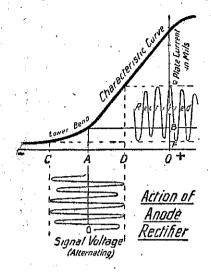
Increase of plate voltage always requires a suitable increase of bias volttage, which should be carefully adjusted. By shifting the point A towards the left and applying higher bias voltage, the signal alternations may have a greater amplitude, which is equivalent to more volume without causing distortion. When the alter-



nating signal impulses make the grid alternately more and less negative instead of alternately negative and posi-

tive, the best effect is being obtained.
Actually, when the plate voltage is low, and the grid is positive during a portion of one half-cycle, then electrons are attracted by the grid from the filament-to-plate stream, forming what is known as "grid current." This unwanted flow of current to the grid causes distortion, but is absent so long as a sufficiently high plate voltage is employed, along with suitable grid bias. In other words, if the maximum of the input voltage does not exceed the bias voltage, the grid will never be actually positive with regard to the filament, and therefore grid current will not flow.

It is this reduced liability to the ity over the leak-condenser type. The employment of reaction has the same detrimental effect upon quality with either system of rectification, unless used with extreme moderation.

Anode bend rectification is not put forward as anything new. The method is quite old, but for a considerable time has been superseded by the popular grid rectifier on account of the made B battery described by "Meglatter's greater sensitivity. Now that ohm." Instead of attempting to form receivers and valves have been much his own plates, he has procured plates improved, and quality is considered es- measuring 5½ x 5 which have been sential, the anode rectifier is being re- already formed. These were cut into vived, and when preceded by efficient strips each half an inch, and suspendradio-frequency stages will find greater ed in the test tubes as was originally favour with many constructors than described. The positive of one has does the grid-leak type. found that there is also a gain in qual-other by a pure-lead telephone wire ity from distant stations, apart from covering. On the top of each test tube the usual interference of atmospherics he has placed a thin covering of light and induction.

Constructor's Suggestions

four-valve BD, writes Mr. Wm. primary by at least five and still maintain stability. Also the increase gives a decided increase in amplification though tuning is flattened slightly. also found that by inserting an earthed copper screen between the aerial coil, condenser, RF valve and the RF transformer that reception was very much screening boxes, as these produce a to attempt construction. I experienced and of adequate size and strength. serious damping or loss of signal strength.

Do you think it possible to make use of screens only between the three stages in the 2RF, BD instead of copper boxes and do away with the losses incurred by enclosing each stage? Would it be possible to maintain stability by the suggested plan?

[Most unlikely, feed-back and interaction would cause instability.—Technical Editor.1

Now a word praising the really firstclass service put across by the R.B.C. I think, and I am not alone in asserting that no sane person could find fault with such a system of entertainment. It is very entertaining reading some of the "growlers" remarks in "Radio Record." It makes one wonder just how much, or what, some people really do want for their license-fee.

Burnt-out Transformers

HERE is a tip that may be of value when the primary of a transformer burns out at an inconvenient moment.

Join a wire on to each of the primary terminals "B positive" and "P," flow of grid current that gives the and put these in a vessel containing anode rectifier its superiority for qual-weak salt solution. The transformer should then act more or less satisfactorily until it can be replaced.

Home-made "B" Battery

A CONSTRUCTOR has advised us of an improvement to the home-It will be been connected to the negative of an-

Peridyne Coils

IN changing to parallel feed on my A SHORT time ago, a correspondent, H.H.E., asked for details of the Seddon, I found I could increase the Peridyne coils. We have received two letters in reply, and in this connection, H.H.E. is asked to communicate with A. G. Baine, Harbour View Road, St. Heliers, Auckland, who has a set of these coils he wishes to dispose of. He will give him full particulars if he prefers to make them for himself.

In this connection another corresponclearer. No doubt this is brought dent, "141" (Auckland) states that he about by stopping any coupling be has made a set with copper cans, the tween aerial coil and RF transformer. coils of which are mounted on celluthis screening I find much better than loid. He adds: "Unless one has plenty totally enclosing the separate stages in of patience, I would not advise them

great trouble at first, but now results are great."

Peridyne coils have been fully described in the "Radio News" Amateur Handbook, Volume 5, pages 15 and 16.

Useful Tips

GRID choking is generally due to a faulty grid leak or to a faulty connection in the grid return circuit.

THE plates of an accumulator should not be exposed to the air.

BATTERY leads should always be regarded as potentially dangerous. and should therefore be of sound wire

RADIO DIRECTORY

What to Buy and Where

CITIES

AERIAL MASTS

Domestic Radio Co., Ltd., 300 Queen Street, Auckland.

ALTONA & HAMMARLUND. ROBERTS SETS.

Johns, Ltd. Chancery Street, Auckland.

ATWATER-KENT RADIO

... Frank Wiseman, Ltd. 170-172 Queen Street, Auckland.

DAYTON All-Electric Radio Superadio, Ltd.,
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