

RADIO

(Edited by G. Douglas Wardrop, Editor of Radio Merchandising.)

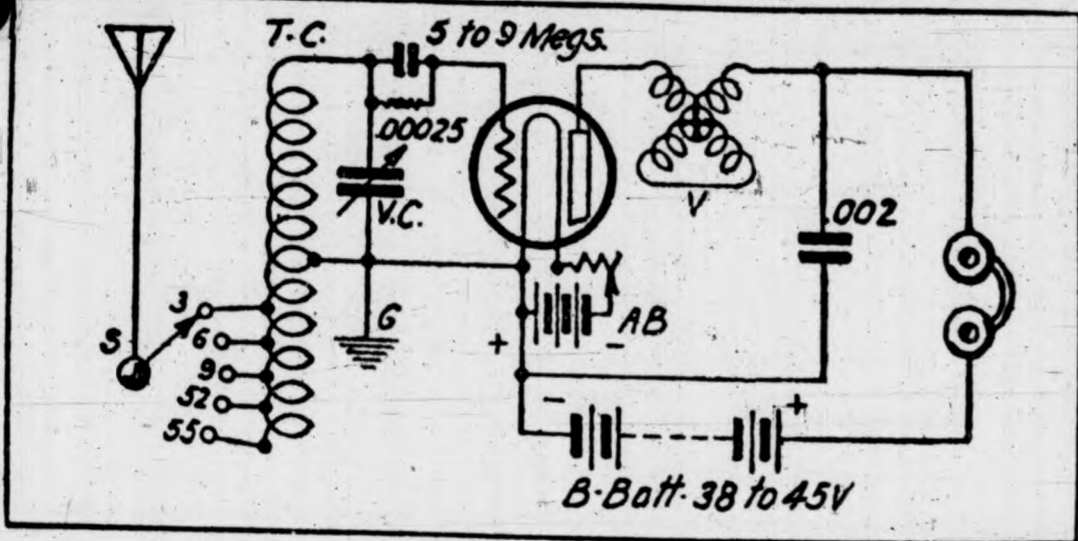


Diagram That Introduces a New Field of Selectivity Into the Multi-Audi-Plex Circuit. Will Interest All Radio Fans.

By LEON W. BISHOP

Those who became interested in the multi-audi-plex circuit have spoken of the wonderful selectivity and volume on distant stations through tremendous local interference.

Here is a diagram that introduces a new field of selectivity into the multi-audi-plex circuit. Directions should be carefully followed in regard to the tuning coil T.C. Procure a four-inch dry cardboard tube. Use no shellac or any compound whatsoever on this tube.

With this selective system, it is possible to connect in three, six, nine, twelve and fifteen turns in the antenna circuit. This, under local interference, will enable you to tune out your local stations and still receive from distant points.

Connecting the Taps.

In connecting the taps, the wire may be cut and holes punched in the tube, and the wires drawn through these. By punching holes in the tube and drawing the wires through, you will make the winding much firmer and eliminate the use of shellac or any other kind of goo.

The variable condenser, VC, should be .0005 mfd., preferably of the 23 plate type of condenser. Here I might say,

condensers that are advertised as having exceptionally low dielectric loss would be best applied in this circuit.

The rheostat should be 30 ohms, and connected in the negative side of the A battery.

The best tube for use in this circuit is the UV201A, although the C301A, UV199 and C299 tubes may be used.

In connecting up the circuit, it is best to have the variable condenser on the left hand side of the panel, the variometer on the right hand side of the panel, the switch taps below in the center of the panel.

The A battery, AB, should be four dry cells in the case of the UV201A and C301A tubes, and three dry cells for the UV199 and C299 tubes.

Although the switch points are only three turns apart, they make a vast difference in selective tuning.

In no case can there be more than 15 turns in the antenna circuit. Thus the chance of radiation is almost nil.

Series-Parallel Switch— Its Uses in Receiver

The series-parallel switch eliminates the necessity of changing wires during a test of a circuit. It comes in very handy for a quick change-over from one circuit to another of the head phones.

