Careful Checkup of Set Necessary

Best Apparatus Very Likely to Reach Buyer in Damaged Condition.

It is hardly possible for the fan to pay too much attention to the quality of the apparatus he uses in his set, and it is just as important that the check up expensive and high quality apparatus before he uses it.

Goods made by manufacturers of undoubted reputation may become damaged in transit, while being handled in the stores or while being carried home after purchase. This may happen only occasionally, but that fact does not help the fan who happens to be the one to possess such damaged apparatus.

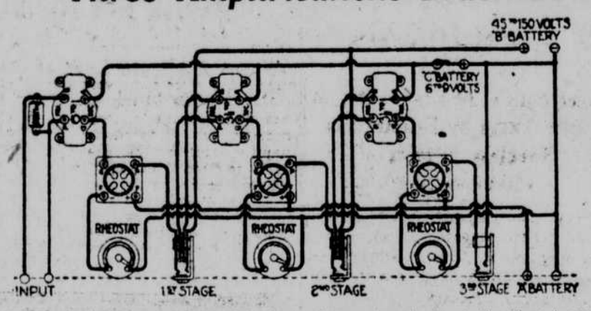
Open Circuits Fatal.

Open circuits in coils (such as the rotors and stators of variocoupler, variometers, tuning coils, fixed resistances, rheostats, etc., and shorted, fixed and variable condensers are fatal to the operation of any set.

If the fan is not sure of his ability properly to test such apparatus, he had best have it tried out by some radio friend skilled in such matters. But such tests can be easily made, in most instances by the following method: Obtain a single dry cell and connect one prong of a post to a small flashlight battery and a piece of wire to the other post of the dry cell. Now touch these two wire ends to each end of the coil being tested and the other wire to the other end. If the lamp of the flashlight flashes, the coil is o. k. If it does not, the wiring of the coil is broken somewhere. Now touch these wires to the poles of condenser, either fixed or variable.

This test is the reverse of the first. In this case, if the lamp lights, it is an indication that the plates of the condenser are touching and the condenser is therefore shorted and cannot be used.

Better Audio Transformers Make Three Amplifications Practicable



Audio frequency amplification has now reached the stage where three steps can be used without distorting the signals. This is due to improvement in the construction of audio frequency transformers.

Most up-to-date receiving sets have audio amplifying apparatus in the same cabinet with the tuning apparatus. A convenient arrangement, however, is to use a separate audio frequency amplifying unit either built into a cabinet or on a panel. This can be attached to whatever type of receiver you are using.

It is the purpose of this article to give a few pointers and cautions to the fans who contemplate building audio frequency amplifiers, either as a separate unit or as an addition to their present receiving sets. Hook-ups for an audio amplifying unit are given in Figs. 1 and 2. A three-stage amplifier, as shown in Fig 1, will amplify the output of a crystal set or nonregenerative single tube set up to full loud speaker volume, while the two-stage amplifier, shown in Fig. 2, will be amply sufficient for any type of single tube regenerative set.

When adding audio amplification to any type of regenerative set it is advisable to connect a fixed condenser of .001 MFD capacity across the primary terminals of the first transformer, as shown in the diagram.

An audio frequency transformer is called upon to reproduce sounds of frequencies ranging from about 100 per second up to the upper limit of audibility, which may be 10,000 to 20,000 per second. If all these frequencies are not equally amplified the result is either a loss of tone quality or an actual distortion of the voice or musical sounds. This becomes more noticeable as the number of stages is increased, and the practical working limit is three stages.

One of the most frequent sources of trouble in audio amplifying circuits and particularly in three-stage circuits, is magnetic interaction between the cores of the transformers, which manifests itself in the production of howls and in distortion of signals. To reduce this effect to a minimum it has been the custom in the past to place the transformers with their cores at right angles to each other.

The best results will be obtained by the use of a transformer having a ratio of 6 to 1 in the first stage and ratio of 3 1-2 to 1 in the following stages.

In any audio amplifier, the most perfect reproduction will be obtained when tubes are not being forced to their maximum.

