

Burndept

MERRYMAKER TWO

A Fully Equipped Receiving Installation at an Attractive Price.

THE demand for simple low-priced receivers has been met in the past by a variety of nondescript sets assembled, for the most part, from components of foreign origin. There is now available a British-made set, built by a firm of long standing in the wireless industry, which should completely fill the requirements of the man with only a limited sum available for wireless equipment.

The Burndept Merrymaker Two is a completely self-contained receiver designed for operation from an outdoor aerial. It is housed in a neat dark oak cabinet, with the principal controls at the front. A self-contained loud speaker is mounted behind a sloping grille, and the H.T. and L.T. batteries are both enclosed in the back of the cabinet. The whole outfit, including valves and batteries, sells at £5 15s.

The two-valve circuit comprises a leaky-grid detector with reaction, transformer coupled to a three-electrode power valve. The moving-iron type loud speaker is connected directly in the anode circuit of the power valve, and the unit is provided with adjustment for obtaining maximum sensitivity.

The tuning coils are well designed and are mounted on a built-up paxolin former. An air-dielectric condenser is employed for tuning, while paxolin-dielectric condensers are used for reaction and in the aerial circuit. The series aerial condenser is invaluable as a means of compromising between range and selectivity and should ensure freedom from interference between regional stations under all conditions. At a distance of 5 miles from Brookmans Park, for instance, complete separation of the two transmitters was possible with about one-third of the aerial condenser in circuit, while at a distance of 15 miles the whole of the condenser could be included without causing overlapping of the programmes.

On a good outdoor aerial the sensitivity is fully sufficient to receive two or three of the more powerful Continental stations, but the ability to make full use

of the maximum range of the set is naturally dependent on local requirements as regards selectivity. Inside a radius of 8 or 10 miles from the local regional stations it would be difficult to increase the range and volume by means of the selector (aerial condenser) control without allowing the local station to spread over any foreign stations that might be received.

The long-wave range gives Daventry 5XX with certainty, and Radio Paris can also be received at fair volume by careful adjustment of reaction.

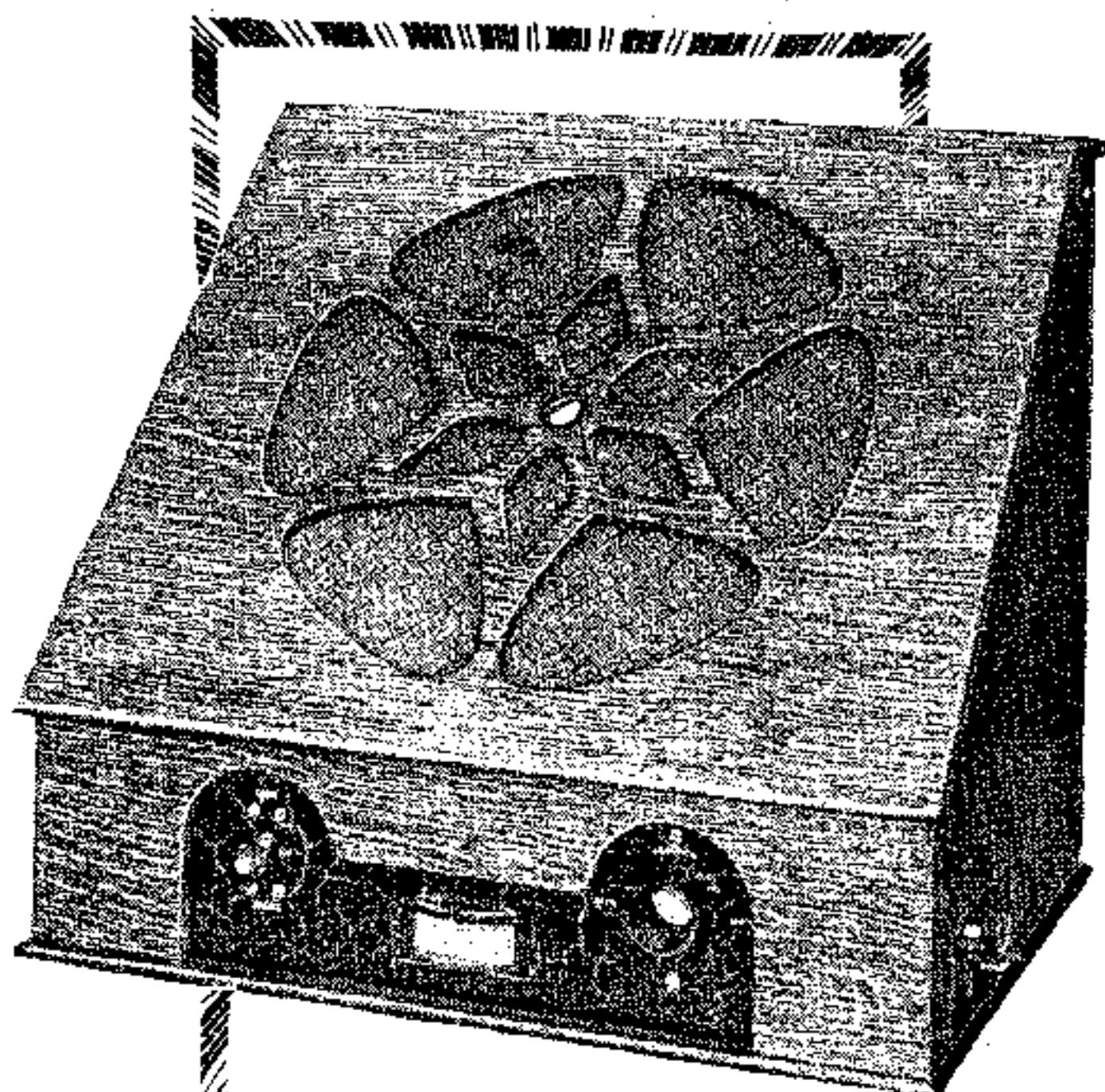
With only two valves, and the restrictions imposed by considerations of H.T. current consumption, the designers have wisely decided to arrange that the bulk of the acoustic output is in the middle and upper register, where a given expenditure of electrical energy gives the greatest return in volume of sound. No attempt has been made to achieve a spurious bass response by means of resonances, and the reproduction, particularly of speech, is clear and bright, without hollowness.

