A Simple Reinartz Tuner.

HE article on the Reinartz tuner, which appeared in the May 13th, 1922, issue, fired the writer's ambition to make up one of these tuners. This has turned out

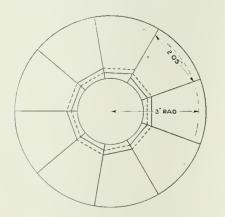


Fig. 1. Dimensions of card former.

so well that probably other readers may like to benefit by the experience gained.

First a coil was wound on a card, after the

produce nine equal divisions (other sizes in proportion).

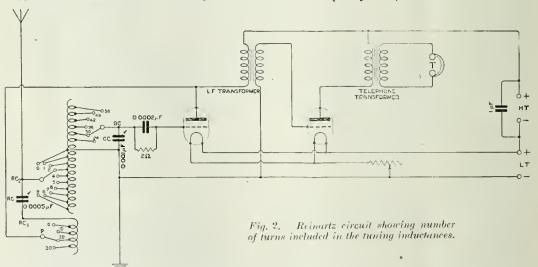
The card actually used was of $3\frac{1}{4}$ ins. radius, and the slots were deep enough to start winding at $\frac{3}{4}$ ins. radius. The following procedure was gone through and reference should be made to Fig. 1:—

Beginning, labelled "30"; wind 10 turns, tap and label "20"; wind 10 turns, tap and label "10"; next, 10 more turns, and then cut off and label "0" leaving enough wire to run to terminal "R.C. I." Start afresh, labelling beginning "9"; I turn, label "8," and so on to "0" and leave enough wire to run to terminal "E and —T.C." Do not break the wire but wind on 24 more turns, label "24"; 6 more and label "30" and so on to 36, 42, 49 and 56.

The switch centre for the "24" to "56" tappings is connected to a terminal labelled "G.C."

The switch arm of the "o" to "9" tappings is connected to the terminal labelled "R.C.2" and that of the "o" to "30" tappings to a terminal labelled "P."

For telephony on 400 metres the tuner is



fashion described in "Experimental Station Design II," June 10th issue. A \(\frac{1}{4}\) lb. of No. 26 D.C.C. was more than enough.

Lest anyone repeat an early error of the writer's, it should be remembered that the card must have an *odd* number of slots. Round a circle of 3 ins. radius, steps of 2'05 ins.

ideal with two valves. When connected to an aerial of the usual amateur dimensions, and the three switches set at 56, 3 and 30; R.C. at about 0.0001 mfds., and C.C. at about 0.0001 mfds., the following come in very clearly at Shoeburyness, Essex:—2 MT, 2 LO, 2 IF, 2 ON and others.

If speech is not clear, less reaction should be used.

A slight improvement has been made by adding a card (wound with 44 turns of No. 26 D.C.C. from 3 in. to 13 ins. radius) below the main eard and connected in circuit at R.C. 1. Probably it would have been better to start the main eard at 2 ins. radius, and wind the "o" to "56" turns on a second eard, starting again at 2 ins. radius. This should make the addition of 44 turns to the "o to 30" coil unnecessary.

The second valve is simply connected as shown in the diagram, Fig. 2.

Using the ordinary slab inductances it was found that the same circuit worked well up to 8,000 metres. No trial was made on higher wavelengths. Attention should be drawn to the fact that this circuit is liable to cause interference by radiation, though with a suitable adjustment of coupling of the plate circuit inductance and reaction condenser, the tendency to oscillate can be critically controlled.

The writer feels sure that he is not alone in being grateful for his introduction to the Reinartz tuner.

B. H. E.

The Ideal Home Exhibition

N the last issue of The Wireless World and Radio Review, an announcement was made I regarding the Ideal Home Exhibition. This Exhibition, which is being organised by the Daily Mai, will be open from March 1st to 24th inclusive. It should be of special interest to those associated with wireless, since arrangements have been made for a section of the Exhibition to be devoted entirely to wireless exhibits, and every effort will be made to present wireless telephony to the public visiting the Exhibition in an attractive manner.

The organisers of the Exhibition have assigned to the National Association of Wireless Manufacturers the entire arrangements for the wireless section of the Ideal Home Exhibition, and the principal manufacturers of apparatus will be exhibiting. The interest of the wireless section will naturally centre around broadcasting, and for the special use of the wireless manufacturers there has been set apart a concert hall in the Exhibition with seating accommodation for 1,000, and here manufacturers will organise continuous free demonstrations of wireless telephony reception. Every opportunity will be given to the public to appreciate the value of wireless telephony in the home, and one feels confident that every visitor to the Exhibition will leave it with the impression that no home can be ideal unless the benefits to be derived from wireless telephony are taken advantage of.

