

## Laboratory Jottings

## Gulbransen Combination

From Messrs. H. W. Clarke, Ltd., we have received a Gulbransen three-in-one model combination radio receiver, incorporating a super-heterodyne short-wave converter, which gives the set a world-wide range.

The receiver has a handsome appearance, and the short-wave adapter, in the model we tested, fits unobtrusively on one side. In other models, and in some ways this is preferable, a separate adapter rests on the top of the receiver.

As a gramophone amplifier, the set leaves nothing to be desired. On a frequency test it gave strong responses from 50 to 7000 cycles. These were by no means the extremes, for more or less weak responses were obtained above and below this, illustrating that the set is capable of reproducing faithfully almost any type of musical instrument or voice. There is a marked absence of base predominance, though the tone control will give this if desired.

The gramophone part of the outfit employs a Hammond motor, which incorporates several new principles, among these being the absence of a stopping and starting device. One starts the turntable revolving merely by flicking it. It is stopped by the automatic stop on the record. There is a complete absence of noise, it is permanently lubricated, beautifully finished, requires no governor, and maintains constant speed. It is indeed a high-class motor.

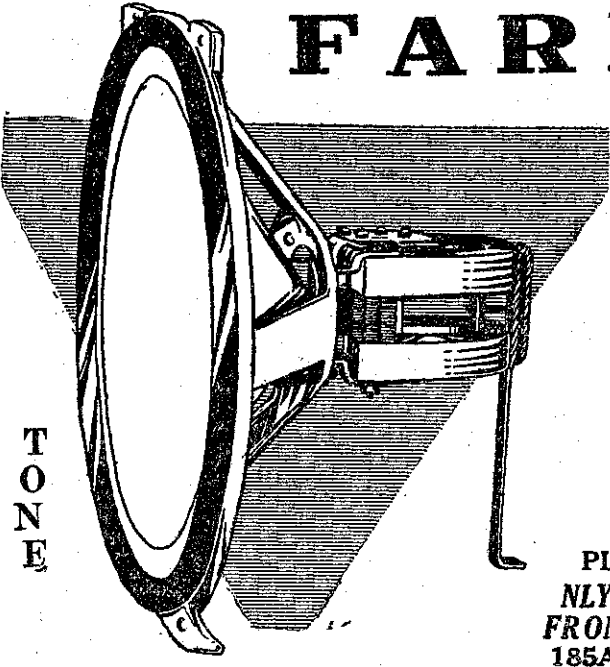
The volume control is smooth, and will control 2YA at close range satisfactorily without having to remove the aerial.

The sensitivity of the set is very high, and on the local switch we could listen to all we desired. 2FC and 2BL could be brought in with the set adjusted in this manner, and for pleasurable listening we found it advisable to use this switch on all stations to which we were listening. One evening when conditions were not particularly good, we ran down the dial and brought in fifteen stations, any one of which might be listened to with pleasure. We did not attempt to do DX-ing with the set, though an ample reserve of power was available had we wished to do so.

The short-wave equipment seems to us to be, perhaps, the most logical solution of the converter problem. By using a super-heterodyne converter all the valves of the main set are employed, as this adapter is placed between the aerial and the aerial terminal of the set. The short-wave coils cover all the bands from 17 to 100 metres. Tuning is very critical, but with a little practice, stations from all over the world can be brought in. We listened to Sydney and Melbourne stations, 5SW (London), W3XAL, and many other Americans, to say nothing of the many amateurs that came in at good strength.

There is much to be explored in short wave, and it takes time and patience. We are convinced, however, that the adapter is an excellent one, and the combination left little to be desired.

CHARLIE CHAPLIN, who on his recent visit to London several months ago could not be persuaded to face the microphone, in America refused offers totalling £180,000 for broadcasting advertisements. He was offered £180,000 for twenty-six radio talks of fifteen minutes each. This works out at £333 a minute! He also received an offer for £50,000 from one of the largest public concerns in America.



