there are some interesting blue prints on the wall showing what is planned.

We were all shocked and very sad at the sudden passing away of our Ladies Auxiliary Club member Lorena Leete (Mrs. Maurice) on March 24th. Services were held March 27th in Canby, Oregon. She was a good friend and we will miss her.

BUENA VISTA CLUB NEWS: The Community Club Awards campaign is almost over for this year. Our last turn-in period being March 28th. Our thanks to all the Buena Vista Club members, relatives and friends for saving the invoices, sales slips and labels that we needed. We plan to go on to bigger and better turn-ins and awards next year. The "Pay Off Party" will be Monday, April 23rd, when all the clubs in the winners circle will be given their prize money. We urge as many Buena Vista Club members as possible to attend.

(Atmospherica, cont. from page 4)

Their son was helping mama
Move furniture round one day,
When that heavy monster toppled
And broke his foot, they say!

Papa Jacobs had had enough,
And he told his family so.
There was no doubt about it,
"Old Maj" would have to go!

He gave it to his hired hand--
(The loss made the old boy wince)
And that dad-gummed old receiver
Has played perfect ever since!

E R R A J A

Craig Hoaglin called our attention
to our error in the membership list.
His home phone should be: 648-1466
and business phone: Cornelius, Or.
exchange: 357-0792
(sorry, Ed.)

---Notice---

(See inside Mailer)

Morgan McMahon advises me that he is shutting down Vintage Radio as of the present, and unless someone takes over the operation of this hobby business, will cease when the present stocks of material is exhausted. Stock up on any of his offerings now.

Your editor heartily recommends these books to anyone in the Vintage Radio field. Additional Information may be had by writing to:

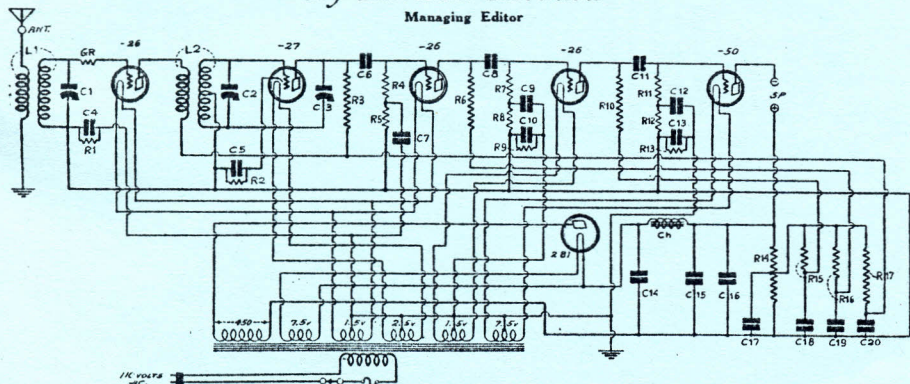
Vintage Radio, Dept. M, Box 2045
Palos Verdes Pnsla., Ca 90274

You Read Diagrams

Quick Glance Reveals Surface, Close Study the Intimate Lore

By Herman Bernard

Managing Editor



WHAT DO YOU KNOW ABOUT READING A DIAGRAM?

ARE you able to read a schematic diagram of a circuit?

Take the diagram printed herewith. What does it mean to you?

No matter what the connections are, you should be able to make them out. They are made to resistors, coils and condensers. You should be able to tell how the current flows, where, why, and the purpose of the connection.

The diagram at a glance discloses the following:

First: A 5-tube AC receiver with B supply, in which is a half-wave rectifier tube.

Second: One stage of RF amplification, regenerative detector and three stages of resistance coupled audio.

That is all that a quick glance reveals.

Now, scanning the circuit, we see that grid bias is afforded to each tube by a resistor. All grid returns are to B minus; hence, all biases are negative.

R1 biases the first tube, a 226. The same resistor biases the first audio tube. The 1.5 volt winding third from left in the power transformer feeds these two tubes directly with AC for the filament, hence only one bias is obtainable. The plate currents of the two tubes must flow through the same filament winding, hence if independent resistors were across each filament they would be merely in parallel. The center-tap, therefore may well be used.

How does the bias arise?