WOAW Radio Programs

Following are the radio programs to be broadcast from station WOAW, the Woodman of the World Life Insurance association the week beginning Sunday, January 20.

Sunday, January 20.

9:00 A. M.—Radio chapel service conducted by Rev. R. R. Brown of the Omaha Gospel tabernacle of the Christian and Missionary alliance, 2006 Douglas street.

6:00 P. M.—Bible study hour under personal direction of Mrs. Carl R. Gray.

9:00 P. M.—Musical chapel service by courtesy of First Christian church, Dr. George A. Miller, pastor.

"Faxel Minuet" ..... H. Paradis
Orchestra.
Violin solo, "Serenade" ..... Schubert
Joe Woolery.
Vocal solo, "The Still, Small Voice" ..... Bernard Hamblen
Mrs. Paul L. Quigley
Vocal solo, "I Come to Thee" ..... Caro Roma
Kenneth Seeley
Duet, "Come Holy Spirit."
Mrs. F. E. Seeley and Jack Knight
Solo, "Open the Gates of the Temple" ..... Knapp
Mrs. C. R. Huston with violin obligato by Joe Woolery
Anthem, "Oh, Come to My Heart, Lord Jesus" ..... Ambrose
F. F. Pitts and choir
Solo, "Not Understood" ..Albert Houghton
Miss Marjorie Jones
(a) "Told at Twilight" ..... Charles Huerter
(b) "My Heart at Thy Sweet Voice" from Samson and Delilah ..... Saint Saens
Orchestra.
Solo, "Come Ye Blessed" ..... Scott
F. F. Pitts
Solo, "My Faith in Thee" ..... Wells
Mrs. R. E. Frary
Anthem, "Festival Te Deum" ..... Dudley Buck
Mrs. T. R. Huston, Mrs. F. E. Seeley, Jack Knight, Kenneth Seeley, Choir
Solo, "The Good Shepherd" ..... Vander Water
Fred B. O'Brien
Sermon, "Agnosticism vs. Christianity" ..... Dr. George A. Miller
Solo, selected.
Mrs. C. C. Choyce
Anthem, "God So Loved the World" ..... Stainer
Solo, "Seek Ye the Lord" ..... Adams
H. F. Bennett
Solo, "The Earth Is the Lord's" ..... Allitsen
Mrs. F. E. Seeley
Duet, "Guide Me, O Thou Great Jehovah" ..... Johnston
Mrs. T. R. Huston and F. F. Pitts
Solo, selected.
Jack Knight
(a) "Salut d'Armour" ....Edward Elgar
(b) "War March of the Priests" ..... Mendelssohn
Orchestra.

Mrs. Carol Markoff Pitts, choir director; Miss Ruth Rockwood, organist; Joe Woolery, director of orchestra.

Monday, January 21.

6:30 p. m.—Dinner program presented by Randall's Royal orchestra transmitted from the Brandeis store restaurants.

Concert and ball, City Auditorium and 300 Professional Musicians.

9:00 p. m.—Dance Program.

11:00 p. m.—Concert program, including Double Saxophone Sextet, Double Trombone Quartet.

(Above program transmitted from City Auditorium.)

Tuesday, January 22.

6:30 p. m.—Dinner program presented by Carl Lamp's orchestra of Keep's Dancing academy.

9:00 p. m.—Concert program presented by Seventeenth United States Infantry band, Herman Webel, bandmaster. Auspices Corn Exchange National bank.

March, "The American Legion" Vanderloot
Overture, "The Merry Wives of Windsor" ..... Nicolai
Grand Selection on Scotch Melodies, "Robert Bruce" ..... Honnisseau
(Dedicated to the Post Mistress of Fort Crook)
Waltz, "Jolly Fellows" ..... Volkstedt
Selection from the Operetta "The Spring Maid" ..... Reinhardt
Dance Suite ..... Tschakoff
1. Sambo's Holiday
2. Cossack Revels
3. Pekoe Dance
4. "Valse Russe."
Clarinet and Saxophone Duet, "Serenade" ..... Titl
Herman Webel, bandmaster
Mr. Handler, assistant leader
Characteristic Morceau, "Woodland Whispers" ..... Ozibulka
Fox Trot, "My Sweetie Went Away" ..... Turk
Vocal Solos, selected.
O. D. Temple.