When the switch is in one position the battery is thrown to the charger circuit and when in the reverse direction the battery is connected to the set.

The honeycomb coil circuit requires the use of such a switch in order to change from medium short waves to

switch and the lower end of the coil winding.

The form of switch shown in the accompanying drawing may be purchased in any radio store, as it is of the standard type. Be sure to make good connections on the back and keep the switch tight, so that it does not wobble out of adjustment.

The contact points may be mounted on the panel, as well as the rest of the switch. The switch points should be kept clean to insure better contact with the switch arms.

The market also affords a series-parallel switch all mounted so that only one hole is necessary in the panel for the center shaft. Such a switch eliminates the necessity of drilling eight holes in the panel, and is recommended where space on the panel is at a premium.—Chicago Daily Journal.

Hints for Constructing Tuned R. F. Amplifier

In constructing tuned radio frequency amplifiers:

Separate the tuning coils to cut down the magnetic and capacity coupling between them.

Use loose coupling between the primary and secondary coils of tuned transformers.

Separate the various condensers used to tune the various circuits by at least five inches.

Experiment with the coupling between the primary and secondary coils of the radio-frequency transformer to find the separation which gives the loudest signal strength with out making the tube oscillate.

Use lamp cord, twisted, for filament leads, and thereby avoid large closed loops.

Keep all battery leads away from the tuning apparatus, and by doing these things it will be possible to build a radio-frequency amplifier that will not oscillate when both grid and plate circuits are in resonance.

Pointers About Makeup of Dry Cell Batteries

A dry cell battery consists of a zinc container filled with chemicals, in the center of which is a brass-capped carbon rod. The zinc can is the negative pole or electrode and the center carbon is the positive pole or electrode.

IMPROVED UNIFORM INTERNATIONAL

Sunday School Lesson

(By REV. P. B. FITZWATER, D.D., Dean of the Evening School, Moody Bible Institute of Chicago.)

Lesson for January 11

THE JUDGMENT OF THE NATIONS

LESSON TEXT—Matt. 25:31-46. GOLDEN TEXT—"Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto Me."

PRIMARY TOPIC—Kindness Pleases. JUNIOR TOPIC—Christ's Picture of the Judgment.

INTERMEDIATE AND SENIOR TOPIC—Christ's Picture of Judgment. YOUNG PEOPLE AND ADULT TOPIC—Practical Christianity.

The subject selected by the lesson committee is "The Last Judgment," but this is an error. According to legitimate textual and contextual significance it is the judgment of the living nations which still lies in the future (v. 32).

I. The Judge (v. 31).

It is the Son of God who came and died to redeem the human race. He is now seen clothed with majesty and power sitting upon His throne acting as Judge.

II. The Time (v. 31).

This judgment will take place when the Lord comes in His glory accompanied with a retinue of glorious angels. This will take place after He has gathered the elect remnant of Israel.

III. The Place (v. 31).

The prophecy of Joel, the third chapter, and Zechariah 14:1-5, show that it is to be in or near Jerusalem. The angel said to Mary, "Thou shalt call His name Jesus. He shall be great and shall be called the Son of the Highest; and the Lord God shall give unto Him the throne of His father David."

IV. The People Judged (vv. 32-45).

These will be the living nations upon earth after the church has been translated (1 Thess. 4:16, 17). These are nations to whom the gospel of the Kingdom shall be preached just prior to the coming of the end.

V. The Issue of the Judgment (v. 46; Cf. vv. 34-41).

1. The Sheep Entering into the Inheritance of a Prepared Kingdom. 2. The Goats Going into Everlasting Fire Prepared for the Devil and His Angels (v. 46). This judgment shall determine their destiny.

Have Not Yet Seen Him

The fact that none saw Christ after His resurrection except those who loved Him is suggestive that His enemies have not yet seen Him and do not know Him.—Echoes.