The plate current flows from the plate of the tube across the inside of the tube, past the grid to the filament. It takes the name of space current. It must find its way back to the starting point, B minus, or there would be no circuit. This it does by flowing through the filament to the secondary of the power transformer, dividing here, so that the current meets at the midtap and proceeds through the biasing resistor to B minus. The current in the resistor causes a voltage difference and this is the bias, due to connection of filament to positive side of the bias resistor, and grid return to negative side. Hence the grid is negative in respect to average filament center.

GR is a resistor that does not bias. Why not? Because no direct current

flows through it. Used as a suppressor, to stabilize the RF stage, it is in series with the tuned circuit. It increases the resistance of the grid circuit, not, however, of the tuned circuit. It is outside the tuning arrangement L1C1. High input resistance (called input impedance) improves selectivity. The resistance of GR should be equal to the negative RF resistance caused by regeneration. Then, and for higher resistance values, the circuit will not self-oscillate.

The detector is negatively biased too. Rectification takes place because the bias is high. Since the detector is only indirectly heated by AC, and is directly heated by thermal radiation from the heater, the biasing resistor now goes from cathode (electron emitter) to B minus. The resistor is R2. It is very large, because, though the plate current is low in a detector, the bias must be high. R2 is 50,000 ohms, whereas R1 is only 1,000. R2 gives 10 volts bias at a plate current of 2 milliampere. The current is so low because of the voltage reduction in R3 and in R2. The plate current of the detector flows through both.

Regeneration is provided by a form of Hartley oscillator that splits a single coil to combine it in plate and grid circuits, to produce "parallel feed."

Look at the resistance coupled audio amplifier. It has plate resistors (R3, R6, R10) and grid leaks (R4, R7, R11), also plate-to-grid condensers. Look at those condensers now. They are C6, C8, C11. Plate to grid! Does that mean they couple the plate of a preceding tube to the grid of a succeeding tube? Think! Can't say?

Well, for R3, R4, R6, R7, R10, and R11 use very small resistance—1,000 ohms each, for instance. No signals are heard. It is a fact the condensers C6, C8 and C11 do not couple the respective stages. Resistance coupling is just that—coupling by and through resistors. R3 is in the plate circuit. R4 is in the next grid. They are in parallel. But if nothing intervened, then the positive plate voltage would go directly to grid of the next tube, and we want the grid negative. Therefore we use isolating or stopping condensers, not to couple one stage to another, but to keep

the positive voltage off the grid. The condensers, however, form part of a resistance-capacity filter, since in series with parallel resistors. Therefore C6, C8 and C11 should be of large capacity (500 mid. or more), lest low notes be cut off. To safeguard amplification the leaks should be of a high order, 1 meg. or more.

The plate resistor R3 may be high, up to 1 meg., or more. But the other plate resistors showed not exceed 100,000 ohms, because a larger flow of plate current is desired in the stages that have to handle greater voltage. The signal has only this plate current to "ride on," so if the plate current is less than the maximum swing of the signal, distortion and blocking arise.

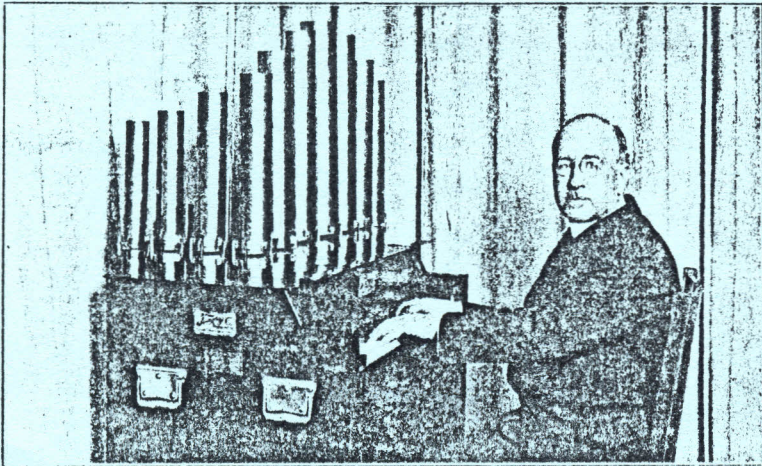
The grid circuits of the AF channel are filtered. R5 is no grid leak, for C7 bypasses the signal to ground. It is a filter circuit to keep the signal out of the B supply. Any shippage would have to be through R5, and that would be a good stopper of truant currents, because whittling them down so much. Contrast this with R4, which, the larger it is, increases the voltage drop across it, hence the input to grid-filament. But remember that the preceding plate resistor is in parallel, and that the net resistance of the two is going to be less than the resistance of the smaller!

