

56 turns. A rheostat will be unnecessary unless for a volume control.

5. What B voltage is required for the radio frequency valves and the detector?

A.: The voltage varies, usually about 60 for the R.F., and from 45 to 22½ for detector.

Screen Grid as Detector.

"S.W." (Southland) asks:—

1. Would a screen grid work as a detector and give approximately maximum amplification?

A.: Screen grid as a detector has been tried out in only a few cases, and it has generally proved less satisfactory than the ordinary triode.

2. Would the screen grid require a tickler?

A.: No, it is impossible (so far) to use regeneration with this valve.

3. Would it detect on short wave?—No.

4. Would the A.C. impedance be quite suitable for ordinary transformers?

A.: No, a resistance of 500,000 ohms in the anode would be required.

5. Would two stages of resistance coupling work as push-pull?

A.: Not satisfactorily; by doing this resistances are placed in parallel, their value lowered, and the efficiency lost.

Changing Valves.

MY five-valve Neutrodyne is equipped with American valves, which seem to have lost their emission, writes "Beginner" (Bunnythorpe). Could you advise me what valves to use to bring my set up to date?

A.: You cannot improve on the valve combination you already have, unless you wish your set to handle greater volume. In this case, use the 171A in the last stage, with 20 volts bias at 135 volts anode. The use of this valve, however, will slightly drop the volume level. You should use 9 volts bias on the 112A. Your aerial and earth are quite O.K.

Rejuvenating Valves

"KAUSPANKA" (Taradale) wants to know this procedure.

Connect the filament legs of valve across the terminals of a 22½-volt battery for 45 seconds, but no longer. Then disconnect all "B" and "C" battery leads from set, insert valves, and turn on filament switch, and leave for six hours. Soft (detector) valves cannot be rejuvenated.—W. D. Campbell (Waipawa).

ONE of the best preventives of threshold howl in a short-wave set is to use an output filter of the L.F. choke-condenser type.

AS smooth reaction is absolutely essential to successful short-wave reception it is no early use buying short-wave coils for a set which is troubled with ploppy or fierce reaction.

DX Notes

An American to Identify?

ON August 30 I picked up an American between 2GB and 3UZ. He signed off at approximately 7.30 p.m., and the call sign sounded something like KF—B. Could any listener identify this station?—D. Jemmett (Gordonton).

Sydney on Crystal.

MR. W. G. McKAY (Wanganui) writes: In a recent issue of "Radio Record" I saw where a radio enthusiast in Dunedin had logged 2YA, Wellington, on a crystal set. On Tuesday, Wednesday and Friday of this week I have received 2FO (Sydney) on an ordinary crystal with remarkable volume. I have written to 2FO reporting the items I received. I have never heard of anyone else getting Australia on a crystal set.

A Very Distant American.

ON Wednesday, August 28, at 7.15, I logged station WITC, Hartford, Connecticut (U.S.A.). The announcer's voice came through very clearly, although slightly husky. After giving the station call he announced that testing was being carried on with power of 25 k.w. Mention was made of reports received from California, and an invitation given to listeners to furnish further reports. The announcer stated that they would gradually increase power. (Their power is given in "Listeners' Guide" as 50 k.w.) Listening was rather difficult on account of 2KY working on the same frequency.

Has any other D.X. friend been able to reach as far as this? Hartford is over 100 miles north-east of New York. I am using a four-valve regenerative set with 90 v. on B battery.—E. H. White (New Plymouth).

Two Americans to Identify.

WOULD you give the locality of two American stations heard on the speaker? Station W1XG heard last night (August 31) on 32½ dial, about 290 metres. We got his call letters and music quite distinctly, but static robbed us of locality each time. We got station WOW just below 2FC, but the same thing with it, and then 2YA broke in and we left. Re 2YA and distortion, on the majority of nights it is free, then we get a period when it is bad. To-night during the church service there was quite a great deal. We live six miles from town, and have an automatic telephone. We notice that when using the 'phone each time the dial is rotated it can be heard dis-

tinctly in the speaker. I would like to make a third to that motion re old-time dance music.—"Puzzled" (Masterton).

