TWIN SPEAKERS IN SETS SHOWN AT N. Y. HOTEL

At a radio trade show held in the Hotel Edison, N. Y. City, thirty-six manufacturers of receivers and parts exhibited their 1932-33 models. Much stress was given the use of the latest improved tubes and to

sound quality.

The midget receivers, which have been popular the last two seasons, are not emphasized this year as much as console models employing superheterodyne circuits and in many instances two loudspeakers. Two speaks are used in the finer receivers, the engineers point out, because it is desired to reproduce all frequencies within the audio band with equal effectiveness, which they say is not practical with a single speaker. Improvements have also been made in the tone chamber with the view of eliminat-

ing distortion.

Many of the manufacturers have also put out sets for those areas of the country not served by electric power lines. There are special sets utilizing the new two-volt tubes and the air cell battery, suitable for use where there is no electrical power at all available. Then there are also sets specially designed for farm lighting installa-

Prices have been reduced considerably and are said to be lower than ever before. There are midget receivers, that is, receivers not installed in large cabinets, ranging from five to nine tubes and sell for from \$30 to \$60. Console machines, employing more tubes, sell for from \$70 to \$300, many being listed in the neighborhood of \$125. Most of the manufacturers advertise their sets complete with quality tubes, and taxnaid

Literature Wanted

Readers desiring radio literature from manufacturers and jobbers should send a request for publication of their name and address. Address Literature Editor, RADIO WORLD, 145 West 45th Street, New York, N. Y.

Leslie Hanyston, 107 North 6th Street, Marshall-

Foster W. Berry, 219 Barrett Street, Syracuse, N. Y.

Sanford Wolf, 3392 De Sota Avenue, Cleveland Hgts., Ohio

James K. Coates (parts suitable for auto and midget radios, also auto "B" eliminators), Tuttle, Okla.

H. Shosh, New Aberdeen Hotel, Aberdeen, So. Dak.

Harold Snyder, Cawker City, Kans. J. L. Ganson, Wallace, Kans.

R. B. Uhle, 3161 East Derbyshire Road, Cleveland Heights, Ohio

Charles Jasper, Box 1016, Anchorage, Alaska Neatway Company, 6626 St. Paul Ave., Detroit, Mich. Marciano Benedicto, 315 Cataluna, Sampaloc, Manila, P. I.

Bonseman Radio Service, 634 South Poplar St., Centralia, Ill.

Leon Sanderson, c/o Fair-Rhodes Oil Co., Hope-well, Va.

H. H. Trowbridge, 1108 2nd St., La Grande, Ore.

SHORT-WAVE CLUB

Thaddeus Gasiorowski, 209 Giffin Ave., Mt. Oliver Sta., Pittsburgh, Penna. Wm. Kehler, 714 Marshall Ave., South Milwaukee, Wis. Roy M. Hawkins, General Delivery, Sweetwater, Texas.

Forum

As a reader of the Radio World since December, 1927, I think that the radio constructors of the layman and novice type should give a vote of thanks for the very excellent and understandable way that the information needed to construct a set from a magazine diagram has been given in your construction articles of the 1933 Four-Tube Diamond of the Air. I think that it is the first article to give

values in every part.

Most of the writers of such articles in all magazines in the past have overlooked the fact that a large number of their readers depend on catalogs when it comes to selecting parts. In a recent hookup in another magazine a circuit was described as one that could be "built by the layman" and "if he will uif he will use care and patience in following instructions given, he will achieve results that would surprise him."

surprise him."

After a careful examination of the article one finds as follows: One part made from aluminum, very carefully drawn and described, but no reference as to where to use it; also to wind 147 turns of No. 32 wire on a tubing 1 inch in diameter in a space of 11/2 inches, and then that it should be properly done. Take a wire table and figure how many turns of No. 32 wire will cover the space as shown in the sketch (wound close) and one finds that nearly 174 turns are needed. Then in the list of parts are given manufacture numbers but four parts that he tells about in his article are not in the list. This writer says to use both the picture and schematic diagrams, but to follow the picture diagram as shown one would

need very good eyes.