Resistors in parallel equal the reciprocal of the sum of the reciprocals. 100,000 ohms in the plate circuit and 1,000,000 in the grid circuit equal:

$$\frac{1}{100,000} + \frac{1}{1,000,000} = \frac{1}{1,100,000} = \frac{1}{11} = \frac{1,000,000}{11} = 90,909 \text{ ohms}$$

The resistance-capacity filter is used in the B supply also. The B voltage is dropped through a resistor (e. g., R15), and immediately this circuit is bypassed by C18. The reason is the same: prevention of audio feedback, which if present would cause slow oscillations (motorboating) or medium ones (howling) or high ones (steady squeal).

Note in a half-wave rectifier that filament is positive, plate negative. A plate in any tube always is negative in respect to the B+ source feeding it, but only in a rectifier is the plate negative in respect to filament.



A BISHOP WHO PLAYS THE CALIOP

The Right Reverend Walter Taylor Sumner, of Portland, Oregon, bishop of the Episcopal diocese of Oregon is the only bishop in the world known to play the caliope. He plays such tunes as "On the Sidewalks of New York," "Little Annie Rooney," "After the Ball" and others in real circus fashion. The bishop is a member of the degree team of the Hoot Owls and takes an active part in the programmes that "spread sunshine" and fun

The Keep Growing Wiser Order of Hoot Owls

IN January, two years ago, a group of Portland, Oregon, business and professional men banded together in what was destined to be one of the foremost organizations of radio fun-makers in the world. The need was felt for an informal programme of fun and frolic to offset the formal recitals and concerts that were then the fashion in broadcasting circles. To this end the Keep Growing Wiser order of Hoot Owls was organized with weekly meetings held in the home roost, the radio studio of KGW, the Morning Oregonian of Portland, Oregon.

Every Friday night at 10:30 o'clock,



Richard V. Haller, Programme Director and Chief Announcer for Radio KGW, of Portland.

Pacific time, these men drop their private affairs and, as members of the degree team, take part in the burlesque lodge meeting and miniature vaudeville show which constitutes the meeting of the Hoot Owls. Each man is picked for some special entertaining ability.

Grand Screech Chas. F. Berg is in charge of the initiations and sees to it that one or more prominent individuals ride Sweet William in person, as representatives of the large class that is taken in weekly. Mr.

Berg and Grand Schmoos Barnett H. Goldstein wrote the Hoot Owl ritual. Minor changes are made in the form of the ritual from time to time to

give it variety and timely interest.

Each week Frank J. Sardam, Grand Scream, presents Dr. Sedative P. Seidletz and the degree team in lectures, dramas, hysterical and otherwise, musical comedies and other features.

The Hoot Owls are proud of the fact that they have the only bishop in the world that plays a caliope. He is Walter Taylor Sumner, of the Episcopal diocese of Oregon. Bishop Sumner is an accomplished musician, but he is more popular with the Hoot Owl audience because of his work on the Owlorgan, an air caliope used in the meetings.

Grand Slumber Steven Jusz presents local musical talent and is also noted for his ad lib humor, his stories, songs, and continually keeps the meeting lively by threatening to play his mouth organ.

Grand Slam Henry Metzgar and Grand Sketch "Tige" Reynolds are also great "ad libbers" and are good actors.

Holder of the Grand Goat, Dick Haller, also chief announcer for KGW, arranges the programmes and does the back stage work and the announcing. He also arranges to have the headliners of the Pantages and other vaudeville circuits present at the meetings as well as the stars of the other passing shows.

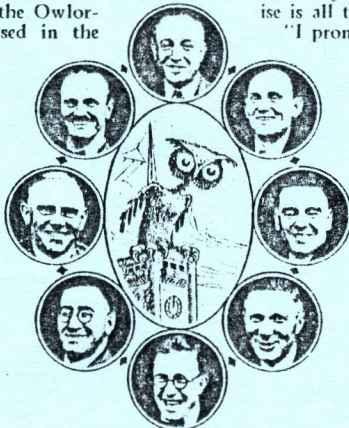
Over fifteen thousand members have been enrolled in this order. Each member receives two cards, a large one to display on his set and a smaller one to carry in his hip pocket if not already occupied. Hoot Owl members are to be found in every state in the union, Canada, Alaska, Mexico, the Hawaiian and Samoan Islands. Hoot Owl pins and other insignia are available if the member wishes.

