

Speakers for the All-Electric

Modern Improvements

WITH the rapid improvement of the radio receiver, its accessories likewise improve. Where both radio and audio stages of a set can reproduce almost without distortion, the music from either the air or gramophone set, a suitable speaker has to be installed, to complete.

There are roughly three types of the horn, the magnetic tone and dynamic tone. Where a great deal of volume has to be handled, the quality maintained, there is only one speaker that can do the job efficiently, and that is the dynamic tone, although several types of a magnetic cone come very near to it.

The horn speaker is very sensitive and very pleasing on certain types of sets, and has not entirely disappeared from the radio world. Its popularity, however, is not increasing, though it is sometimes discarded when it should still remain.

Magnetic cones have been improved rapidly, and some of the now existing models are very like the dynamic. They give a good overall reproduction, and have the advantage of being light and transportable. Another advantage they have no need for a baffle or baffle cabinet. The dynamic cone is universally recognised as the perfect speaker, although, really, it is not perfect, as far as power utilisation is concerned.

It has been pointed out in another article that only a very small percentage of the power fed from the power valves can be finally utilised as sound by the speaker. This means that there is a big waste. The listener and the technician do not notice this (in fact it is unnecessary to notice it) when a good speaker is heard. Adequate power can be provided, especially with a good push-pull amplifier to feed any speaker. Where the amplifier and speaker are matched almost perfect results obtain.

Modern power amplifiers with low impedance valves require for their best results a speaker with a low impedance, and this is most often met with in the dynamic.

It has been explained many times that there are several types of this speaker, two of which will become more popular than the third. The hundred volt winding and the 230-volt AC mains unit will be used in preference to the 6-volt. This, of course, is inevitable with the disappearance of the battery charger and the accumulator. Modern dynamic speakers no longer cause a preponderance of the base and an attenuation of the treble. Reproduction is round and even, having a definite proportion of both sides of the musical scale.

WHEN it is newly received from the charging station a 4-volt battery should show a reading of approximately 4.2, and a 6-volt battery a reading of approximately 6.3 volts.

ONLY low-impedance valves which can handle a considerable current are of use for the output valves.

No Dull Lectures New York "Bombed" by Huge Plane

Fundamental Principles in American Broadcasting

AMERICA has determined that her listeners are not to be bored by dull lectures. Station WRNY, New York, has set out a number of rules which should satisfy the most frivolous listener. The following fundamental principles have been laid down:—

1. The subject must be indicated by a pleasing and catchy title which will attract attention.
2. The first few sentences must be arresting and even startling in character and in some subjects deliberately provocative.
3. Lectures in general should contain more explanation than fact.
4. The speaker must be of such standing that his statements will not be questioned. He must be a recognised or unassailable authority.
5. The maximum duration of a lecture should be fifteen minutes.
6. The speaker must possess personality. It is not generally realised how broadcasting betrays colourless character. The speaker must "punch" rather than "pat."

WHEN received from a charging station the voltage of a 2-volt battery should be a little above two volts, the usual reading being 2.1.

GOVERNOR'S Island, in New York Harbour, the headquarters of the 2nd Army Corps, was theoretically, reduced to a heap of smouldering ashes by a giant army bombing plane, which appeared over the city last night and dropped a theoretical load of 2000 lb. of explosives.

Army men applaud the fact that the plane with its wireless and navigation equipment was able to remain in the air when other machines were compelled to seek refuge at airports. From the time the plane left Fairfield (Ohio), 700 miles away, until New York was reached, it was in continuous wireless communication with successive stations and was able to keep on its course without any great difficulty.

This is the first time in the United States that a plane has taken advantage of the network of wireless stations spread across the country. Despite rough weather over the Alleghany Mountains, also low clouds, drizzling rain, fog-filled valleys and extremely poor visibility, which obliterated all landmarks, the crew had throughout complete information as to their exact whereabouts.

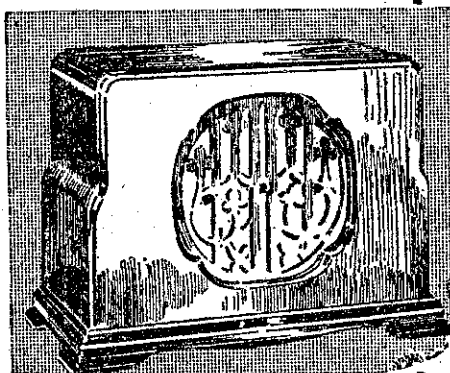
IF you use an aerial it should be fitted with an earthing switch so that the aerial can be connected direct to earth outside the house when not in use.

The Best is Always Cheapest in the Long Run

The new Magnavox X-Core Dynamic Speaker will add realism to your receiver. Radio sets may be cleverly engineered but unless hooked up to the best speaker unit—the Magnavox X-Core—their performance is not in keeping.

The new Magnavox X-Core Dynamic Speaker is absolutely free from rattle and A.C. hum—gives a depth of tone and superb quality of reproduction previously unknown—and, moreover, carries a lifetime guarantee of the original standard of performance.

Obtainable from your regular radio dealer who will be happy to demonstrate to you at any time.
Factory Representatives: SPEDDING LIMITED, P.O. Box 462, Auckland; P.O. Box 1531, Wellington; P.O. Box 922, Christchurch; P.O. Box 516, Dunedin.



BEVERLEY MODEL.

Cabinet in Brushed Walnut.

MAGNAVOX

"X-CORE" DYNAMIC SPEAKERS

REVISED

Price List

Effective September 1, 1929, until further notice.

- D6.—6/12 volts D.C. Accumulator or Eliminator, £6/17/6
- D6a.—6/12 volts D.C. Accumulator or Eliminator, £7/10/0
- D7.—110/180 volts D.C.—£6/17/6
- D7a.—110/180 volts D.C.—£7/10/0
- D9.—108/300 volts D.C.—£6/17/6
- D9a.—180/300 volts D.C.—£7/10/0
- D80.—220/240 volts A.C. mains (plug into lighting socket)—£10/0/0
- D80a.—220/240 volts A.C. mains (plug into lighting socket)—£10/12/6
- D81.—110/120 volts A.C. mains (plug into lighting socket)—£9/15/0
- D81a.—110/120 volts A.C. mains (plug into lighting socket)—£10/3/0