The following is a list of some of the

principal firms who will exhibit :-Siemens Brothers & Co., Ltd.

Rogers, Foster & Howell, Ltd. Igranie Electric Co., Ltd. Radiophones, Ltd.

Marconi Scientific Inst., Co., Ltd.

Automatic Telephone Mfg., Co., Ltd., jointly with

Ashley Wireless Telephone Co., Ltd. Dubilier Condenser Co. (1921), Ltd.

General Electric Co., Ltd.

Metropolitan-Vickers Electrical Co., Ltd.

Radio Instruments, Ltd. Telephone Mfg. Co., Ltd.

Western Electric Co., Ltd.

S. G. Brown, Ltd.

The Wireless Press, Ltd.

Radio Press, Ltd.

Fellows Magneto Co., Ltd.

British Thomson-Houston Co., Ltd.

L. McMichael, Ltd.

Electric Appliances Co., Ltd.

Tingey Wireless, Ltd.

Burndept, Ltd.

C. F. Elwell, Ltd.

Marconi's Wireless Telegraph Co., Ltd.

Radio Communication Co., Ltd.

Sterling Telephone & Electric Co., Ltd.

A. W. Gamage, Ltd.

H. Stanley Prince, Ltd.

General Radio Co.

Alfred Graham & Co.

L. A. Coomes & Co.

Tomlinson (London), Ltd.

It will therefore be seen that the Exhibition is strongly supported by wireless manufacturers, and there will undoubtedly be displayed the finest selection of wireless receiving apparatus in the world.

This will be the seventh Exhibition under the name of "The Ideal Home Exhibition," to be organised by the Daily Mail, and it is a matter of interest that so important a part should be played in the coming Exhibition by wireless telephony.

the following and her y Drujemin in the set who was a considerare fairing a all at associated likely for the production of the product of the meaning on the phone posts stry, the meaning on the phone posts stry, and efficient has at the set they freel' sight when turned, amounted by the The two validate condensors failed in maintains of this color, and the version shesitat is the ning re' multi-ure of this order, and the version rhoustates in its g melty with the great asks to be fastened to the puncti-

The tobe socket, variable grid leak-con-densor combination, and Britantz spilles web should then be Landsom to the bias in the relative positions shown in the hottom phetograph of page seven, which years is not the base, looking down on it panel layout and circuit diagram panying this article are those used. Present is making the set which

Patras Mercessery addition to the parts there will be of phones, a need or not tabe, it hat-

cions should be made to agree with d for the panel in the nearest approximating

ne believ to men in diameter, to into me the buttom offer to the center of panel and I to broken from each and

Stope in Assembly

the panel. It is here bond or other touch

betten phrograph of pape seven, which on the right, or prid inflations, which is made and the right of the price store in the right of the right of

comp here. he could be requested with the be cost about be requested with the it making inductance bride toward the at. the there grid inductance tape to the pair right, and the last plate ladic-tures turn should be at the ray left, as one faces the front of the punct. Wiring the Set Properly good note to wrong It

ne there connections, next, and ALWAYS

p. If one desires to affect an Britanes in. It is only possible to its down general raise for the possible are it should be mounted with the conflict, and let the approximate of the possible are proportional to the possible and the possible are pure time as from their sections.

the best position to common related the best position to found. Next advisable to vary the plate indus-switch and the 23-plate condenses, until full regueration without door obtained.

may even better the reception. It is neither advisable now measure to tar-the make flament very belliamity. In how low the chrostat can be turned one and you may be surprised at the goo results.

The antenna system for heat results with this set should not be smoch over as under 200 feet in length.





i material, which was supported may be variable. The short diagram away from the wooden tase to show the secessary external connections did not be the control, through which are was fastened. A condit, on the short definite circular control of the short distance was fastened. A condit, on the short different to give definite circular control of the short different to give definite circular control of the short different to give definite circular control of the short different to give definite circular control of the short different to give definite circular control of the short different to give definite circular control of the short different to give definite circular control of the short diagram short different to give a short different to give definite circular control of the short diagram short different to give a short diagram short diagram short different to give a short diagram short diagram

- STOCK ACTION RADIO SUPPLIES STORES TELEPHONE MAINTENANCE CO. 28 5. Welle St. Franklin 25 126 W. Hallon, Austr 2005, 1152 6 Lank for the TELNIACO tipe Franklin 2000 HEEE 61th 3s