So famous have the Hoot Owls become that two stations have applied for permission to rebroadcast them for the benefit of owners of small sets who are unable to pick up KGW, the home roost, direct. This permission has been granted and every meeting is rebroadcast, through CFAC, the Herald of Calgary, Alberta, Canada, and KFRCM, the Radioarts Studio of San Francisco, Calif.

You are all cordially invited to attend the meetings of the Hoot Owls. If you care to join, the following promise is all that is required:

"I promise to sleep all day and hoot all night; I will hoot till the limb breaks and then get on a higher limb; to a brother owl in distress I will give at least two hoots, and I will scatter sunshine at night and scatter it good. I also promise to attend the meetings every Friday night at 10:30 o'clock, Pacific time."

C-9



The degree team of the Keep Growing Wiser Order of Hoot Owls, which broadcasts every Friday night at 10:30 o'clock Pacific time, from the home roost in the Oregonian tower, Radio KGW of Portland, Oregon.

Reading clockwise: Charles F. Berg, Grand Scream; Frank J. Sardam, Grand Scream; Alux Reilly, Grand Symphony; Henry Metzgar, Grand Slam; Dick Haller, Holder of the Grand Goat; Barnett H. Goldstein, Grand Schmoosh; "Tige" Reynolds, Grand Sketch; Steven Jusz, Grand Slumber.

From Radioscope Magazine, 1/1'25

I remember the Hoot owls from my area in Nc. Washington.

It was one of our "must"

programs before bedtime. There were numerous classics in the Golden Age of radio which have no counterpart today.

ed.

Radio Kit Reviews

HFL MODEL 10 ISOTONE

THE HFL Model 10 Isotone is a standard screen-grid superheterodyne, utilizing nine d.c. tubes as a radio receiver, with a tenth tube available as an extra stage of audio amplification for phonograph reproduction. It incorporates several new features, including a radiophone control switch on the panel. When this switch is turned to the phonograph side the oscillator, detectors and i.f. amplifiers are completely disconnected from the circuit, leaving three stages of a.f. amplification with '12A tubes for the first two stages and two '71As in push-pull for the third. This a.f. amplifier may be used in connection with any external detector, short wave or broadcast, by plugging the latter into the tip jacks designed for the phono-

is shunted across each of the larger .0001 secondary condensers, allowing each i.f. circuit to be separately tuned. This compensates for variations in the internal capacities of the tubes, making it possible to maintain the utmost selectivity of the amplifier at all times. The sensitivity of the i.f. amplifier is controlled by variation of the voltage applied to the screen grid. Each stage is said to have a radio-frequency gain of 65.

In the tuning unit a small trimmer condenser, shunted across the oscillator coils, makes it possible to adjust the oscillator and antenna tuning dials so that they read alike. In balancing the instrument for best results it is necessary to leave all the shield cans covered with the exception of the one to be balanced. Once the intermediate amplifier is balanced it should be left that way until such

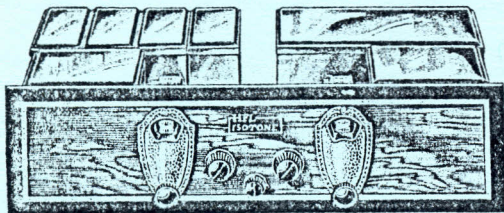
to a metal sub-base drilled for speedy mounting. Six bakelite strips protrude through the bottom of the base pan and the terminals thereon are easily hooked up with nickel-plated connecting strips. The whole job of assembly can be done in less than an hour; each unit fitted into place and made fast, bottom connecting strips screwed on, panel and knobs mounted on front, tubes put into their sockets and covered with the individual shield cans. The panel is 7 x 26 in. in size, of walnut grained Micarta.