Thursday, January 24.

6:00—Every child's story hour conducted by Grace Sorenson, editor and publisher of Every Child's Magazine.

6:30—Dinner hour program by courtesy of Omaha chapter of Izaak Walton league. Arranged by Harry Pitch of Thomas Cusack company.

"Potato Bug Parade."
Concord Club Saxophone Band
(Ed. Myers, director)
"Cross and Crown."
Concord Club Saxophone Band.
Talk, "Fish and Fishing."
Orin D. Steele, United States federal game warden.
Selection, "Carolina Mammy."
Keno Four (official quartet of the advertising and selling league)
"Fast Asleep in Poppyland."
Concord Club Saxophone Band.
"No Wonder I'm Blue."
Concord Club Saxophone Band.
Piano solo, "Radio Ripples." (Original piano compositions.)
Mrs. Perry Rose.
Talk, "Our Game and Wild Life."
Orin D. Steele, United States federal game warden.
Selection, "That Old Gang of Mine."
Keno Four.
"Glow Little Glow-Worm."
Concord Club Saxophone Band.
"Connecticut March."
Concord Club Saxophone Band.
Piano solo, "Woodmen, Woodmen, Spare the Tree." (an original composition by Mrs. Rose.)
Mrs. Perry Rose.
Talk, "Where Can Fish and Game Cast Their vote?"
Orin D. Steele, United States federal game warden.
"The Sneak."
Concord Club Saxophone Band.
"Twelfth Street Rag."
Concord Club Saxophone Band.
Selection, "Dreamy Melody."
Keno Four
"Lucille."
Concord Club Saxophone Band.
Selection, "Medley."
Keno Four
"Stars and Stripes."
Concord Club Saxophone Band.

9 P. M.—Community program presented by talent from Falls City, Neb. Arranged by Alvin A. Burger, secretary Chamber of Commerce. Auspices Midwest Electric company, Omaha.

(a) "I Never Miss the Sunshine"
(b) "Lonesome"
(c) "Blue Waltz"
Merritt's Serenaders Dance orchestra.
(Assisted by Elmer Herling, tenor.)
Piano solo, "Prelude in G Minor" ..... Rachmaninoff
Miss Lucille Thomas, pupil of Miss Mabel Poteet.
Male sextet, "Good Night Moonlight"
Elks Male Sextet.
Trombone solo, selected.
Ray Lane of Falls City Municipal band.
(a) "A Sanctus" from Mozart's Twelfth Mass.
(b) "Gloria" from Mozart's Twelfth Mass.
St. Thomas Episcopal choir.
Piano solos, "Valse" ..... Chopin
"Rhapsodie Hongroise VI" Rachmaninoff
Miss Nellie Lee Holt.
"Marchetta," waltz.
Merritt's Serenaders Dance orchestra.
(Assisted by Elmer Herling.)
Four-minute talk on Falls City and Richardson county.
Speaker to be selected.
String quartet number, selected.
Sacred Heart Convent String quartet.
Male sextet, "Old Southern Melodies."
Elks Male sextet.
Baritone solos:
(a) "The Sea Gypsy" ..... Hovey
(b) "Bedouin Love Song" ..... Pinsuti
Oscar Bennett, soloist First Methodist church.
Vocal duet, "Oh Swallow, Happy Swallow" ..... Tucken
Misses Ruth Wirth and Hazel O'Rourke
(Sacred Heart choir.)
Fox trots:
(a) "House of David Blues"
(b) "Not Here, Not There"
Merritt's Serenaders.

Friday, January 25.

6:30 P. M.—Dinner program presented by the Mizpah Lodge Masonic orchestra, W. M. Olson, director, Florence Basler Palmer, soprano, and Paynter brothers, Mizpah duo, assisting. Auspices Mizpah lodge No. 293, A. F. & A. M., Omaha. Arranged by W. S. Purnell, senior deacon.

