try to dispense with this extra tuned circuit, which is quite worth inclusion for the extra selectivity it gives.

Where the first stage of the broadcast receiver is of the untuned type employing a resistor or r.f. choke to couple the aerial to the grid circuit, it will usually be found of advantage to connect the lead from the adapter to the grid of the second r.f. valve; where this is done, a reduction of C5 to .00005 mfd. or less will improve selectivity.

CRAMPING should be avoided in constructing the adapter. A metal panel is of advantage in reducing

FOR SALE OR EXCHANGE

The rate for small advertisements under this beading is 1/6 cash for 20 words, and twopence for every other word thereafter.

VOUTH-O-FORM Capsules afford easy and quick way of reducing. Absolutely harmless. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

LOFTIN-WHITE Amplifier and Farrand Dynamic Speaker, complete with valves. This is not an amateur job but is professionally made and in perfect condition. Used for demonstration. fect condition. Used for aemunication, burposes, £16 or near offer.—"Loftin,

SLENDER figure secured with Youth-20lb. reduction 6 weeks. A. C. Timms, Chemist, O-Form. 6/6 posted. Pahiatua.

8 SCREEN-GRID RADIO CHASSIS. £26, Triple S.G. R.F., Power Detection, 245's Push-pull. Write for details. Royds-Howard Co., Christchurch.

YOUTH-O-FORM is safe, easy cut to slimness. 20lb. reduction 6 weeks. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

OD. 41-volt Torch Batteries, Round Units 8d., 9-volt C, 3/-, No. 6 1/11 posted. Royds-Howard Co., Christchurch.

WESTINGHOUSE" Battery your Radio, eliminate batteries. Results superior to most A.C. Radios. Guaranteed. Write us. Johns, Ltd., Chancery Street, Auckland.

sub-panel is raised an inch or two above the floor of the cabinet the bypass condensers and the heater and low potential wiring can be located out of

any hand-capacity effects, while if the ing that the two tuning controls on the adapter run more or less in line. Lastly, adjust the condenser C4 and the detector bias resistor for best re-'sults. Once the initial connections and sight beneath it. The 2.5 volt heater adjustments have been made, it is only

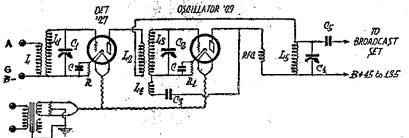


Fig. 3.—Circuit Diagram of High Frequency Adapter.
L. L.1.—1st Det. Colls.
L.2. L.3, I.4.—Oscillator Colls.
RFC.—Radio Frequency Choke.
R.—Filament Transformer.
R.—50,000 ohm Variable Resistance.
C1.—C1.—C2.—.00014 mfd. Tuning Condenser.
C3.—0005 mfd. Tuning Condenser.
C4.—0005 mfd. Semi-variable con-R1.—1,500 ohm Resistan R2.—60 ohm Resistance. -1,500 ohm Resistance.

circuit should be wired with No. 14 or 16 S.W.G., the two wires being twisted together and kept well away from other wiring and components to prevent hum being picked up.

The adjustment of the adapter is very simple, particularly where the input stage of the receiver proper is of the tuned type, which is usual. The aerial is first disconnected from the broadcast set and connected to the adapter, the earth wire being treated likewise, or an additional earth connection used for the adapter. Next the B + 45 and B leads must be brought out from the broadcast receiver power-pack and connected where shown to the adapter. The lead from the adapter may then be connected to the aerial terminal of the broadcast set; where two terminals marked "long" and "short" are provided, make the connection to that marked "short." The power may now be switched on to the filament transformer. With the broadcast dial set at maximum, tune in a weak shortwave station, remember-

C3.—.0005 mfd. Tuning Condenser. C4.—.0005 mfd. Semi-variable condenser

a matter of changing over the aerial connections and switching on the filamen transformer to put the adapter into operation.

It is only a broadcast receiver having considerable radio-frequency amplification which is suitable for use with an adapter of this type.

Politics via Loud Speaker

A Useful Ally

GENERAL CHARLES DAWES, the American Ambassador in England, remarked during a recent speech that he regarded radio as one of the best means of maintaining law and order and good government.

"For some inexplicable reason," he continued, "when persons listen through the wireless to the speeches of politicians, their instincts are not roused in the same way as they are in a crowd. The best illustration of this was the Democratic Convention held in New York, when the speeches caused the crowd present to howl in a perfect frenzy, while a much larger crowd of 25,000 to 30,000 people listening to those same speeches through loud: speakers were as silent as death."

"In other words," he concluded, "the crowd listening over the radio behaved as individuals and not as a crowd, and their mob instincts were not roused.

RADIO DIRECTORY

What to Buy and Where

ACE and HAMMARLUND SETS, Johns, Ltd. WESTINGHOUSE Rectifiers Chancery Street, Auckland.

BROWNING DRAKE SPECIAL. F. J. W. Fear & Co.

BURGESS RADIO BATTERIES. All Radio Dealers. KING RADIO RECEIVERS ... F. J. W. Fear & Co.,

63 Willis Street, Wellington.

LOFTIN-WHITE AMPLIFIERS Stewart Hardware Ltd.,

Courtenay Place, Wellington,

MAJESTIC RADIO RECEIVERS Kirkcaldie & Stains.

Wellington Agents, Lambton Quay.

MULLARD VALVES ..., 10 X+201

All Radio Dealers.

FILOT 1930 PARTS-PILOT Harrington's, N.Z., Ltd., SUPER WASP KITS, GILFIL 138-140 Queen St., Auckland. LAN, KELLOGG and AT-WATER KENT SETS

RADIOLA RECEIVERS and Farmers' Trading Co., Ltd., Expert Radiola Service.

Hobson Street. Auckland.

STEINITE RADIO

G. G. Macquarrie, Ltd., 120 Willis St., Wellington.

COUNTRY TOWNS

MAJESTIC, ATWATER-KENT Radio House, Hamilton. AND RADIOLA ELECTRIC G. S. Anchor, Manager. SETS

PHILIPS VALVES AND APPARATUS All Good Radio Dealers.

Trickle Chargers

We have landed limited supplies of "BALKITE" Trickle Chargers, suitable for charging 4-volt or 6-volt Batteries at .65 to .5 amperes.

These were formerly £3/10/- each

Special Price, 32/6 each, Post Free

Thos. Ballinger & Co. Ltd.,

58-62 VICTORIA STREET, WELLINGTON.

" Where the Quality Goods are Sold"