

**LOCAL AND PERSONAL**

**Returns from Eugene—**  
Miss Agnes Danford, who has been attending summer normal at the state university at Eugene, returned home Saturday evening. Miss Danford spent the past week visiting a brother at Portland.

**Automobile insurance a specialty.**  
Ask Mr. A. L. Lamb. Yeo, of course. 265ft

**Vacationing at Newport—**  
Mr. and Mrs. G. S. Butler left today for Newport, Or., where they will spend the next two weeks on a vacation.

**Good insurance at good rates.**  
Phone 274-J. Yeo of course. 265ft

**All-Day Picnic—**  
An all-day picnic will be held Tuesday in Lithia park by the Junior Endeavorers of the Congregational church. They will have lunch at the noon hour, and it is their intention to take along enough eats to have some left for the evening meal.

**Let Jerry O'Neal figure your next job of plumbing.** First class material and workmanship. Phone 138. 207 E. Main street. 238t

**Visiting in Ashland—**  
D. D. Good, formerly of Ashland, but who now lives in Dunsmuir, was in town visiting today.

**LEEDOM makes the price on MASON CORDS.** Come and get 'em at LEEDOM'S TIRE HOSPITAL. 270-ft

**Leave for East—**  
The H. T. Elmore family left yesterday by auto for the state of Maine. They will go by way of Portland and Yellowstone park, from where they will take the Yellowstone trail on east.

**Fruit canning time is at hand.** For fruit jars, lids, rubbers, jelly molds and sugar, Detrick's prices can't be beaten.

**Some Apricot Crop—**  
A. C. Joy brought a small twig from one of his apricot trees into the Tidings office Saturday evening. It had the appearance of a full-sized tree. Though only about two feet in length, it had 38 good, big apricots thereon. Needless to say, there are none of them left at this time.

**Green apples—Gravenstines.** Can't beat 'em for pies and sauce. 25 pounds for \$1 delivered. Phone 9-F-11.

**Selling Rand-McNally Maps—**  
W. M. Messick is in the city selling Oregon state maps, made by the well known Rand-McNally company. Mr. Messick states that he will be located here permanently. He is a graduate of the state school for the blind, but has the partial sight of one eye, which enables him to make his way about his business without requiring any assistance.

**To Whom It May Concern—**  
John D. McRae is not connected with the firm of Swenson & McRae. (Signed) John D. McRae. 284-3\*

**Locksmith. Fixit Shop. 282ft**

**Leaves for Newport—**  
F. B. Sanger, of 657 B street, left today for Newport to spend several days on a vacation trip. Mr. Sanger is one of those people who seldom take a vacation and has certainly earned this one, it being the first in about 14 years.

**Chiff Payne makes folding screens.**  
**LINEMAN ELECTROCUTED ON WIRES AT ALBANY**  
ALBANY, Or., Aug. 7.—Sigert Myers, a lineman for the Mountain States Power company was electrocuted here yesterday afternoon when he slipped and fell into contact with a live wire carrying 2300 volts. Myers has been a resident of this place for two years. He is survived by his widow and two year old son.

**UNIFORM INDUSTRIAL LAW IN U. S. FAVORED**  
SAN FRANCISCO, Aug. 7.—A uniform law to establish tribunals in the various states of the nation for the settlement of industrial disputes vitally affecting the "life, liberty and pursuit of happiness" of the public at large, was approved yesterday by the national conference of commissioners on uniform state laws, in session here.

**TWO LARGE SHARKS ARE CAUGHT AT NEWPORT**  
NEWPORT, Or., Aug. 7.—Much excitement was caused Tuesday when the fishing boat Discovery brought in two large man-eating sharks. These fish, caught just outside the harbor, were the first to be seen here for years.