9:00 P. M.—WOWL dance program, presented by Frank Hodek's orchestra, transmitted from the Roseland dance palace.

Saturday, January 26.

6:30 P. M.—Dinner program, presented by Ackerman's orchestra of Empress Rustic Garden dance palace.

9:00 P. M.—Program under auspices of Omaha Printing company.

"Instrumental Trio" ..... Gurlitt
Desella Strawn, violin
Gleda Strawn, piano
Elizabeth Strawn, cello
Baritone solo, "Dreaming Alone in the Twilight" ..... Moore
Ray Sage, Mrs. Sage, accompanist
Banjo solo, "Silver Crown Schottische," ..... Jennings
Henry E. Tagger
Mildred Tagger Koch, piano
Soprano solo, "Homing" ..... Del Ritto
Emily Mitzlaff Furnish
Martha Thornton, accompanist
Violin solo, "Ave Maria" ..... Schubert-Wilkeinl
Miss Rose Dubnoff
Mrs. Burnite, piano
Tenor solo, "Maid of the West" ..... Stott-Smith
E. H. Strickler
Mae Knott, accompanist
Piano solo, Polish Dance (Op. 3, No. 1) ..... Scharwenka
Louis Rainbour, Columbus, Neb.
Contralto solo, "Goodbye" ..... Tosti
Geraldine O'Mally de Backer
Instrumental trio, "Poet's Dream," ..... Husf
The Strawn Sisters
Baritone solo, "One Fleeting Hour" ..... Lee
Ray Sage, Mrs. Sage, accompanist
Banjo solo, "Golden Bell Waltz" ..... Albrecht
Henry E. Tagger
Mildred Tagger Koch, accompanist
Piano solo, "Fantasia" ..... Leybach
Louis Rainbour, Columbus, Neb.
Soprano solo, "The Sweetest Story Ever Told" ..... Stults
Emily Mitzlaff Furnish
Martha Thornton, accompanist
Violin solo, "Caprice Basque" ....Sarasate
Rose Dubnoff, Mrs. Burnite, accompanist
Recitation ..... Charles R. Docherty
Tenor solo, "I'm in Love" (From Apple Blossoms).
E. H. Stickler
Mae Knott, accompanist
Instrumental trio, "Romance"..Vangoens
The Strawn Sisters
Contralto solo, "Ave Maria"....Mascagni
Geraldine O'Mally de Backer
Violin solo, "Turkish March"..Hert-Avers
Rose Dubnoff, Mrs. Burnite, piano.

Radio Big Aid to Farm Move

Advancing Science Brings News of World to Lonely Prairie Ranches.

By Bowden Washington.

Man is gregarious—he hates isolation. Those who are behind the "back-to-the farm" movement realize this human weakness, and appreciate that the popularity of the farm depends upon the opportunities offered for social intercourse in the thinly populated regions.

If more people are to be induced to live in rural districts, farm life must be made more attractive to them and the greatest attraction is that afforded by intercourse with others. But as soon as this grouping of people so necessary to social intercourse occurs, the locality ceases to be rural, and becomes urban—a small town springs up, and the soil is occupied with the activities of the town, perhaps a city with its industries and closely-grouped dwellings.

All wealth comes from the soil.

The "back-to-the-farm" movement proposes to popularize the rural district, and great strides have been made with the help of science and industry.

But the human touch is needed. And this human touch is the gift of radio.

The roads may be bad, with the movie show, the church, or the social miles away; the telephone lines may be down; and the mail carrier unable to complete his circuit; but news and entertainment are always in the air, to be caught by the adequate receiving set, to inform, instruct and amuse.

The great broadcasting stations are night and day serving the isolated farm with the world's best music, transmitting the voices of great men; world news, and the market reports so necessary to the modern agriculturist.

If radio will aid the back-to-the-farm movement, as I honestly believe it will, then another great good can be laid at its door.

Plattsmouth Chief Remains.

Special Dispatch to The Omaha Bee.