I think that if you wil follow the exampl as given in the 1933 "Diamond" you would receive the thanks of all fairminded constructors, who realize that all persons can not figure out the value so as to use other parts that are procurable

in their home towns.

The only grief in your articles that I find is this: your coils call for No. 32 wire, also a finer wire to be used optionally as a primary winding.

These kires I find not listed in any catalog nor in many cases can they be bought in local stores.

Keep up the work as shown by the

Keep up the work as shown by the Diamond article.

CHAS. McBurney, 1124 West Berks Street, Philadelphia, Pa.

DUOVAC SUES A. T. & T.

The Duovac Radio Corporation has sued the American Telephone and Telegraph Company, Western Eelectric Company, Inc., and the Electrical Research Products, Inc., naming violation of the Clayton antimonopoly act and the Sherman anti-trust laws. Suit was entered in the Federal District Court in Wilmington Delaware.

New Incorporations

Conrad Radio & Television Corp., New York City, electrical apparatus—Atty., E. Light, 27 Cedar St., New York City.
Ontario Electric Corp., Buffalo, N. Y., refrigerators, etc.—Atty., I. Setel, Buffalo, N. Y.
Dearie & McLaughlin, New York City, electrical appliances—Attys., Chadbourne, Hunt, Jaeckel & Brown, 70 Pine St., New York City.

BANKRUPTCY PROCEEDINGS

Petition Filed by
Davidson Radio Corp., Chicago, Ill., involuntary:
creditors include Crosley Radio Corp.

CORPORATE CHANGES

Capital Increase
Le Winter's Radio Stores, Brooklyn, N. Y., 50
shares no par to \$75,000.

NBC ELECTRIC CHIMES GIVEN **AUDIENCE TRIAL**

The National Broadcasting Company chimes, which for years have kent the networks in synchronous step, have changed their tone.

An automatic electrical device, sending out a modulated, even tone at a constant level, replaced the familiar hand-struck chimes on all programs emanating from the NBC New York studios.

Purpose of Chimes

The contrivance, invented by Captain Richard H. Ranger, designer of the pipeless organ and the bell-less carillon, has been installed in the installed in the main control room of the NBC Building in New York. If the trial period proves its operation practical and its precise notes pleasing to the public, it will be adopted as permanent equipment at the New York Studios and also installed in the main control rooms of NBC Studios in all other cities.

The purpose of the chimes, which previously have been rung by the announcer striking one of the small hand sets with which each studio is equipped, is to synchronize local station identification announcements, and to serve as a cue to engineers at relay points all over the country to switch various branches of the networks on or off as the programs change each fif-

teen minutes.

Automatic Adjustment

For some time technicians have been seeking some automatic instrument which would insure a more constant level than could be obtained when different announcers were required to produce the three notes on different instruments.

The device itself is based on the old-fashioned music box. Actually, the are no chimes, only electrically created tones. A revolving drum with properly spaced pins, striking against a series of metal reeds, tuned to the chime pitch, produces electric vibrations which are picked up and amplified.

7-Prong Tube Offers a Variety of Uses

W. L. Krahl, Chief Engineer of the Arcturus Radio Tube Company, Newark,

N. J., said:
"We have developed a new seven-prong tube embodying a filament, cathode, control grid, suppressor grid, screen grid and plate. All of these elements within one bulb results in one of the most versatile tubes ever made. By various connections, this new tube can be used as a Class A amplifier, triode driver-output tube, Class

"Here is a definite example where a multi-element tube, involving difficult manufacturing processes, results in improved performance of a radio receiver."

NEW CALIFORNIA STATION

Washington The Federal Radio Commission has granted H. H. Hanseth, Eureka, Calif.,

a permit to construct a new broadcast staa permit to construct a new broadcast station to be operated on the 1,2210 kc channel with a power of 100 watts in the day time. It had been found that the people living within a radius of 40 miles of Eureka were inadequately served in the day time because of their isolated location on the Humboldt Bay.