# RADIO

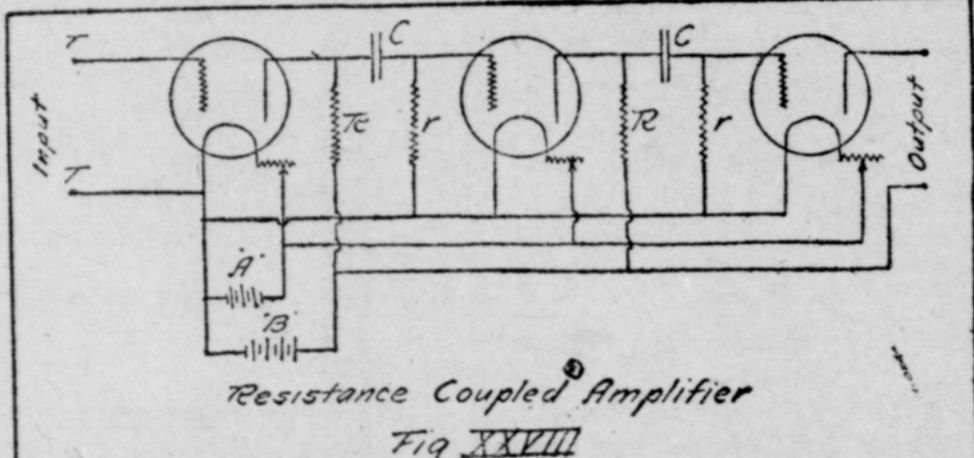
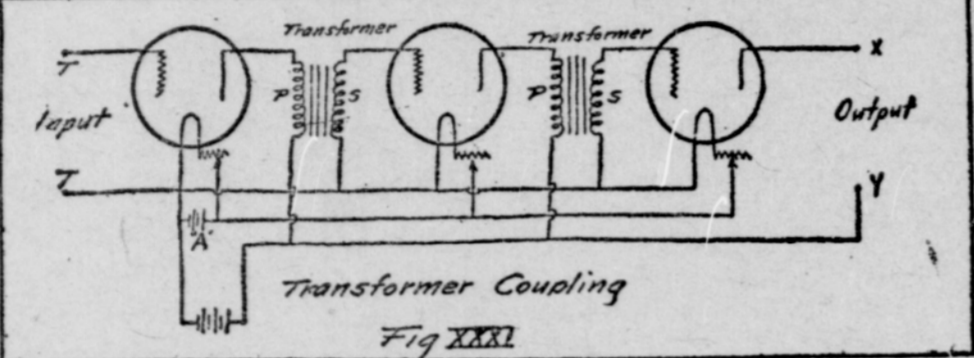
## USE OF CHOKE COIL AND TRANSFORMERS

### Latter Provide the Most Practical Method of Coupling for the Amateur.

Figure XXVIII shows the actual circuit of a three-stage resistance coupled amplifier. The output of such a circuit is K times K times K the input or assuming the amplification factor of each tube to be 10, the output would be 1,000 times the input. The resistance R is the coupling resistance whose function it is to transform the plate current variation to potential drops to be applied to the grid of the next tube.

The capacity C is simply a means of allowing the potential variations across the coupling resistance R to be applied to the grid of the next tube, yet not allowing the "B" battery applied to the plate circuit of a tube to be applied to the grid of the next. Because of using the condenser, what one might say, insulate the grid from the "B" battery potential, it is necessary to use a grid leak, to keep the charge which collects on the grid from becoming excessive and reducing the plate current to zero.

One of the chief disadvantages of the resistance coupled amplifier is that very high plate battery poten-



tials are necessary. The amplification per tube of a resistance-coupled amplifier is not as high as it is for some other methods but it is stable and does not distort the input as much as do some other methods used which give greater amplification per tube.

Resistance-coupled amplifying may be used to amplify either radio or audio frequency. A method of transforming the change in plate current of a vacuum tube to differences in potential is by means of a choke coil. A choke coil consists of a number of turns of wire wound up in a multilayer coil and may or may not have an iron core. A coil of this kind offers a high impedance to the flow of alternating current, but has a relatively low direct current resistance.

The choke coil on account of having a low ohmic resistance, will have a smaller method of coupling, so that lower "B" battery potential can be used on choke coil coupled amplifiers and the batteries can be of smaller capacity.

