

The "Picnic Portable"

(Continued from Page 19.)

position and screwed down after the whole job has been completed.

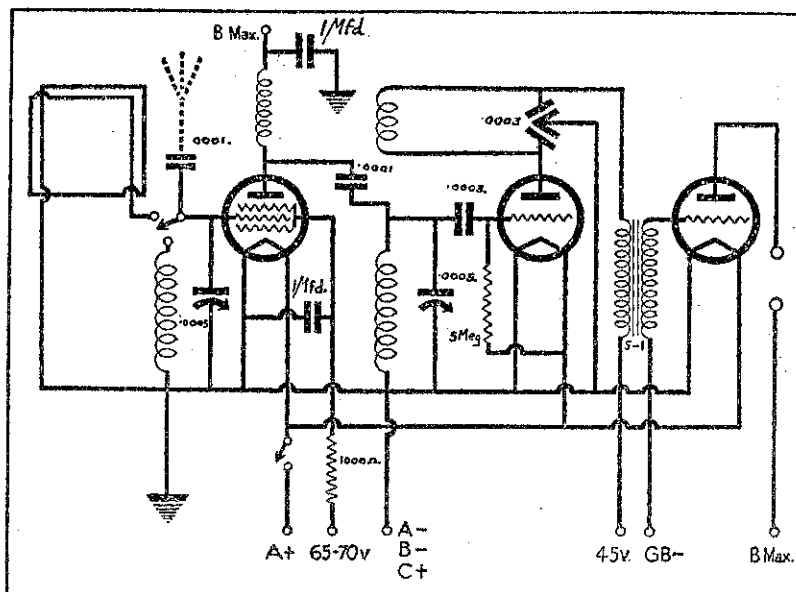
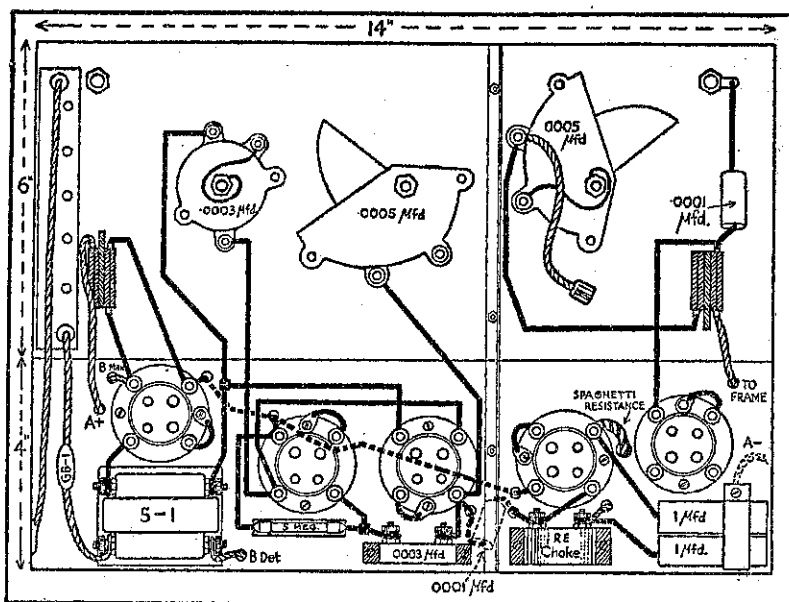
The aluminium boxing should now be placed in position over the chassis and bolted in position. Before doing this, however, it is a good plan to solder suitable lengths of wire to the various panel components to enable the final connections to be easily made. Notice that there are only three of the panel components which need to be insulated from the aluminium panel. These are the on/off filament switch, the three-point aerial switch, and the socket to take the aerial plug. The others, comprising the variable condensers, the reaction condenser, and the earth sockets, are mounted directly on the aluminium panel. The moving vanes of the variable condensers are thus connected to the chassis and are virtually earthed. Hence only one connection, that to the fixed vanes, need be made.

Winding the Coils.

THE coils, which are of very simple construction, are wound on 1½ in. diameter valve base extension former. A winding length of about 2½ in. will be needed for the r.f. coil, and about 3 in. for the detector coil.

The connections to the various pins should be carefully followed, because they have been arranged so that if by chance a valve is plugged into a coil socket, the filament will not be damaged.

After mounting the two pieces of former of the required lengths on the valve bases, the longer is laid aside and the winding of the r.f. coil commenced. This consists of but one winding, a secondary, and so only two connections of the valve base are utilised, namely, plate and grid. About 3-8 in. from the bottom of the former bore a small hole and pass the end of a coil of No. 28 d.s.c. wire through the plate pin and se-



Upper: The layout diagram. Lower: The circuit. Wiring should be done from the latter and checked by the former.

cure it there with a dab of solder. 105 close-wound turns are now put on, and a hole drilled above the grid pin, through which the end of the wire is taken and secured as before.

The Detector Coil.

THE secondary winding of this coil is put on in a manner exactly similar to that followed previously, only the number of turns in this case is reduced to 88. The reaction winding is now commenced. Exactly 1-8 in. above the secondary, and directly over one of the filament pins, drill a small hole and pass the end of a length of No. 32 d.s.c. through the pin and secure it there. Then wind on 42 turns in the same direction as the secondary. The end of the winding is taken down through a hole to the remaining filament pin. The pins of both coil valve-bases should now be smoothed off with a file so that they will slip readily into the sockets.

Final Hints.

THE set is now complete, and should be tested out before proceeding further.

Before inserting the valves conduct a final test of the wiring by the torch bulb method, which has often been outlined on these pages.

If the set will not oscillate reverse the connections to the fixed vanes of the differential reaction condenser, try a higher "B" voltage on the detector, a larger value grid-leak, and, as a last resource, increase the number of turns on the tickler. It is extremely unlikely that the latter will be necessary, and so, before making any alterations to the coil, carefully check and re-check all wiring.

[Owing to unusual pressure on space, we regret that we have been forced to hold the remainder of this article until next week's issue.—Ed.]

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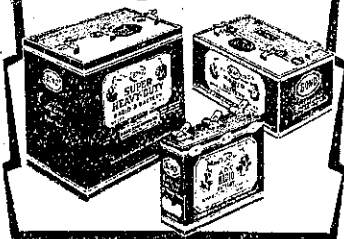
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