

Questions and Answers



"NOVICE" (Masterton): When the volume control is turned almost off is the maximum current from the mains still being used?—Yes.

E. C. (Timaru): Would it be possible to incorporate a differential condenser in my commercial three-valve set?

A.: Yes, if you re-design the coils.

2: Would it improve its efficiency?

A.: Yes, but it would not be worth while.

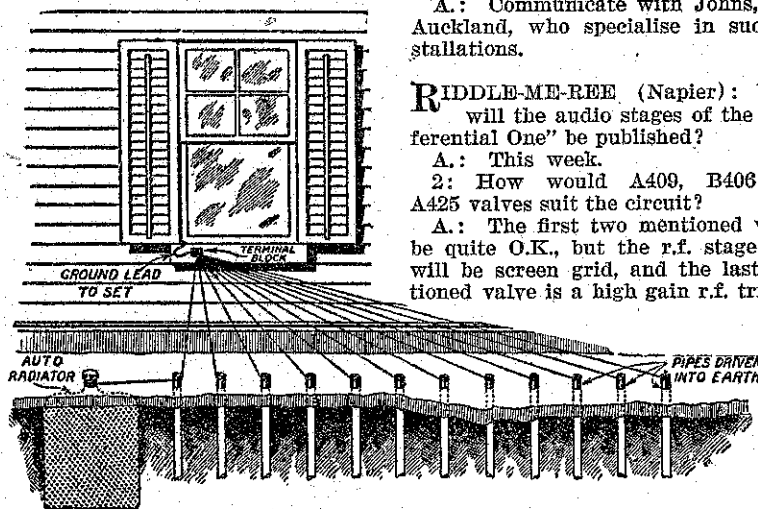
"VEGA" (Dunedin): I have a power transformer with a secondary tapping giving four volts at 3.6 amps. Would this tapping be satisfactory for the filament of a single E435 Phillips valve with a filament voltage of 4 volts, current .9 amp? Will the high amperage burn out the filament?

A.: No, it will be quite safe.

2: Have you published a circuit using A.C. screen grid valves in the r.f. stages and incorporating a pentode in

the final audio? I like the tone the pentode valve gives, but so far have not been able to get any information re this circuit.

A.: No, we have not published such a circuit. The pentode, which works excellently under proper conditions, is a rather tricky valve to handle.



T. C. (Te Kina): In what issue was the article on the Daniell cell charger published?

A.: November 7, 1930.

"VOX" (Kokiri): Would it be possible to run an all-electric six-valve combination set from a dynamo?

A.: Communicate with Johns, Ltd., Auckland, who specialise in such installations.

RIDDLE-ME-REE (Napier): When will the audio stages of the "Differential One" be published?

A.: This week.

2: How would A409, B406 and A425 valves suit the circuit?

A.: The first two mentioned would be quite O.K., but the r.f. stage used will be screen grid, and the last-mentioned valve is a high gain r.f. triode.

6: Should my coils, which are wound with enamelled copper wire, be space wound?

A.: Not necessarily, though a slight gain in efficiency would be noticed.

7: Could I use a variable resistance ranging from 0 to 100,000 ohms and capable of carrying two mamps to secure any "B" voltage from zero up to 45?—Yes.

"SCREEN GRID" (Dunedin): I have built the screen grid shortwave set described in the "Listener's Guide" and would like to know the following: 1.—Why cannot tin be used for shielding?

A.: Aluminium and copper are much more satisfactory as they offer a higher resistance to radio frequency currents, and appreciably absorb magnetic lines of force. Tin is not as efficient and its use may cause undesired oscillation.

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3: Would the set work a speaker using a 66K Blue Spot unit?

A.: Yes.

"INCEPTOR" (Tariki): I notice in a recent issue an American listener has logged 740 stations, for which he gives his earth system credit. Could you explain this more fully?

A.: See accompanying diagram.

2: Do you know of a set called the "Inceptor Three," and if so could you give me coil particulars?

A.: The set you mention was published by an English radio magazine and is probably not suitable for N.Z. conditions.

"BUNG" (Waikato): My set works better on shortwave with the earth disconnected and connected to the metal cabinet.

A.: This is quite usual.

2: What distance can I expect on a three-valve short-wave set?

A.: All over the world.

3: Why should my set crackle with aerial and earth disconnected? I have tested my batteries and speaker.

A.: It is probable that either your transformers or your grid leak are defective.

4: What size earth wire would I need to reduce resistance losses using 100 feet of 7/22 single wire aerial?

A.: 14 gauge single copper wire or 7/22. The earth lead should be as short as possible.

5: Why should I get better volume in the loudspeaker than in my phones?

A.: The latter are probably defective.

A. J. PARK & SON

Patent Attorneys

Routh's Buildings,

Featherston Street,

WELLINGTON

CORRESPONDENTS must attach this coupon to all queries sent to the Technical Editor (Box 1032, Wellington). Questions arriving without it are likely to go astray or be delayed.

Name of set

Number of Vales

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries.

Date

Please Note:—

- (1) Be specific and brief, tabulating, if possible.
- (2) Write legibly, and on one side of the paper.
- (3) We do not design circuits, but accept suggestions for feature articles.

Solving trouble, as different from advice, is difficult by correspondence and while letters are given every consideration, answers are not necessarily correct—they are only our opinion based on the matter supplied, which may be quite inadequate. Intricate and involved specifications cannot be supplied without a specialist's fee.