The manufacturers of the HFL Isotone have also designed a power pack which furnishes all of the required voltages to the receiver. This is sold completely assembled and wired and provides the following currents and voltages: A current, 2½ amperes at 6 volts; C voltages variable 0-15 and fixed 45 volts; B voltages 45 (variable 0-90), 135 and 180 volts. There is a variable resistor in the A supply circuit which allows the filament voltage to be increased or decreased. Oversize condenser sections and heavy chokes eliminate all tendency toward motor boating and voltage fluctuation. The instrument uses dry rectifiers and condensers throughout and the plate current is furnished by means of a 250 rectifier tube.

When using the power pack on the a.f. amplifier alone, i.e., on phonograph reproduction, with the filaments of the six unused tubes turned off, it was found necessary to use a compensating resistance. This is incorporated in the set.

The parts in the kit are:

1 HFL Isotone assembled and wired tuning unit, 1 HFL Isotone assembled and wired screened grid amplifier, 1 HFL Isotone assembled and wired audio amplifier, 8 HFL Isotone shield cans with tops, 1 base assembly plate, 1 drilled and engraved front panel, 1 seven-wire cable and plug, 2 gold escutcheons with knobs (attached), 2 dial lights (inside of drums), 2 large walnut control knobs, 1 small walnut switch knob, 2 steel panel supporting brackets, 12 plate connecting strips, 55 6/32 hexagon brass nuts, 14 3/4 in. hexagon spacer studs, 14 3/4 in. by 6/32 R.H. machine screws, 6 3/4 in. by 6/32 F.H. black machine screws, 4 3/8 in. by 6/32 R.H. machine screws, 11 tinned copper lugs, 6 ft. push-back wire.



HFL Model 10 Isotone

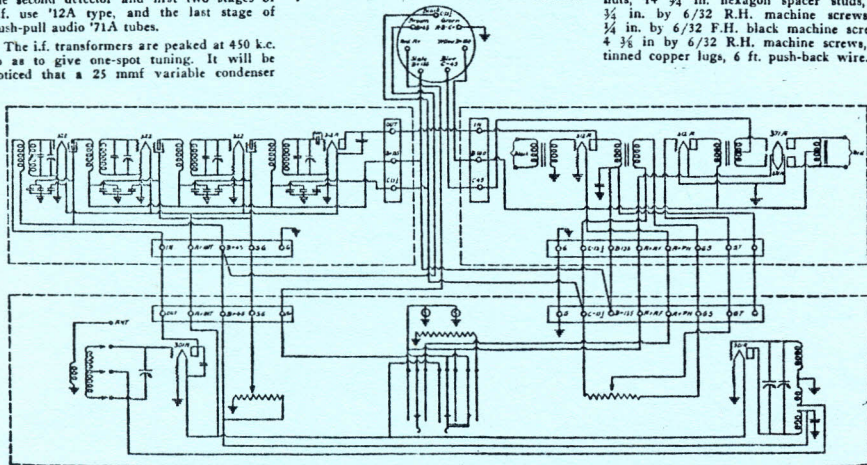
graph pickup. When the switch is turned to "radio" one stage of audio is disconnected, and the other tubes thrown back into the circuit.

Either a loop or an outside antenna may be used. In the case of the latter, the phone tips hanging from the antenna coupler are plugged into the tip jacks marked for the loop. The oscillator and first detector use '01A tubes, the three i.f. stages use '22 type, the second detector and first two stages of a.f. use '12A type, and the last stage of push-pull audio '71A tubes.

The i.f. transformers are peaked at 450 k.c. so as to give one-spot tuning. It will be noticed that a 25 mmf variable condenser

time as any of the screen grid tubes have to be replaced. The only remaining variable control is the small trimmer condenser in the antenna tuning stage. This is non-critical in adjustment and does not usually have to be touched. It is possible, however, to make the receiver oscillate by tightening this condenser. All units are thoroughly shielded.

The kit comes in four parts; namely the base pan, the front control unit, the i.f. amplifier unit and the a.f. unit. All are fastened



Circuit Diagram of HFL Model 10 Isotone

Nov. 1928

LETTERS

(From Joe Tompkins)

Honolulu, Mar. 16th/79

.....Here, I've been only 3 days and I'm ready to go back to my beloved N.W., where the breeze blows cool and fresh and radios are there to find.