Plattsmouth, Neb., Jan. 19.—Jess Elliott, who has been acting chief of police since the removal of Alvin Jones, indicted by the grand jury and convicted in district court of malfeasance in office, was permanently appointed to the position by Mayor Johnson this week.

Re-new-ed Cadillacs

Closed car comfort is never more appreciated than in the present winter season.

Type 59 Victoria

Just re-finished, re-new-ed and has new tires. This car has very low mileage and is an exceptional buy.

Type 57 Suburban

Just from our painters and in shape for your most rigid inspection and exacting requirements—one of Cadillac's most popular models and a car we can truthfully recommend.

Many Other Beautiful Models

Either of these cars can be purchased under our HANSEN PLAN with a payment of less than $1,000.00 down and the balance monthly.

J. H. Hansen Cadillac Co.

HA rney 0710 — Farnam Street at 26th

New Orleans to Hold Mardi Gras

Annual Southern Classic Comes to Climax March 4—Special Trains Arranged.

New Orleans, La., Jan. 19.—Preparations already are under way for New Orleans' annual Mardi Gras, to be held March 4.

The carnival season actually begins 12 nights after Christmas with the ball of the Twelfth Night revelers. The first parade is that of Momus on Thursday before Mardi Gras. Other exclusive organizations have their revels on announced dates up to the Monday before Lent.

On that day Proteus appears from the sea with a brilliant pageant and concludes his reign with a splendid ball. The following day is Mardi Gras, when revelry holds sway, and the streets are packed with masked and costumed merrymakers.

Carnival balls this year will be those of the Krewe of Nereus, January 23; Krewe of Iris, February 13; Krewe of Aglia, February 18; Krewe of Nippon, February 19; Krewe of Osiris, February 20; Krewe of Mithras, February 21; Grand Duke Alexis, February 23; Elves of Oberon, February 25; The Atlanteans, February 26; Freund, February 27; Krewe of Momus, February 28; the Athenians, February 20; the Mystic club, March 1; Krewe of Proteus, March 3; and March 4, Mardi Gras.

Specially conducted tours will be held by the Illinois Central railroad from Chicago, St. Louis, Cincinnati and Indianapolis, returning by way of Vicksburg.

Horse Falls on Rider.

Special Dispatch to The Omaha Bee.

Gregory, S. D., Jan. 19.—Charles Patton, 13, was seriously injured when the horse he was riding slipped and fell, leaving the lad unconscious on the state highway between Gregory and Dallas.

Passersby picked him up and brought him to the hospital here, where he is recovering. He is badly bruised and his face and lips are cut.

RADIO SPECIALS
FOR MONDAY AND TUESDAY

Genuine Brandes Head Sets at $4.95
Towers Guaranteed 3,000-Ohm Head Sets $3.95
Little Tattler 2,200-Ohm Head Sets at $3.35
Scientific Head Sets, 20,000 turns equal to 3,000 ohms, fully guaranteed $2.95
Large beautiful Crystal Sets, complete, ready to listen in, at $9.45

R. M. Shlaes Co.
218 N. 16th St.
Opposite Loyal Hotel

The day of the Knight is here!

THE ENGINE IMPROVES WITH USE

238% Sales Increase!

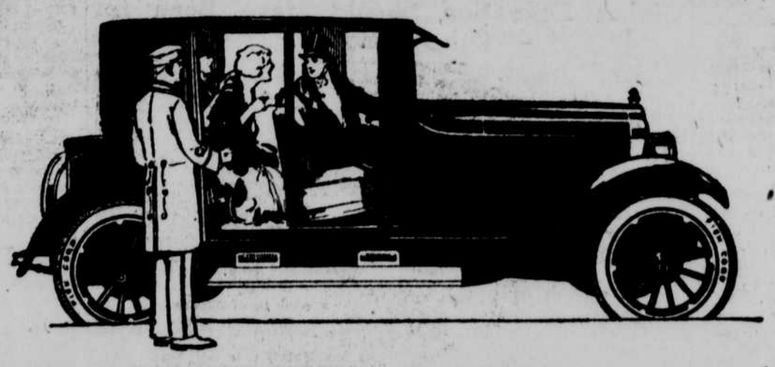
One thing sure—it takes a wonderful motor car to make the brilliant record Willys-Knight made in 1923. It certainly shows that folks are out for the biggest value they can get—and determined to get it.

