

neat receiver, finished in a metal shielded case. On removing the lid a workmanlike job could be seen; everything is perfectly shielded, including the three screen-grid radio frequency valves, the coils, condensers and power pack. To show that the set is well constructed and well wired, one had been reversed to reveal the wiring. Everything here was neat and in or-

name Philips was formed by valves and the flood lights above them gave a very artistic effect. The stand was furnished like a sitting-room, with a fireplace, chairs, etc. A full range of speakers, including the new dynamic, was on view.

Philips new Q-P (Kewpie) local station receiving set deserves special mention. This is a very small receiver

constructors' brought along. The gear for testing carrier current (wired wireless) drew much attention, and a great deal of interest in this new possibility was evoked. An apparatus to measure capacity by the hetrodyne principle received much attention, while a fading indicator kept continuously on a broadcasting station, showed very clearly how the output from this was being received. A simple method of measuring resistance was that of the neon lamp apparatus, the number of flashes per minute, indicating the resistance.

STAND No. 17.

"The Radio Record."

VISITORS to the exhibition were generally interested in the collection of obsolete radio apparatus displayed on the "Radio Record" stand. This was centred about a very complete case of valves representing types dating from the de Forrest valves in 1912 to the modern valve, and a set of tuning coils, constructed in 1918 for use on the wave band between 4000 and 23,000 metres. The tickler and aerial coils each exceeded 2ft. 6in. in length, and were about 5ft. in diameter. The tuner, primary, and secondary, comprised two coils about 18in. long and 8in. in diameter. One moved one within the other. Interesting radio curios from the late war showed the progress radio has made during the last ten years. In contrast to these was a modern power amplifier designed and constructed by "Pentode." This was operated from a gramophone pick-up and in conjunction with the original crystal set described by "Megohm" 2YA was brought in at excellent strength and quality. "Pentode" and the Technical Editor were in attendance to answer the constant stream of inquiries regarding the exhibits and radio problems confronting constructors. Sample copies of the "Radio Record" were distributed by members of the staff.

STAND No. 18.

Amateur Radio Society.

THE exhibits of the winners of the competition organised by the

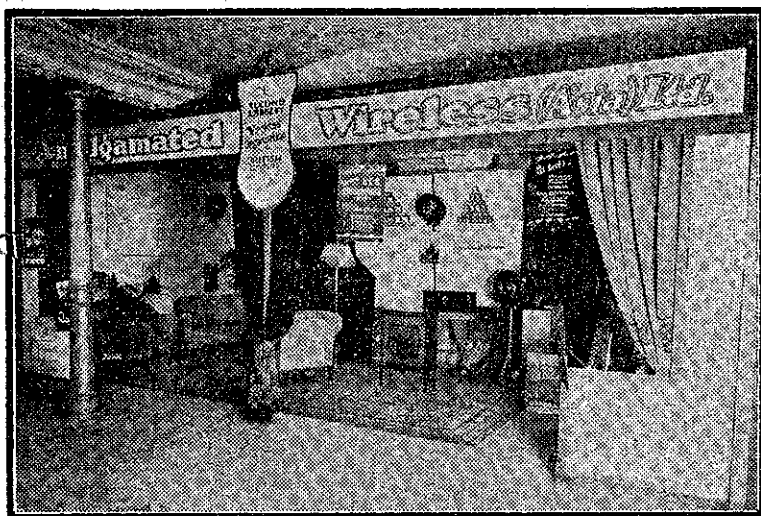
Amateur Radio Society were closely examined by a very large number of exhibition visitors. The winner in each section called forth much praise for their neatness in construction, and general finished appearance. Other exhibits were an "Economy One"—a one-valve home-constructed receiver with a glass panel, a crystal set which had won a prize in a London exhibition and an assembled kit set. This latter was the work of an experienced set builder and showed constructors how to go about these apparently simple jobs.

STAND NO. 19.

The Amateur Transmitters.

IN the centre of this exhibition was a large power amplifier which had been constructed to supply the power to a very neat transmitter assembled as a separate unit. This transmitter uses one of the special Marconi valves which, with suitable coils, will tune down to 5 metres (600,000 kilocycles). Probably the most novel exhibit on the stand was the transmitter and receiver of 2GA. These were both fitted into a cabinet about 20 inches high, 8 inches deep, and 20 inches wide. In the top compartment are two metal cans containing the receiver and the transmitter. The change-over switch in the lid enables either to be used. With this apparatus two-way communication with Spain has been accomplished.

There were very many neatly-built transmitters, ranging in size from one slightly larger than a one-valve receiver to complete outfits standing 4ft. high. The receivers exhibited were very well made, and amateur short-wave enthusiasts examined them with interest to get ideas for the construction of their own sets. The stand was brightly lit with small lamps which made the display quite cheerful. QSL cards from all over the world covered the walls, and some interesting "Ham" photographs were on view.



