Questions and Answers

DHAR LAP (Napier).—On switching on the power to my set it hums for about five minutes before starting, reception then coming in suddenly.

A.: There is something wrong with your set, probably a defective resistance. The only way to locate this would be with instruments. If the trouble originated only after you had a serviceman to the set then bring him back and ask him to complete the job.

B.S.D. (Wanganui).—Yes, we shall endeavour to publish in the "Radio Times" an oscillator valve circuit suitable for Morse practice.

E.T. (Wellington).—If the rasping noise is present when you are adjusting the volume control we presume there is something wrong with that part of the set. The jumping of the programme would also indicate that there is something with the something wrong with the volume con-

trol.

2. Should Christchurch buzz on some afternoon—sometimes more than others?

A.: No, but it does unfortunately, and as far as we can make out this is a raspas as as we can make out this is a rap-iness in the carrier wave which originates at the station itself.

3. Should an 8-valve set secure more American stations than KFI, Los An-

A.: It altogether depends upon locality.

4. What is meant by dx? Can an ordinary broadcast set owner become a

dxer?

A.: The term "dxer" is applied to those who are interested in bringing in long-distance broadcast stations, and dxers in general do not possess short-wave outfits. The word "dx" means "distant."

5. Yes, your valves are quite good, and it is doubtful if any others would produce better results.

6. J. G. Henderson, Victoria Street, Wallington.

Wellington.
7 Is Auckland always a hard station

o bring in?

A.: It fades rather badly.

(Note.—Our limit is three questions without a shilling fee. What are you going to do about it?)

46W. (Wanganui): Is it possible to use a pentode in my present fourvalve battery operated set so that it will give me greater lift?

A.: A pentode valve will probably give you greater lift, but it is necessary that it be matched to the speaker by a special matching transformer.

N.D. (Auckland): I wish to use finer We wire and a smaller former for the "Rejecta Two." At present I am getting good results.

A.: You could use a 2in. former and 26 gauge d.s.c. wire, winding on 80 turns on the main coil and 40 on the small coil. for reasons of efficiency we do not advise you to make a smaller coil than this.

2. Both sun and rain decrease the yolume of my "Rejecta Two." Can this

be overcome?

A.: This is due either to a defective

crystal or to your aerial and earth sys-tem. See that all joints are good, that the connection with the ground is perfect, and that the aerial can in no way contact the leads going to the ground.

LORENZO (Taranaki): What causes

A: That is due to the large amount of current which is passed through the field winding. Unless it is unbearably

of current which is passed inrough the field winding. Unless it is unbearably hot, it is quite normal.

2. If I touch any part of the chassis with a screwdriver, the speaker picks it up. Is this right?

A.: Yes, we think this does not indicate a fault.

CHARGER (W. Coast): When 3ZR shifted to 200 k.c., the volume of that station dropped until it was not

PHAR LAP (Napier).—On switching comfortable to listen to. About three miles away a friend has a set, and the about five minutes before starting, receptions that the same on this has increased. What can be done?

A. This is due probably either to your location with respect to the station or more probably due to the peaking in your receiver. In your particular receiver, 1800 k.c. is a frequency at which there is less amplification than at other frequencies, and in your friend's set vice versa. We suggest you trim the condensers, carrying out this operation on

I often have the set on when the 2. I often have the set of when he was a set of when the B" batteries are charging, and the noise from the dynamo comes through. How can I prevent this?

A.: You cannot do so practicably.

DX25N (Nelson): From 540-720 k.c., I can bring in only 4YA with the

A.: Either the set is designed so that amplification takes place below a part of the dial or the ganged condensers are out of alignment. Have them lined up.

2. The A.F.C. gets very hot. Is this

A.: It is probably built of wire which is of too small gauge. However, you can do nothing for it.

3. Working on an average of 8½ hours day, it costs 7/6 a month for power.

A: Yes, that is quite the normal consumption for a set of that description.

KFI (Napier): We are sorry we can-not give you the short-wave colls for the 1932 "Outspan Four." It is purely a broadcast set.

2. I have a 15 volts C battery and wish

to supply a valve with 4½ volts, negative. What value of resistance would I require in connection?

in connection?

A.: You cannot break down a C battery by a resistance. Your best plan would be to shunt a 2000 ohms potentiometer aeross it and take the moving arm to the grid return on which you wish to place 4½ volts. Vary it until you get the right value. You would need to disconnect the potentiometer when you are not using the battery, otherwise you would run it right down.

3 What is the amplification of A422 s.g.?

A.: About 250.

A.: About 250.

S. J.S. (Taita): I have a local made six-valve electric set, which has a very pronounced hum. It fades and develops into a crackling noise after the set has been running a short while. A.: This is due to a broken down

electrolytic condenser.

MOKI (Hinan): The Daniell Cell charger will not work for me, yet it registered 8 volts without the accumu-

A.: Are you leaving it on your accumulator continuously? Are all the external convections sound? It may pay you to add a few more cells and bring the number up a little. Are you quite certain you are connecting it the right way round, that is, the copper rod to the positive terminal of your battery?

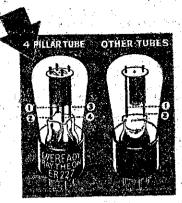
DX179A. (Auckland): I recently tried paralleling an Osram 610 and a 171A valve. There was a decided loss of volume.

A.: No wonder. You must parallel valves of the same type. Further than that, you probably caused the voltages on all the valves to drop as the power-pack was designed not to take the extra load imposed by the paralleled valves. You will not get greater amplification in any case, only greater undistorted outnut any case, only greater undistorted output and in a three-valve set paralleling is quite unnecessary. In fact it is a waste,

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