The choke coil not only has inductance but a certain amount of distributed capacity. The distributed capacity of the coil plus the capacity of the plate with respect to the filament, together with the inductance of the coil, give to the plate circuit a certain definite period. That is, the plate circuit is an oscillating circuit whose resonant frequency is determined by the total capacity and inductance in the circuit.

If the choke coil be made variable, it will not only serve to transform the plate current variation with maximum plate potential variations, but it will also serve to tune out unwanted frequencies. When the plate circuit of the amplifier is tuned, the resonant frequency is amplified K times, but all other frequencies are amplified to a less degree.

Another and by far the most widely used method of coupling successive tubes in a cascade amplifier is by means of transformers. The transformer method of coupling amplifier tubes may be considered a development and a refinement of the simpler choke coil method. Coupling tubes by means of properly designed transformers will give a greater amplification per tube than any of the other methods.

Figure XXXI shows the diagram of a three-stage transformer coupled amplifier, where P and S are respectively the primaries and secondaries of the coupling transformers. The transformer as a whole is so designed as to convert the plate current variations into maximum potential variations. The plate circuit of each tube which includes the primary winding of a coupling transformer must be

assigned for maximum power amplification, while at the same time the ratio of the transformer must be such as to deliver maximum potential to the grid circuit of the next tube. The greatest advantages of the transformer method of coupling audio frequency amplifiers are the high degree of amplification, the relative simplicity of operation, and the low plate voltage required. Chief among the disadvantages of the transformer coupled frequency amplifier is noise. Also the transformers amplify different frequencies to different degrees, which means that when this type of coupling is used for radiophone reception, the voice is distorted by the amplifying transformers. However, from a practical standpoint, the average amateur will have better results using transformer coupled audio frequency amplifiers than from any other method that can be used with the tubes and equipment now available.

### GREAT BRITAIN VS. AMERICA

#### Radio Amateurs of Those Countries Pursuing Distinct Courses in Development of Receivers.

Two separate and distinct courses are being followed by the radio amateurs of this country and Great Britain in the development of receiving apparatus for continuous-wave telegraphy and wireless telephony. Both courses are of the utmost importance to the art, and each will exert a great influence on the future of radio communication and entertainment. The American amateurs have gone along the lines of regeneration and amplification of audible signals, as well as development of long-distance

reception on short waves by the super-heterodyne principle. On the other side of the Atlantic the British amateurs, restricted in their hobby by ultra-conservative government regulations, have turned their attention solely to radio-frequency amplification. This has given excellent results on all long and medium wave lengths, but its success on shorter wave lengths has depended solely upon the expert handling of the operator, who has been compelled to use tuned coupling circuits between each of the radio-frequency vacuum tubes.

It is too early yet to tell which of the two systems will ultimately triumph, but there is no doubt that the laurels at the present moment rest upon the American amateurs through the latest achievement of their leader, Armstrong, in the production of the super-regenerative system. **Liner Delayed to Save Life.** The value that we set on human life today has been dramatically illustrated by an incident on the Atlantic ocean. An explosion in the engine-room of a freight ship caused terrible injuries to the second engineer, a young man named O'Neal. There was no doctor on board, so the captain sent out wireless calls for assistance. Seven ships replied. In six cases doctors told the captain what treatment would be likely to give the best results. But one passenger liner did more than this; it put 150 miles out of its course and sent a lifeboat with the ship's doctor in it, who attended to the patient and then had him transferred to his ship. When the liner reached England he was comfortable and on the way to recovery.

**That's it.**  
Mr. Wampoodle was trying to explain.  
"You know what I mean. It's the play where they have the witches' cauldron."  
"Witches Cauldron."  
"Yeah."  
"Oh, yes, I know."  
"Yeah."  
"You mean the home brew scene from Macbeth."—Louisville Courier-Journal.  
**Hubby and Wifey.**  
"I've learned one thing from this fishing trip."  
"What is that, dear?"  
"You will wait more patiently for a cheap fish than you will for your wife."—Louisville Courier-Journal.  
**He Was Through.**  
"I miss your neighbor across the way at the piano this evening. He plays with such finish."  
"Yes, he's finished; the installment man took his piano this morning."—Judge.

