

Vol. IV

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CALL LETTER

THE WUNDERLICH RADIO TUBE

One of the most interesting radio tubes of the 1930's was the Wunderlich tube. The Wunderlich was designed by Norman E. Wunderlich and developed by the Arcturus Radio Tube Co.

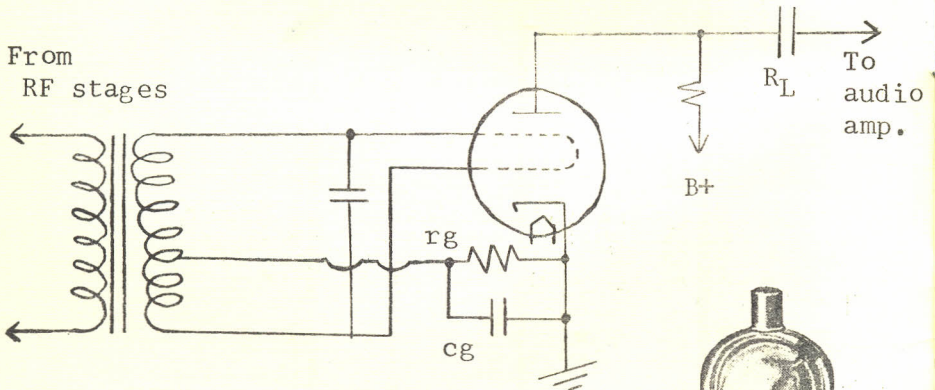
The Arcturus Wunderlich was a blue tube with a red base. The tube was made in both a six prong base version and a five prong base version with a cathode cap. The tube was intended to serve as a detector, an audio amplifier and as an automatic volume control.

The Wunderlich tube employed two input control grids symmetrically oriented in a co-cylindrical relationship with the cathode. The detector circuit is a special version of the grid-leak detector. Driven from a balanced source the two grids full-wave rectify the incoming signal (see fig. 1). The RF signal appears equal in amplitude but opposite in polarity on the two grids. Thus the RF portion of the incoming signal is canceled out and is not amplified into the plate circuit.

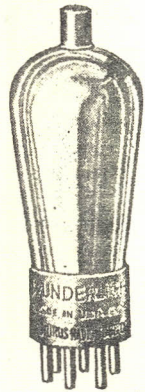
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(Wunderlich continued)

Like so many other good ideas, the Wunderlich never really caught on. Nevertheless, it provided some of the technology behind today's balanced input operational amplifiers. After forty-five years, the Wunderlich is one of the most collectable of the early tubes.



Appearance of the Wunderlich radio tube.



CALL LETTER

The Call Letter is a monthly publication of the Northwest Vintage Radio Society which meets the second Saturday of each month at the Buena Vista Club House, Sixteenth and Jackson Streets, Oregon City, Oregon.

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MARK'S MEMO

By Mark Moore

As most of you are aware, Don Iverson has been making some reproduction parts and is doing an excellent job. They are first rate and he is very proficient at giving them the crackle finish paint jobs. For some of those almost non-existent parts we need more concerned collectors with the ability to turn out high quality reproduction parts. Thank you Don, and keep up the good work. We also hope to have some Magnavox decals available soon.

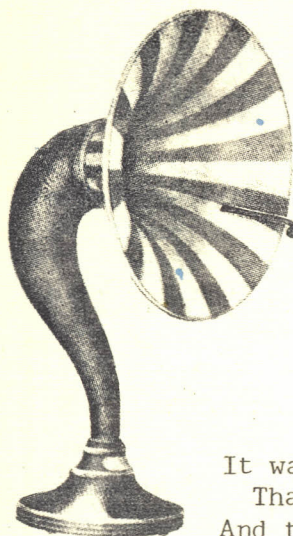
Among the letters that have crossed my desk is a very fine letter from a member from Keyport, New Jersey, Eugene Bordeaux. His big find is a three tube homebrew set that was entered in the Fourth Annual Radio Worlds Fair held at Madison Square Garden in 1927. This set won 3rd Prize and with it were the original pencil schematic, a letter of certification from the radio association and a copy of the New York Times that day concerning the show and announcing the winners. Congratulations on your finds Gene!