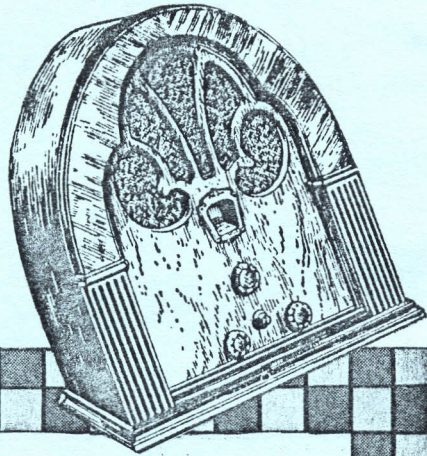
Yesterday I was over town walking around and happened to drop into a seedy looking antique shop--full of dragons, elephants and pot bellied Buddha's etc. All this time, a Japanese clerk, who had an uncanny sense of smelling out a tourist, kept telling me that everything was on sale. I came flat out and asked for the "radio dept". Ha Ha! He laugh at this funny joke, I don't ever see one--I have a tv in my office to sell, a 1973 model--

My daughter, who lives here, is taking me to a flea market Sunday. It's held in the parking area of a drive-in theater; everything is on the ground and if you want tables you bring your own. She is taking her new bike to sell. I'm supposed to help do it, big deal! I'll fall over dead if I see a radio there. However I was told by an old radio repairman, that radios were very scarce and only on the back islands would they be likely found. Battery sets are still in vogue as there is not too much AC on the islands.

.....so Tom it appears it will be a long dismal vacation--vacation from what? My radios, my club, my great friends, what better vacation can that be?

As I look out of the 5th deck of my daughters apartment lanai (Hawaiian for porch) and see 600 more of the same, is not too exciting. Pigeons are there for their handout too. I keep seeing a mirage out there, a 10 tube Golden Leutz, lying under a banyan tree, left there for me--and as I reach out to lift the lid, I glimpse my old friend and fellow collector, with the white cap, drift away with it, laughing, into the sunset!

Best regards, and
good hunting, Joey 11



**WANTED ANYTHING MADE BEFORE 1940,
CASH PAID, ANY AMOUNT
WE PICK UP ANYTIME, ANYPLACE
QUALIFIED APPRAISALS**

Furniture	Comics	Glassware	Clocks
Rugs	Dolls	Post Cards	Trunks
Pictures	Jewelry	Toys	Trains
Radios	Pocket Watches		Coins

MIKE'S GOLD ANVIL ANTIQUES

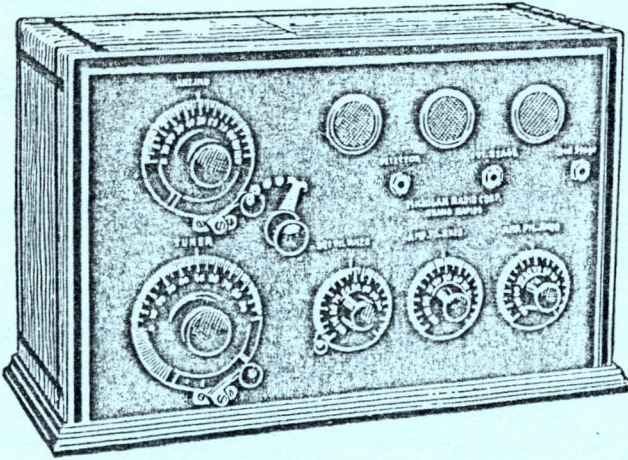
5901 S. E. FOSTER RD. - PORTLAND, OREGON
CALL COLLECT - 771-1066

Proprietor
Mike Losli
Res. 645-1254

Mercantile Clerk
Bob Davis
Res. 775-9908

1914 1900 1904
1928 1908 1937
 1903 1933 1902 1934 1906 **1917** 1911
 1929 **1936**





Michigan "Senior" Regenerative Radio Receiving Set

A Long-Distance Wonder Worker

Built under Armstrong License (U. S. Patent No. 1,113,149) and pending letters of patent 807,388

Brings in signals clear, loud, remarkably free from distortion of any kind. Adapted to either head-phone or loud speaker reception.

Its Michigan "Split Hair" Vernier Dial Adjuster permits of a finer selective tuning than any other dial-control offers. It has a small rubber washer, in friction-contact with the dial rim, enabling the operator to tune to the fraction of a hair's breadth. (Patent applied for.)