### AT THE COUNTY SEAT

**Real Estate Transfers**  
Arthur W. Boslough to Myrtle C. Boslough, lots 28 and 29, Mountain-view addition to Ashland—\$1.  
B. F. Lewman et ux to Glenn Provolet, land in sec. 7, twp. 38 S., R. 4 west—\$10.  
W. J. Albert to E. Utter et ux, land in sec. 8, twp. 39 S., R. 1 east—\$10.  
Mathilda J. Adkins et al to F. E. Merrick, land in sec. 30, twp. 37 S., R. 1 west—\$1.  
J. A. Perry et ux to Farm Bureau Co-operative Exchange of Medford, lots 1, 2, 3, 10, 11, 12, block 34, Medford—\$12,400.  
Mabel Evans to William C. Hood, lot 3, Crestbrook Orchard tract—\$10.  
Eleanor McQuiston to Margaret E. Gould et vir, lot 5, block 1, Page addition to Medford—\$10.  
Sheriff to W. S. Depeau, lots 40, 41, 42, 43, 44, 45, block 2, White's addition to Ashland—\$257.28.  
Eli W. Davis to D. N. Davis et ux, w. d. to N 1/4 of NE 1/4, SE 1/4 of NE 1/4, sec. 8, twp. 40 S., R. 3 east—\$10.  
A. D. Perdue et ux to Harold F. Nelson, w. d. to land in d. l. c. 61, twp. 37 S., R. 2 west—\$10.  
**Circuit Court**  
C. E. Terrill et al vs. Chauncey Florey et al. Motion to dismiss, affidavit of prejudice, affidavit of C. Florey.  
Hale's Piano House vs. Dwight Vimont. Return of summons.  
Pearl W. Smith vs. Arthur L. Smith. Answer.  
C. E. Terrill et al vs. Chauncey Florey et al. Demurrer of defendant C. Florey. Answer of defendant C. Florey.  
A. W. Walker as Walker Auto company vs. Fireman's Fund Insurance company. Notice of appeal.  
Maggie Inlow vs. Fred Inlow. Complaint.  
Earl H. Fehl vs. city of Medford. Opinion, undertaking on appeal.  
Medford Furn. & Hdw. Co., vs. M. F. Hanley. Complaint.  
A. W. Walker as Walker Auto Co. vs. Fireman's Fund Insurance Co. Stipulation.  
Pearl V. Collins vs. E. A. Collins. Motion to strike.  
Hazel E. Ward vs. Harry E. Ward. Complaint.  
J. T. Sullivan vs. P. Welch et al. Assignment.  
Bertha Harris vs. Samuel Harris. Complaint.  
J. T. Sullivan vs. P. Welch et al. Reply.  
Charles Painter vs. F. L. Tou Velle et ux. Undertaking; order; dissolving injunction; stipulation.  
J. W. Dressler vs. Pacific Record Herald Publishing Co. Plaintiff's brief.  
Leonie D. Schmitt vs. Jackson Co. Creamery. Stipulation; order.  
W. C. Clements vs. S. H. Courtney et ux. Undertaking; oath.  
Credit Service Co. vs. W. H. Truax et al. Notice.  
Order, in the matter of opening ballot boxes for purpose of canvassing vote at recall election.  
Ella H. Smith vs. William Sears. Affidavit; motion; order of default; judgment; cost bill.  
**Probate Court**  
Estate Otis Hall. Proof of publication; receipt of heirs; inventory; appraisal.  
In the matter of cancellation of interest and penalty on personal property tax of R. W. Stearns.  
Guardianship of Geraldine Theiss. Order for substitution of guardian.  
Estate Jacob Conley. Notice of appeal.  
Estate James Boyd. Affidavit of publication.  
Estate of Harriet N. Osborne. Order.  
Estate James C. Gibson. Proof of publication.  
Estate E. V. Maddox. Inventory and appraisal.  
Estate Michael Sweeney. Inventory and appraisal.  
Articles of incorporation of Rogue River Mining and Milling Co.