To our members in the northeastern U.S. we want to let them know about the contest show, and flea market coming up August 13th at 11 AM at the Old Amherst Colony Museum, 500 Smith Road, East Amherst, New York.

Concerning shows, we want to mention a couple of our own. Now through July 17th, we have a very fine display at the Oregon Museum of Science and Industry. There are about 30 consoles (more than we usually see at shows) and some very early receivers on up through more modern Hallicrafters gear. This promises to be one of our best shows and is already receiving a fair amount of publicity.

Those of you who plan to spend a very good day at Forest Grove for the Concours d'Elegance Show on July 31st, please have your radios there by 8 am. All who show radios will receive two free tickets. This is always a very prestigious show for us and gives us much publicity.

Remember -- our next meeting will be July 9th at 10 am. at the Beuna Vista Club house, 16th and Jackson in Oregon City. We welcome all members and visitors.



ATMOSPHERICA

By J

TOAT'S COULEE CARL

It was an ancient Philco,
That sang beside the chair,
And the old man adored it,
As a child, his teddy-bear.

'Twas comfort in the evening
Clean up 'til he'd return.
'Twas company in the morning,
When he 'rose to build a fire.

He turned it on at noon-time,
A rest from toil, and loam.
And then on every Sunday,
He went to church--at home.

He'd bought the set in '30,
And in nineteen sixty-two,
Lightning hit the aerial,
And the Philco finally blew!

'Twas only two days later,
That the old man passed away--
The service was very simple,
He'd wanted it "that-a-way".

Old Carl's been gone for year now,
But at the end of a summer's day
You may hear him down the coulee
Making his "Phantom-Philco" play.

LETTERS

Dear Bob,

The Call Letter looks great! You asked for ideas. I would like to suggest a "Restoration Tips" column. It would be nice to know some of the tricks for restoration that members use.

Thanks,

Robert Deuel

TOPIC: Five Tube Set Using Freshman Masterpiece
Type Coils

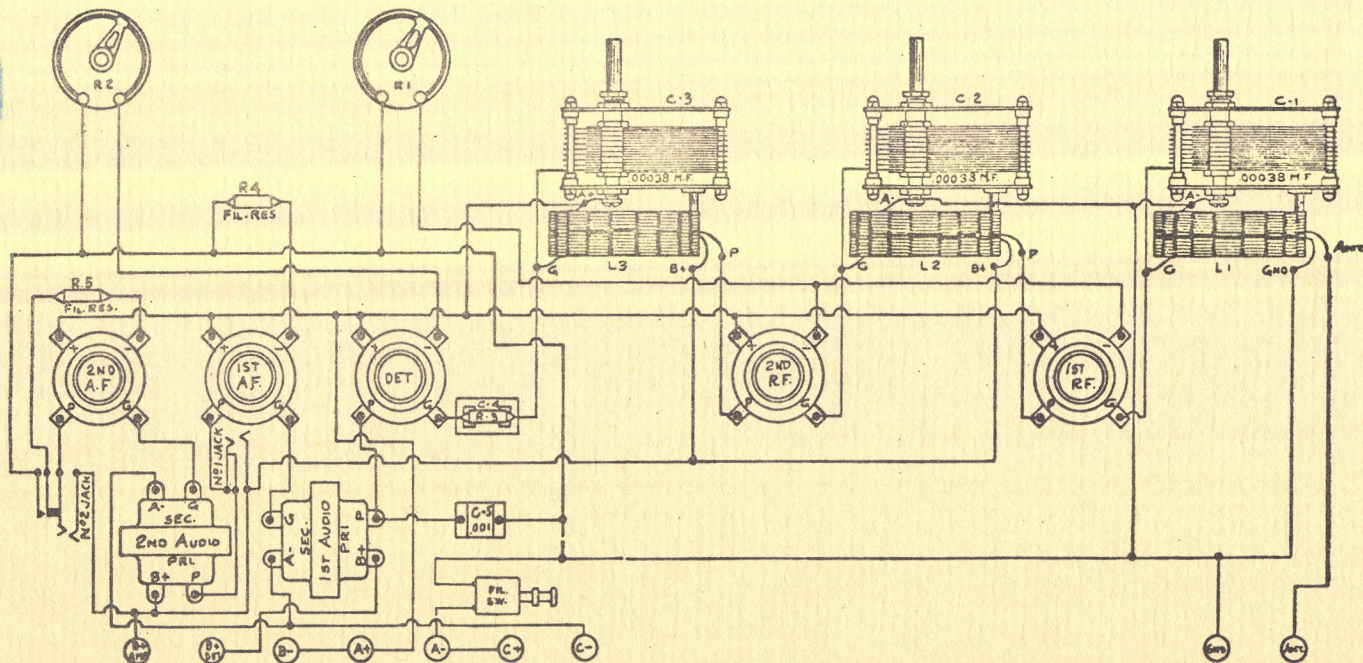
One of the simplest of early tube sets was the TRF circuit also called Tuned Radio Frequency sets, they were very numerous in kit form and although they used several different types of coils they all were wired the same. This diagram used the common and very good Freshman Masterpiece coil. Their coil-loss was rated the least of all the types in use at that time.