"Michigan" Tube-Sockets insure positive and permanent contact. The tubes are held in perfect alignment. The wiring is so arranged as to be out of sight—making but a few short wires necessary.

The Michigan Vernier Rheostat—Simple to operate, gives that close

and fine adjustment of filament heating which is so essential to good results. The Panel is shielded which completely eliminates body capacity.

The Cabinet illustrates in no uncertain way the reason for Grand Rapid's international reputation for high-grade wood-craftsmanship. Made in brown mahogany, richly finished. It is an ornament to any home.

Send for circular. It also describes a "Junior" Set at a much lower price, for use with headphones only.

DEALERS will find this set a consistent performer, easy to demonstrate and one that makes quick and easy sales, on demonstration. Our local newspaper and other advertising helps are "just fine."

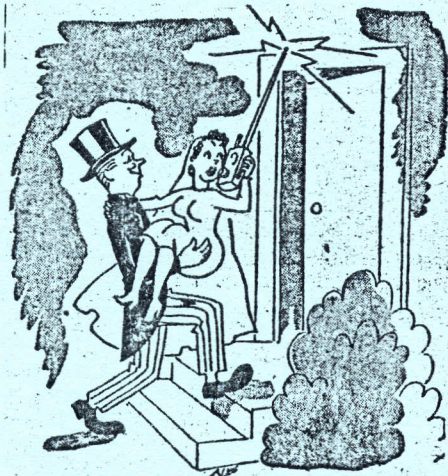
MICHIGAN RADIO CORPORATION

GRAND RAPIDS, MICHIGAN 1923

CARTOON CLIPPINGS



"Well, Mr. Bedsoe, you've certainly been a good sport, yes indeed . . ."



What shall I do next,
Mother?

RADIO-CRAFT for MAY, 1948

The I Q Trimmer--
by Glenn

Here's a few multiple choice questions. Just underline the correct words for the initials given.

R F-----Ratio Finder--Radio Frequency-- Regular
Foot--- Rotating Force-- Real Foolish

V C-----Variable Choke-- Voice Clipper-- Vario-
Coupler--Voice Coil-- Vanishing Cathedrals.

J R F --True Rotating Force-- Tri-Ribbed Feeler
--Tuned Radio Frequency--Two Rigs Following--
True Radio Field-- The Real Figure

E M F -- Emitting medium Frequencies-- Energy
Minus Fading-- E.M. Fada---Electromotive
Force--Early Model Feeder

L W ----- Length x Width-- Low Wattage--Least
Winding-- Leaky Wicket-- Long Wave

A V C ---Any Variable Condenser-- A Vicious
Circle--Autodyne Valve Circuit--Average Vintage
Collector--Automatic Volume Control-- Anhydrous
Viscous Capacitor.

----The correct term applies to radios old or new.
ans. next mo.

** ** * ** ** *

Last months answers are as follows:

- | | |
|--------------|-------------|
| 1. Grebe | 7. Kolster |
| 2. Victor | 8. Meck |
| 3. Dayton | 9. Arvin |
| 4. Crosley | 10. Aeriola |
| 5. Air King | 11. Airline |
| 6. Splitdorf | 12. DeWald |

** ** * ** ** *

It's a Sick Radio that has no tuning: proverb.

SWAP SHOP

compiled by H. Ranken

Don't forget the
Swap Meet

Buna Vista Clubhouse Apr. 14 -
11:00 AM - to ?

- WANTED: Hallicrafter SX23.
Frank H. Plaisted, Jr.
Rt. 3, Box 478
Hillsboro, Or. 97123
Ph: 647-2891
- WANTED: Crosley Cathedral clock radio
and parts for same. Buy or
trade.
Edwin Buhite
4041 N.E. Wistaria Dr.
Portland, Or. 97212
Ph: 284-7061
- WANTED: Old radio tubes, crystal
radios, unusual components.
Don Iverson
10115 N.W. St. Helens Rd.
Portland, Or. 97231
Ph: 286-1144
- WANTED: Short wave plug in coils,
all types.
R. C. Campbell
2175 S.E. Pine
Hillsboro, Or. 97123
Ph: 648-7331