With One Hand

God chastens us by many instruments, but with one Hand.—Christian Evangelist.

God Knows

Man takes account of our failure, but God of our striving.—Christian Evangelist.

Today and Tomorrow

The talents, our today, may be demanded by the Owner tomorrow.—Herald and Presbyter.

Boschee's Syrup

Alleviates irritation, soothes and heals throat and lung inflammation. The constant irritation of a cough keeps the delicate mucus-membrane of the throat and lungs in a congested condition, which BOSCHEE'S SYRUP gently and quickly heals.

Beating Time

A New York newspaper placed a loud speaker alongside a linotype machine in its composing room during the world series game. The compositor cast the type describing the plays as they came to him over the radio.

The Remedy That Has Passed The Test

It has been before the public for more than fifty years—It is a scientifically compounded prescription. It has healed thousands—It is of special value in diseases of catarrhal nature.

PE-RU-NA

will prove helpful wherever and whenever there is catarrhal inflammation. Sold Everywhere Tablets or Liquid

Motor Ships Favored

For the first time in history the tonnage of motor ships being constructed throughout the world recently exceeded that of steamships.

"ASCARETS" FOR LIVER AND BOWELS—10c A BOX

Don't Stay Dizzy, Bilious, Headachy, Sick or Constipated.

Feel fine! Let "Ascarets" clean your bowels and stimulate your liver. No gripping or overacting. Millions of men, women, and children take this harmless laxative-cathartic. It doesn't sicken you like pills, oils, calomel and salts. Tastes nice—acts wonderfully. Sold at drug stores.

Golfer's Advantage

The golf fair has one advantage over the angling Ananias; he doesn't have to show anything to prove it.—Boston Transcript.

Cuticura Comforts Baby's Skin

When red, rough and itching, by hot baths of Cuticura Soap and touches of Cuticura Ointment. Also make use now and then of that exquisitely scented dusting powder, Cuticura Talcum, one of the indispensable Cuticura Toilet Trio.—Advertisement.

Women Want Smoking Cars

In England an agitation has been started for smoking compartments on trains for the exclusive use of women.

Winter Desserts.

Date Pudding: 1 c. molasses, 1/2 tsp. salt, 1 c. milk, 1/2 tsp. clover, 1/2 c. butter, 1/2 tsp. allspice, 1 c. flour, 1/2 tsp. nutmeg, 1 level tsp. Calumet, 1/2 lb. dates, cut baking powder in pieces.

Melt butter and add to the molasses and milk. Sift together flour, baking powder, salt and spices and add with dates. Steam two and one-half hours. Serve with hard or creamy sauce.

Winter Desserts.

JOSEY OPEN-FORMULA FERTILIZERS advertisement with product images and guaranteed analysis table.

Children Cry for Fletcher's CASTORIA



Fletcher's CASTORIA

MOTHER:—Fletcher's Castoria is a pleasant, harmless substitute for Castor Oil, Paregoric, Teething Drops and Soothing Syrups, especially prepared for Infants in arms and Children all ages.

Inscriptions on Rocks

Thought to Be Chinese: Weird rock writings in caves ten miles northeast of Virginia City, Nev., are to be studied with a view to determining whether they are the work of ancient Chinese, says the New York World.

So It Seemed: The Boss—And what have you been doing all this time, Miss Montgomery? New Typist—Typing the letter you dictated, sir.

Nature's Great Law: Everything bears within itself an impulse to strive after a higher degree of divinity, and that is the great law of progress throughout all nature.

Bayer Aspirin advertisement featuring the Bayer cross logo and text: 'Genuine BAYER ASPIRIN', 'SAY "BAYER ASPIRIN" and INSIST!', 'Unless you see the "Bayer Cross" on tablets you are not getting the genuine Bayer Aspirin...'.

Advertisement for joint relief: 'You Can Quickly Limber Up Sore, Stiff, Swollen Joints'. It describes 'Joint-Ease' as a powerful counter irritant that can be rubbed into joints for quick relief.