A.W.A.'s Stand at the Exhibition.

der. Several speakers were also exhibited.

Novel lighting effects were obtained by a candle type electric fittings, making in all a neat and attractive stand.

STAND NO. 10.

Macquarries, Ltd. Steinite Radio.

AT this stand the new line of Steinite radio was on view for the first time. The design is most unusual, and very pleasing. Of the large combination model the upper portion is devoted to a wireless set with a gramophone turntable in the lid. The lower part contains the speaker and record albums. This receiver was demonstrating during the exhibition. The smaller model Steinite radio set only was also on view. Several Cossors in kit form and one in assembled set completed the exhibit.

STAND NO. 11.

Macquarries, Ltd.

THE outstanding exhibit here was a console Crosley Show Box, with turntable and pick-up built in. The speaker was a Crosley Dynacone, finished in silver crystalline. Other Crosley models were displayed—the Show box and Gem box. Artistic light shades gave to the exhibit an added warmth.

STAND NO. 12.

Kirkcaldie and Stains.

THIS contained four Majestic A.C. receivers, each of a different type. One of these had been adapted from the model 71 by Kirkcaldie and Stains. An addition has been made to the top portion, enabling the inclusion of a gramophone turntable with a pick-up. It is difficult to believe that these are not being turned out directly from the factory. Model 181, the big combination set, was used to demonstrate reception from 2YA.

STAND No. 13.

Philips Lamps, N.Z., Ltd.

A NOTE of originality was struck in the furnishing of this stand. The way of testing apparatus that amateur

no larger than a Philip's battery eliminator. In appearance it is altogether different from a receiver. One simply presses the button and listens to the local station. Neither aerial or earth is necessary for the local station, with the result that the set can be moved about from room to room.

The A.C. 333 is a self-contained 3-valve A.C. set. The amateur obtains the parts and the circuit and builds this up for himself. A large assortment of trickle chargers and power packs were displayed.

STAND No. 14.

L. M. Silver and National Electric.

AS far as L.M. Silver was concerned, Kuprox rectifiers and eliminators were the main features. Crosley sets and speakers were also in evidence. An unusual effect was produced by lengths of Laker steel masts around the stand.

National Electric Engineering Co. exhibited their new H.C. table model Fadas. A gramophone pick-up complete with motor and tone-arm was on view, and ran continuously, showing that it was capable of very smooth motion.

STAND No. 15.

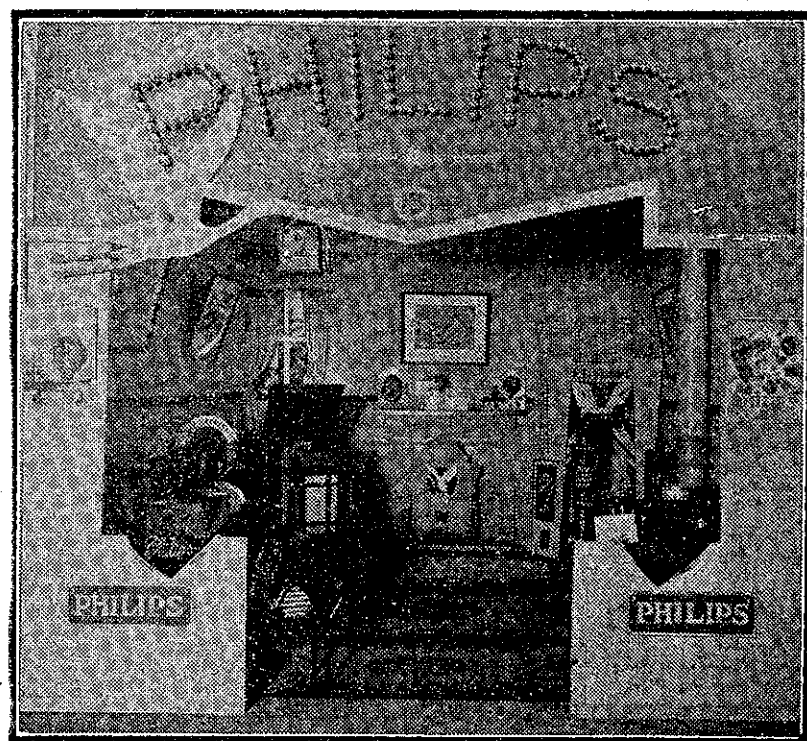
Ballinger's.

OSRAM valves and Peerless speakers were featured on this stand, with a very fine piece of furniture in the centre, made by Ballinger and Company themselves. This was a model wireless set, with an amplifier using a 250 in the final stage. This was operating during most of the exhibition, and during the football broadcast large crowds gathered to listen in.

STAND No. 16.

Post and Telegraph Department.

LARGE and interested crowds gathered round this stand to see the many types of scientific apparatus displayed. The attendants did a great deal in the way of testing apparatus that amateur



Philip's Radio Exhibit.

—Commercial Photographic Service. Photo.