The parts came to the buyer very complete, down to the bolts and screws. The tubes were quite standard, 201A's and now and then there was one that called for 199 tubes.

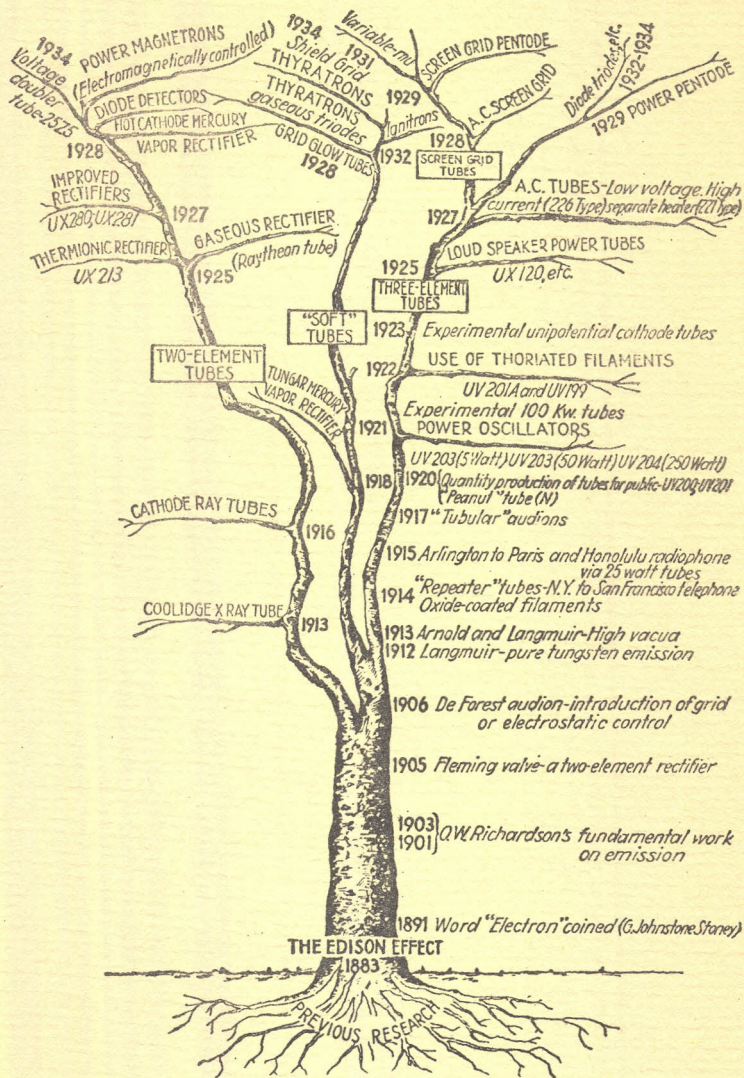
These early kit sets which are now collector's items of note were a boon to the early poor radio maker. You were often able to make one for around \$30.00 or so. The tubes were never included in the kit price and neither was the horn, but often the aerial was with that dubious lightning arrestor.