**The Forty Immortals.**  
A name often given to the 40 members of the French academy is the Immortals. These members are elected for life to the academy which meets twice weekly in Paris and which constitutes the highest authority on everything appertaining to the niceties of the French language, to grammar, rhetoric, poetry and the publication of the French classics. The academy was founded by Cardinal Richelieu in 1635, and is the most important and best known of the five academies composing the French institute, the other four being L'Academie des Inscriptions et Belles-Lettres, L'Academie des Sciences, L'Academie des Beaux-Arts, and L'Academie des Sciences Morales et Politiques. Membership in the academy is the highest distinction within the power of the nation to bestow upon a literary man.—Kansas City Star.

**Relics of Long-Past Age.**  
A large copper kettle and other relics of a past age, believed by students of archeology to have been buried 1,000 years, were unearthed recently by Dr. H. C. Myers, professor of chemistry at Whitworth college, Spokane, Wash., a few miles north of the city, where some road excavating was being done.

"With the copper kettle," said Doctor Myers, "was the skull of an Indian, wrapped in a piece of buffalo skin. The copper was so old it had changed to copper carbonate. This chemical compound had been absorbed by the skull, and it had served as a preservative. A buckskin shirt also was found in the kettle. A few beads and some wampum also were secured from the excavation."

**The Ostrich in Africa.**  
Some time ago the French authorities in western Africa undertook to organize the breeding of ostriches in the territory under their control. Ostriches are found wild in many parts of western Africa. Along the River Niger they avoid the neighborhood of man, but on some of the islands in that and other rivers the natives have established rude ostrich farms. One official, who was appointed to study the subject, says that the methods of the ostrich farmers of the Cape cannot be fully carried out in French territory. It is necessary to leave the ostriches in a partially nomadic state. They migrate more or less with the seasons. When it becomes too dry in the south they go northward.

**The New Qualification.**  
"I presume there is no need of my asking whether you are conversant with the duties of your position?"  
"Indeed, no, ma'am, trust me. Before I have been here a week you will have evidence enough to get a divorce in any state in the Union."—Judge.

**C. B. LAMKIN**  
**BARGAINS IN REAL ESTATE**  
**ASHLAND REALTY CO.**  
Opposite City Hall  
**Business Chances**  
Insurance Real Estate  
**CITIZEN'S BANK BUILDING**



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The college of Literature, Science and the Arts with 22 departments.  
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**CAR BUILDERS**  
(Carpenters)  
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**HELPERS—ALL CLASSES**

Adequate provisions have been made for the full protection of new employees, the same as old employees who remained loyally at work. Applicants should apply at SOUTHERN PACIFIC EMPLOYMENT BUREAU, Room 7, 65 Market Street, San Francisco (open 8 a. m. to 8:30 p. m. daily, including Sundays), or any of the following offices: Superintendent (Third St. Station), San Francisco, Oakland Pier, Sacramento, Stockton, Dunsmuir, Bakersfield, Los Angeles, Assistant Superintendent, Sparks, Nev., and Roseburg, Or.; Superintendent Motive Power, Sacramento and Los Angeles.

**J. H. DYER, Gen. Mgr., Southern Pacific Company**

**INTERURBAN AUTOCAR CO.**  
(Effective January 1, 1922)  
Daily (Except Sunday)  
**LV. MEDFORD LV. ASHLAND**  
7:00 a. m. 7:00 a. m.  
8:00 a. m. 8:00 a. m.  
9:00 a. m. 9:00 a. m.  
10:00 a. m. 10:00 a. m.  
11:00 a. m. 11:00 a. m.  
12:00 noon 12:00 noon  
1:00 p. m. 1:00 p. m.  
2:00 p. m. 2:00 p. m.  
3:00 p. m. 3:00 p. m.  
4:00 p. m. 4:00 p. m.  
5:00 p. m. 5:00 p. m.  
6:00 p. m. 6:00 p. m.  
7:00 p. m. 7:00 p. m.  
8:30 p. m. Sat. only 8:30 p. m.  
9:30 p. m. 9:30 p. m.  
10:30 p. m. Sat. only 10:30 p. m.