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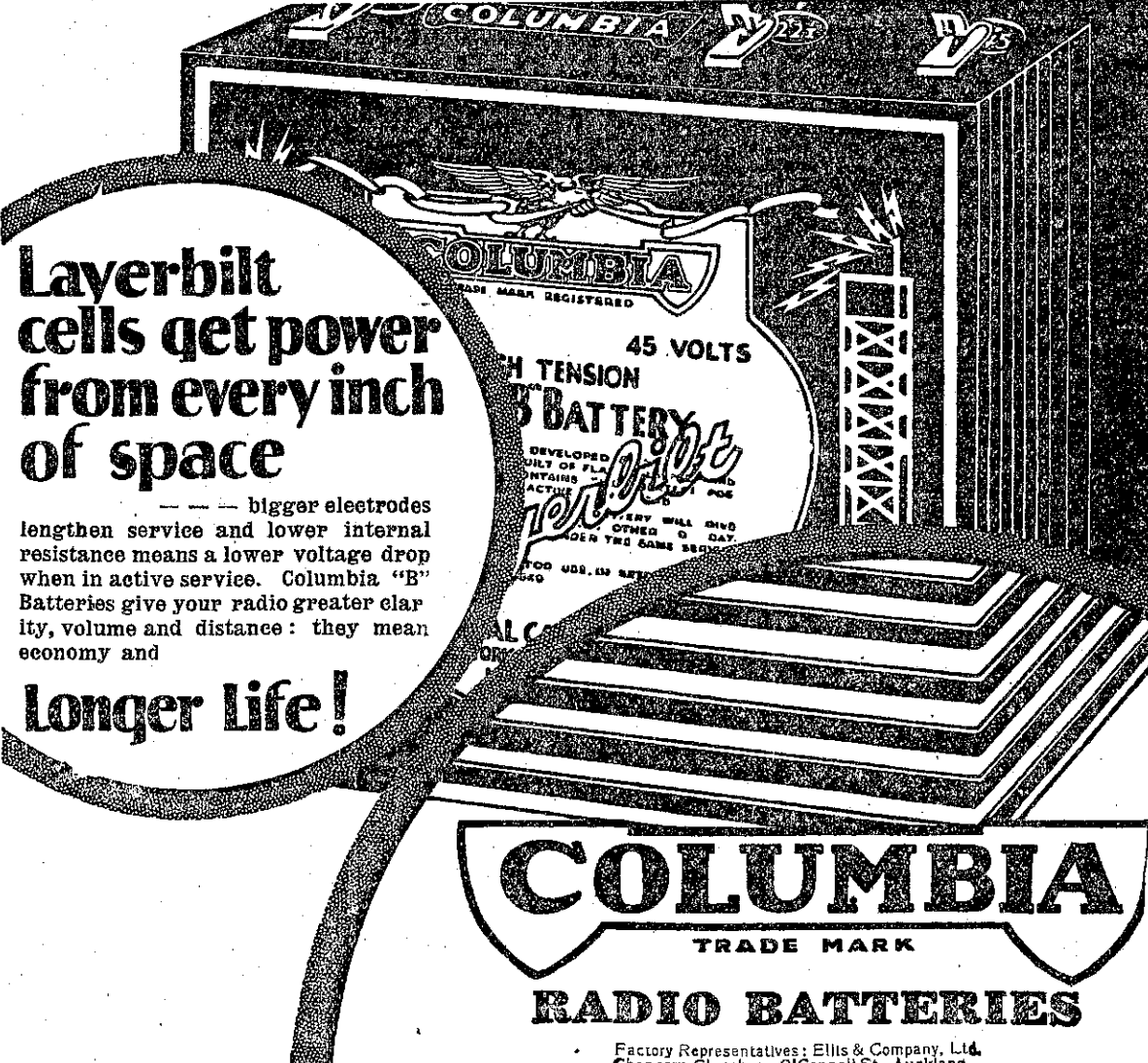
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TRADE MARK

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