Do not, however, make this connec-

Returning to the junction, carry one wire to the centre tap of the input push-pull transformer labelled F-The longer wire is connected to one side of R5. Connect the other side of this resistance through the hole in the panel to the cathode terminal of the first audio valve socket.

Passing now to the push-pull stage, connect the two filament terminals of each of the valve sockets by separate wires. "P" of the output push-pull transformer is connected with one side of the output jack, and the other output terminal to the other side.

then this to B— on the panel. This lat-connected between "G" of the first ter connection is not shown in diagram audio transformer and "G" of the first valve socket, and "P" is connected with tion until all the wiring is completed. "P" of the first push-pull transformer. The terminals marked "G" transformer are connected with the "G's" of the UX sockets in the power stage. The "P" terminals of these are connected with the output transformer, which has already been connected to the output jack.

> This completes the A.C. power amplifier, and if instructions have been carefully followed, trouble cannot arise. for the original model works perfectly. There should be practically no hum and amplification from a gramophone pick-up will be more than ample.

It need hardly be added that the This baseboard will now have to be valves in the push-pull stages must be placed in position, and the following perfectly balanced. Those who desire wiring made to the power pack. The to use transformers with different fila-

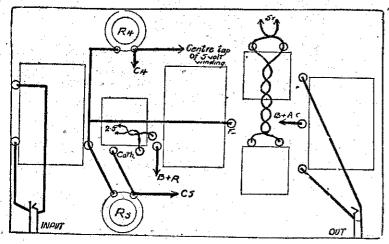


Diagram 4, showing under baseboard wiring.

Now from the cathode end of run a wire to the small condenser C5 and one from the free sides of R4 to C4. Connect this also with the centre tap of the 5-volt winding (or other power). If a centre tap is not provided, connect a 60 ohm centre-tapped resistance across the This electrical centre filament leads. tap will suffice for the work. the centre tap of the output push-pull transformer (B+) make a connection with "A" on the panel. B+ of the inpu' push-pull transformer is connected with R2 (and labelled B+) on the panel. The filament wiring which has been provided for by two lengths of flex is now connected up. winding being carried to the push-pull transformers and joined up with the previously existing wires between the valve filaments. The 2.5 winding valve filaments. The 2.5 goes to the first audio stage.

It will be remembered that earlier in the description, it was remarked that an extra terminal might be provided on the panel. If this has been done, connect it to the cathode.

The Above Board Wiring.

completed.

connection to B- previously referred ment windings from those specified, say the 4-volt type, will find the instructions apply equally well to them. Such deviations as these may be made quite well if the constructor thinks out beforehand just how his product differs from that described and makes the

226	Single	1,500	ohms
227	Single,	3,000	
171	Single	2,250	,,
245	Single	1.500	,,
250	Single	1.500	,,
226	Two	850	"
227	Two	2.000	25
171	Push Pull :	1.250	,,
245	Push Pull	750	
250	Push Pull	750	. ,,

necessary allowances. The second pushpull transformer in some cases has five terminals. In cases such as these, the plates of the valves will be connected to "P" of the transformers. The terminals on the other side are connected with the speaker, for which there is neither positive or negative.

Where the A.C. Browning-Drake or THE panel may now be screwed into any other receiver is to be used, connect position, and the above board wire the plate of the detector valve to one A short wire is side of a plug and B+ I) to the other.

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WITH the increasing popularity of the A.C. sets and the consequent ever-increasing number of resistances, there is some necessity for a standardisation of terminology. For instance, a tapped resistance may mean a resistance placed across the output of an eliminator to break down the voltage, a small resistance placed across a filament supply to provide a centre tap, or a potentiometer. This latter term is in itself very confusing. A potentiometer is a piece of apparatus consisting of a dry cell, at accumulator, switching devices, a high resistance wire several metres in length, and a variable tap. It is used for determining differences is potential, and so resistance, hence the derivation of the name potentio-meter, a meter to measure potential difference.

The term has for some reason or other been applied to a final resistance with a variable tap, and as this potential divider, as it should be called, now almost universally receives the name of "potentiometer," we shall in future refer to it as such. It is, then, a resistance with three terminals. The two outside may be regarded as being the ends of a fixed resistance of the value of a potentiometer. The centre tap is variable, so that at any time any amount of resistance may be placed between this tap and one of the others.

A centre-tapped resistance is really a potentiometer with the moving arm fixed at the centre point. A fixed resistance will indicate an untapped resistance that cannot be varied. By a 'tapped resistance" will be implied a high value resistance placed across the output of an eliminator to break down the voltage. It is sometimes referred to as a "voltage divider" or a "potential divider." A grid leak is a highvalue fixed resistance that will pass very little current, and is suitable only tential divider.

rican stations to hand, dated August 10, is as follows:-

ngust 10, is as follows	E il navalor
KDYL, Salt Lake KEJK, Beverley Hills	1900
KEJK, Beverley Hills	1170
KELW, Burbank	780
KFI, Los Angeles	640
KFOX, Long Beach	
KFQZ, Los Angeles KFRC, San Francisco	610
KERU, San Francisco	600
KFSD, San Diego KFVD, Culver City	710
KI'VD, Culver City	050
KFWB, Holywood	
KFW.C, Pomona	
KGB, San Diego	
KGER, Long Beach	
KGFJ, Los Angeles	
KGO, Oakland	790
KGW, Portland	
KHJ, Los Angeles	
KHQ, Spokane	
KMIC, Inglewood	
KMO, Tacoma	1340
KMTR, Hollywood	
KNX, Hollywood	
KOA, Denver	830
KOL, Seattle	
KOY, Phoenix	
KPLA, Los Angeles	
KPO, San Francisco	
KQW, San Jose	
KSL, Salt Lake City	1130
KTBI, Los Angeles	
KTM, Santa Monica	780
and the second s	

for insertion in the grid lead of the valve. A rheostat is a very indefinite name applied to types of variable resistances. Its use in A.C. terminology serves only to confuse matters. We shall henceforth refer to it as a variable resistance.

In a recent article by "Megohm" (the anode bend detector) the term "potentiometer" was altered to read "potential divider," which, although more correct, is nevertheless rather misleading, as any tapped resistance is a po-

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