**Sunday Schedule**  
Leave Medford for Ashland and Ashland for Medford every hour on the hour from 9 a. m. to 5 p. m.; then 6:30 p. m. and 9:30 p. m. Ashland waiting room—East Side Pharmacy.  
**ASHLAND-ROSEBURG STAGE**  
Daily (Except Sunday)  
**LV. ASHLAND LV. ROSEBURG**  
7:00 a. m. 8:30 a. m.  
12:00 noon 2:00 p. m.  
Travel by stage; shortest route by 20 miles; one of Oregon's most scenic trips. Fare—Ashland-Roseburg, \$4.60; Medford-Roseburg, \$4.15; Grants Pass-Roseburg, \$3.00. MEDFORD-GRANTS PASS  
Daily (Except Sunday)  
**LV. MEDFORD LV. GTS. PASS**  
7:45 a. m. 7:30 a. m.  
1:00 p. m. 1:00 p. m.  
4:45 p. m. 5:30 p. m.

**NEW AND USED GRAIN SACKS AND SACK TWINES JUST IN**  
"SHOO FLY" the great fly killer, should be used on your horses and cows more freely.  
Fencing of every description. New and used Sewing Machines always on hand.  
AT  
**Pell's Corner**

**W. A. SHELL**  
BARBER  
Safety blades resharpened like new. Single bit, 30c doz. Double bit, 50c doz  
Children's Work A Specialty

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**HELP WANTED**  
**WANTED**—On ranch near Klamath Falls, woman for general household. Good home, four in family. Phone Klamath Falls 11F12. Box 538. 284-6\*

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The Ashland Conservatory of Music opens September 5th, 1922. Madame Tracey-Young, directress. The school of daily instruction in all branches of music. The Leschetitzky method. The secretary will be pleased to supply any information desired. Address Box 54, Ashland, Oregon. 280-1mo\*  
**TEACHER OF PIANO**—The Leschetitzky method. Pupil of Madame Tracey. Lolita Pierson. Phone 485-J, Boulevard. 282ft  
**TRANSFER AND EXPRESS.**  
FOR prompt and careful service, auto trucks or horse drays, call Whittle Transfer Co. Phone 117 Office, 89 Oak street near Hotel Ashland. 56ft

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**FOR TRADE**—160 acre unincumbered ranch on Pacific highway and county road, near Hill; small house and outbuildings; good stock or chicken ranch with plenty of wood and tillable land. Will trade for unincumbered Ashland acreage; prefer no house, but would consider acreage with small house. Eleanor Greer, 199 Gran, ite St. 231ft\*  
**FOR RENT.**  
**APARTMENTS**—Furnished, close in, modern conveniences. Adults only. Inquire 166 Hargadine St., or phone 122. 257-ft  
**FOR RENT**—Nicely furnished four-room apartment in private family. Adult couple preferred. Also six room house close in. S. L. Allen. 285-ft

**FOR SALE.**  
**HAY FOR SALE**—By G. F. Billings.  
**FOR SALE**—Acreage on paved highway, splendid soil. Five acres, 10 acres, 15 acres, 20 acres, and the price is right. O. A. Manning, Talent, Oregon. 272ft  
**GREEN APPLES**—Gravenstines. Can't beat 'em for pies and sauce. 25 pounds for \$1 delivered. Phone 9-F-11.  
**FOR SALE**—Player piano, good condition. N. G. Coleman, 361 Mountain Ave. 280ft  
**FOR SALE**—On the highway, about one acre of land, good house, electric lights, all in garden, some berries. Price \$1600. O. A. Manning, Talent, Or. 281ft  
**FOR SALE**—Astrakhan and transparent apples. Kieckson and Santa Rosa plums. Bagley Ranch, Talent, Oregon. 284-6

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**DOCTOR STUDYING COUNTRY**  
IN VICINITY OF DORRIS  
DORRIS, Calif., Aug. 7.—Dr. Frank C. Clark, president of the Southern California academy of Sciences and a prominent doctor of Los Angeles, is spending a few days in Dorris visiting with Mr. and Mrs. W. G. Hagelstein. Mrs. Hagelstein is Mrs. Clark's niece.

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