This is a set that all of us should have, and it's easy to make now as most all of us have the parts around our collections. You can also make it as a one, two, three, four and five tuber. A very great early set with much history.

Joe Tompkins



Outline Drawing of Five Bulb Set Using Freshman Type Coils



Development of electronic tubes.

RADIO STATIC

By Glenn Gonshorowski

ALL THE WORDS BELOW ARE NAMES OR RADIOS.
THE LETTERS OF EACH NAME ARE SCRAMBLED TO
CONFUSE YOU, YOUR JOB IS TO REARRANGE THEM
INTO CORRECT ORDER. THE ANSWER WILL BE
GIVEN NEXT MONTH.

JATCSMIE

LOCYRES

ITNSITEE

TEDSFROE

GLIMPIR

MRFESANH

ANSWER TO LAST MONTHS
RADIO STATIC PUZZLE

FLIRDTPSO

SPLITDORF

SLOTKER

KOLSTER

PIHCPL

PHILCO

AODRLAI

RADIOLA

LARTERV

TRAVLER

ERABNHOOPR

ARBORPHONE

SOME TUBES!!

The latest word in multi-tube receivers, as advertised in the *Vancouver (B.C.) Star* of Sept. 17: "Radiola 93A with phones and 30 BY 199 tubes. \$42.50." We don't quite get what sort of tubes these are, whether we should multiply 30 by 199, or whether they are 30 by 199 inches or feet. Does anybody know?



Contributed by A. R. Cans

EDITORIAL COMMENT

About the time this issue of the Call Letter hits the street, your Editor will be returning from two weeks in Frankfort, West Germany. No it's not a radio safari looking for those rare Telefunken machines. The occasion is my two weeks of summer camp with the National Guard.

Next month I'll try to pass on any interesting sights or bits of information that I run onto as far as our favorite hobby -- vintage radio in Germany.

The letters received by the Call Letter are an important part of this publication. They are the best way to tell us what you would like to see in the Call Letter. They also allow each member to pass on information to all the other members. I intend to print all letters that space will permit. Special thanks to Joe Tompkins for the letters he has sent.

This issue marks the start of another experiment--Commercial Ads. Hopefully, we can have one page each month for advertisements representing those who have business interest in vintage radio. These ads will help defer the expenses of the Call Letter.

My special thanks goes to Cathi Hay for the work she puts in typing each issue. Also Mark Moore has contributed much time and effort in getting special things printed and helping out whenever anything needs to be done. By the way, in my absence this issue of the Call Letter is being edited by Mark and Cathi. See all of you at the July meeting.

A NOTE FROM OUR POWER SUPPLY

The Ladies Auxiliary will be supplying coffee, tea, and punch at the "bring your own" picnic after the upcoming Vintage Radio Society meeting, July 9th. All members and their families are invited to come have a good time.

SWAP SHOP

FOR SALE: 01A - 101A - 201A Tubes and various other vintage radio parts.

Elmer W. Schurman (206) 573-0380

WANTED: Pre 1942 Communication receivers - R.M.E. Preselector Misc. Amateur Radio Junk Box parts.

R.C. Campbell

2175 S.E. Pine

Hillsboro, Oregon 97123

WANTED: Volume Control Knob (red) for Freshman Masterpiece Battery radio.

Art Redman

(503) 774-9913

WANTED: Majestic 50 Cabinet

Elmer W. Schurman

(206) 573-0380

WANTED: WD 12

Craig Hoaglin

(503) 648-3148

WANTED: Wooden knobs to fit Echophone F Cathedral and spring push posts for antenna and ground connections from a metal box Atwater Kent.

Also collecting microphones, stands and bases.

Mark Moore

P.O. Box 13544

Portland, Oregon 97213

(503) 658-2260

WANTED: AK Bakelite Amplifier-Detector board and tuning knobs for Model 20 Big Box.

Robert Deuel

1058 Linda Avenue

Ashland, Oregon 97520

(503) 482-8752

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CARTOON CLIPPINGS

By Art Redman