GOV'T. RADIO STORAGE BATTERIES

PLEWELLING AN CONDENSERS PLEWEILING SPIDER WER COILS PLEWELLING VARIABLE GRID LEAKS REINARTZ LATEST SPIDER WER COILS VERNIER FOR VARIABLE CONDENSER Fig. 812 contents. Regular to cont. Sec. 1818. POWER AMPLEYING TRANSFORMERS first mair. Londy struck. Corner here set. (all flash of all Cheating Parisms, \$1.15. We seek out money. Tell no what you read

QUALITY RADIO SHOP, RICHMOND, IND

Kellogg Radio Equipment for Better Results Easy to Mount - Simple to Operate Microphone

Standard Microphone. Super-sensitive. The result of treony-

No. 21..... Each \$8.90

five years experience.

ometer. Two rotor and

bres stator terminals. Standard wound. For No. 501 Each \$8.00



502 Each \$1.25

The Kellogg plug fire all jacks, No. 301 Each \$1.00 Bead Set

The value of extremely light and very small head sees in Radia receiving is most evident when ming kellodg head receivers, which, fromever, have proved as sensitive and thoroughly ellicient as they are light in weight and small in size.

502-2 Conductor...

Pashive contacts, cor

oble insulated frome

No. 69A Head Sec. 2400 No. 69C Head Set, 2000 Each \$8.00

Variable Condenser

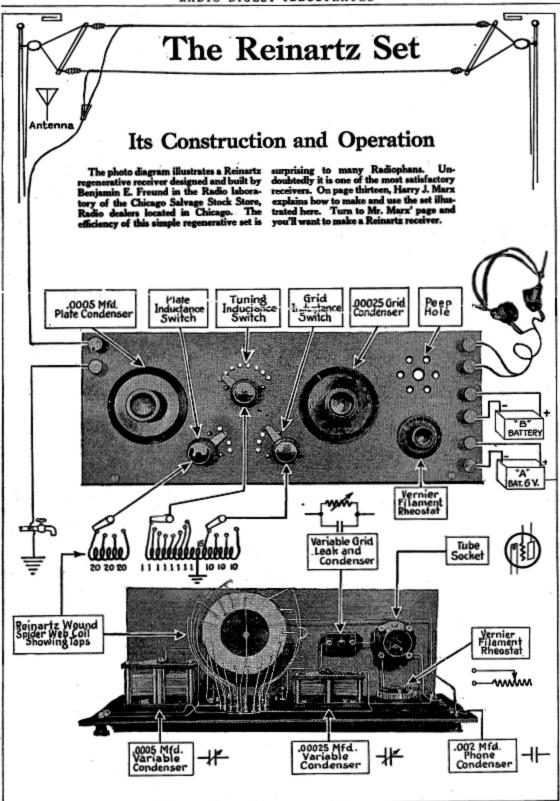
This condenses is at the dec-

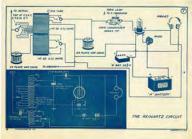
remeter type and is unum-ally well consequent.

No. 601 11 plate with 5 plate Versier, Knah and beieh Dial. Each. 58-75 No. 682 11 plate without Ver-nier, Less Knob and Dial. Each. 51-50 Each St.50
No. 603 23 plate with 5 plate
Vernice. Knob and dough
Dial. Each S7.75
No. 604 23 plate without Varnice. Less Knob and Dial.

No. 505 43 plate with 5 place Vernier. Knith and +inch 18at. Each \$8.75 No. 505 43 plate without Verpier. Lass Knob and Dist.

KELLOGG SWITCHBOARD & SUPPLY CO., CHICAGO





Largest Radio Store America

RADIO Radio Store

BUY HERE FOR LESS Radio Supplies purchased here are sold under a positive guarantee of satisfaction. We carry the largest new stock of first quality merchandise.

Complete Parts for Reinartz Circuit

Includes 1 7x18 Formica Panel, 1 Bakelite Socket, 1 Howard Vernier Rheostat, 23 Plate Condenser, 11 Plate Condenser, 3 Switch Levers, 2 Dozen Switch Points, 1 Reinartz Wound Coil, 1 Variable Grid Leak, 8 Binding Posts, 25 Feet Tinned Wire, 1 Base for Coil, 1 Mounting Base Board, and 1 Diagram to Construct This Set. Complete....

FORMICA PANEL, 1" thick, Black or Brown, Square Inch......12c

We guarantee all merchandise purchased of us. Mail orders receive immediate attention

Letters of comment on the merit of the merchandise sold and the service rendered through our mail order department have brought duplicate orders which have put us in a swamped condition. We ask to bear consideration, if your order is a day or two behind in delivery.

BUY HERE FOR LESS

CHICAGO SALVAGE STOCK STORE

509 South State Street

CHICAGO, ILLINOIS