[W1XG was reported in last week's notes.]

The Bells of St. Paul's.

USING a 4-valve all-wave receiver I tell you I get plenty of fun, and I suppose if I cared I could get almost a 24-hour service. A while back I used to think it great to hear VK2ME having a chat to GBX, Rugby, England, and on one occasion I heard the announcer at GBX say to Sydney to stand by while he held the microphone at the window to see if Sydney could hear the bells of St. Paul's Cathedral. I heard them rather well. As a matter of fact I think I heard London more clearly than Sydney. On different occasions Mr. Farmer, of VK2ME mistook the names of different gentlemen who were introduced to him over the air. However, it seems just an every-day affair now, and one can almost rely on finding 2ME on the air with CJA, Canada, Suva, or some other shortwave station. I have heard a few other short-wavers, but perhaps not as many as some of our friends. On the broadcast band we certainly get a good variety; some evenings one can hardly move the dial round—a station every few degrees. Congratulations to the young stations, such as New Plymouth, Gisborne, Palmerston North, Napier, etc. I have heard them with excellent results. If this should meet the eye of "New Chum, Timaru," of your issue of September 6, I would be glad to have a line from him.—Albert C. Martin (Temukū).

WHEN a new set is being assembled have a piece of soap at hand and push the screws into this before attempting to drive them, as this makes a surprising difference to ease of working.

ONE of the advantages of using a good solid coil tube instead of a flimsy cardboard is that the terminals can be securely mounted upon the former for the purpose of connection.

Nelson Amateur Radio Club

THE Nelson Radio Club is growing larger every week, but as yet it is no rival to the Hastings one, which is to be congratulated upon the concert it relayed. The Broadcasting Company as well must come in for a large share of praise for the way the relay was handled. The concert was listened to here with pleasure from start to finish, and it is hoped others like it will follow.

There have been two meetings of this club since the last notes appeared. At one, in the unavoidable absence of the president, Mr. C. Lewis presided.

Mr. Askew (of Messrs. Wilkins and Field) gave a demonstration of the latest all-electric Majestic receiver, and Mr. Shea gave an instructive talk on gramophone pick-ups. The thanks of the club are due to both these gentlemen and their firm for their time and trouble.

At this week's meeting the president (Mr. C. Page) gave a lecture on "Trouble Finding" and spoke on how to test component parts for faults and remedy them when found.

The humble crystal set is of no use in this town, and many people are not listeners because, although they believe the valve sets to be efficient, they are too expensive for them. The club, with the help of the more experienced members, hopes to be able to help members to build quite good sets for the price of the parts. In this way both the trade and the Broadcasting Company should benefit.

[An excellent idea. More of this would stimulate amateur construction, which in the day of the all-electric is liable to wane.—Tech. Ed.]

Have you secured your copy of

"N.Z. Radio Listener's Guide?"

Dealers and Booksellers 2/6; Post Free 2/9—P.O. Box 1082, Wellington.

Now Available.

Speed and Ease . . . Are two very important features in the assembling of the . . .

National Official BROWNING-DRAKE RECEIVER

Using either ORDINARY TYPE or SCREEN-GRID VALVES.

But more important still—EFFICIENCY

DISTANCE—SELECTIVITY—VOLUME AND TONE

Is GUARANTEED by the New Official Browning-Drake Coils and Complete Units.

The quickest, easiest set to assemble—and the best of them all when built.

Enquire for particulars from your nearest dealer or write

BOND & BOND LTD.

P.O. BOX 331, AUCKLAND



Sole N.Z. Agents:

Messrs. **CORY-WRIGHT & SALMON**

ENGINEERS
P.O. Box 1650, Auckland.
P.O. Box 1230, Wellington.