People are turning to the Knight for its beautiful coachwork, its luxurious comfort, its distinction, its great strength—but mainly and mostly for the many incomparable benefits of the wonderful Willys-Knight sleeve-valve engine. The famous engine that actually grows quieter, smoother and more powerful in use!

Here is welcome freedom from valve-grinding and carbon-cleaning—and other disadvantages of ordinary poppet-valve engines. Willys-Knight owners report 50,000 miles and more without need of tinkering with the engine. And *no Willys-Knight engine has ever been known to wear out!*

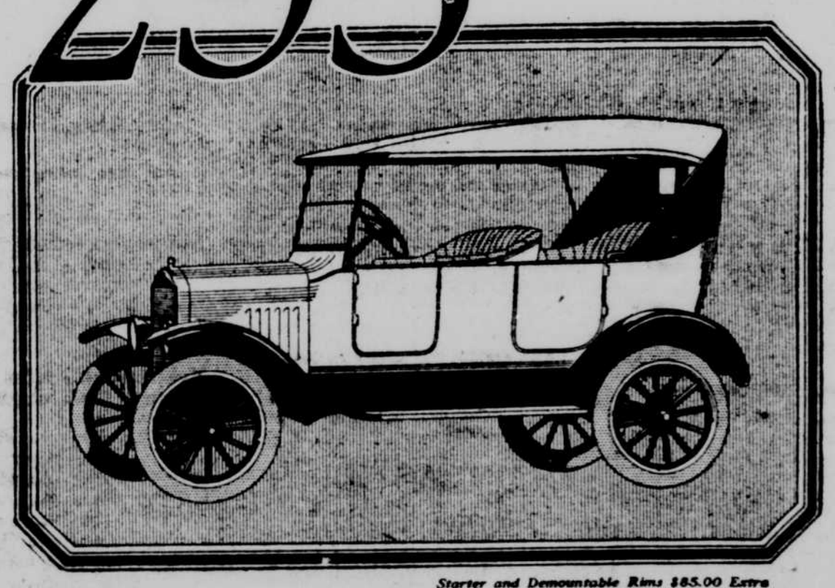
The day of the Knight is here—for good. You can hear evidence of it from happy owners. You can get the evidence yourself in a demonstration of its action. Any car that leaps ahead 238% in one year strongly invites looking into!

WILLYS-OVERLAND, Inc.
2562 Farnam Street — Phone HA rney 0353
Factory Branch—Open Evenings
CITY DEALERS
Folsom Auto Co., 5915 Military Ave. — Wickland Motor Co., 2921 Sherman Ave. — Opocensky Bros., 5134 S. 24th St.
Council Bluffs, Council Bluffs Overland Co. — Fort Crook, Byron L. Fowler



WILLYS-KNIGHT

$295 F.O.B. DETROIT



Starter and Demountable Rims $85.00 Extra

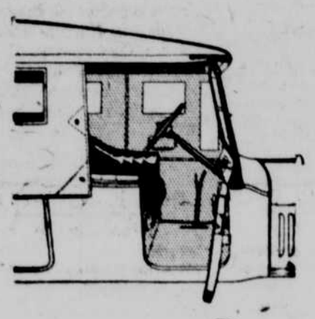
Why You Should Order Your Ford Car Now

123,607

Actual retail deliveries in December, establishing a new high record for winter buying.

Considering that, as spring approaches, retail buying will become more and more active, it is certain that there will be a greater demand for Ford Cars, Trucks and Tractors this spring than ever before.

In view of this situation, the only way in which you can be sure of obtaining delivery of a Ford Car, Truck or Tractor this coming spring or summer, is to place your order immediately.



If you do not wish to pay cash for your car, you can arrange for a small payment down and easy terms on the balance. Or you can buy on the Ford Weekly Purchase Plan.

See the Nearest Authorized Ford Dealer

Ford Motor Company
Detroit, Michigan