A single dry battery provides 100 volts H.T. and 3 volts bias for the output valve. The connections are very simple, and there are only three coloured leads to this battery. The total current taken from the H.T. section is approximately 7.5 milliamperes, so that the battery should be good for at least 250 working hours or about three to four months' normal service. The L.T. current is 0.3 amp., and the 20-ampere-hour accumulator will require recharging fortnightly, assuming four hours' use per day.

To summarise, the Burndept Merrymaker Two can be relied upon to bring in the B.B.C. programmes clearly, and without interference, in all parts of the country, while under favourable conditions there is the possibility of receiving two or three foreign programmes. The initial outlay is small, and the running costs low.

Next Week's Set Review:—

THE NEW GECOPHONE D.C. ALL-ELECTRIC RECEIVER.



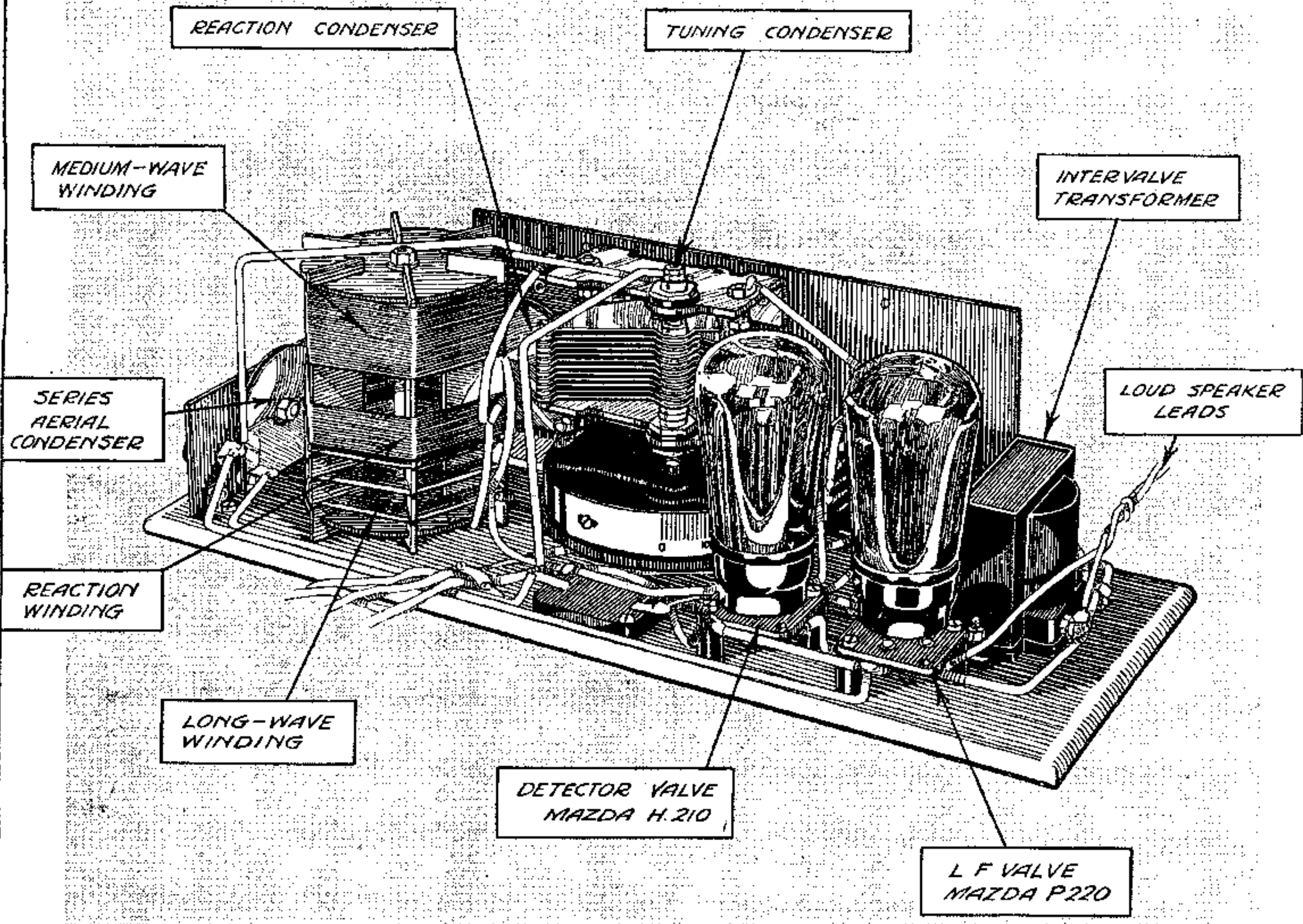
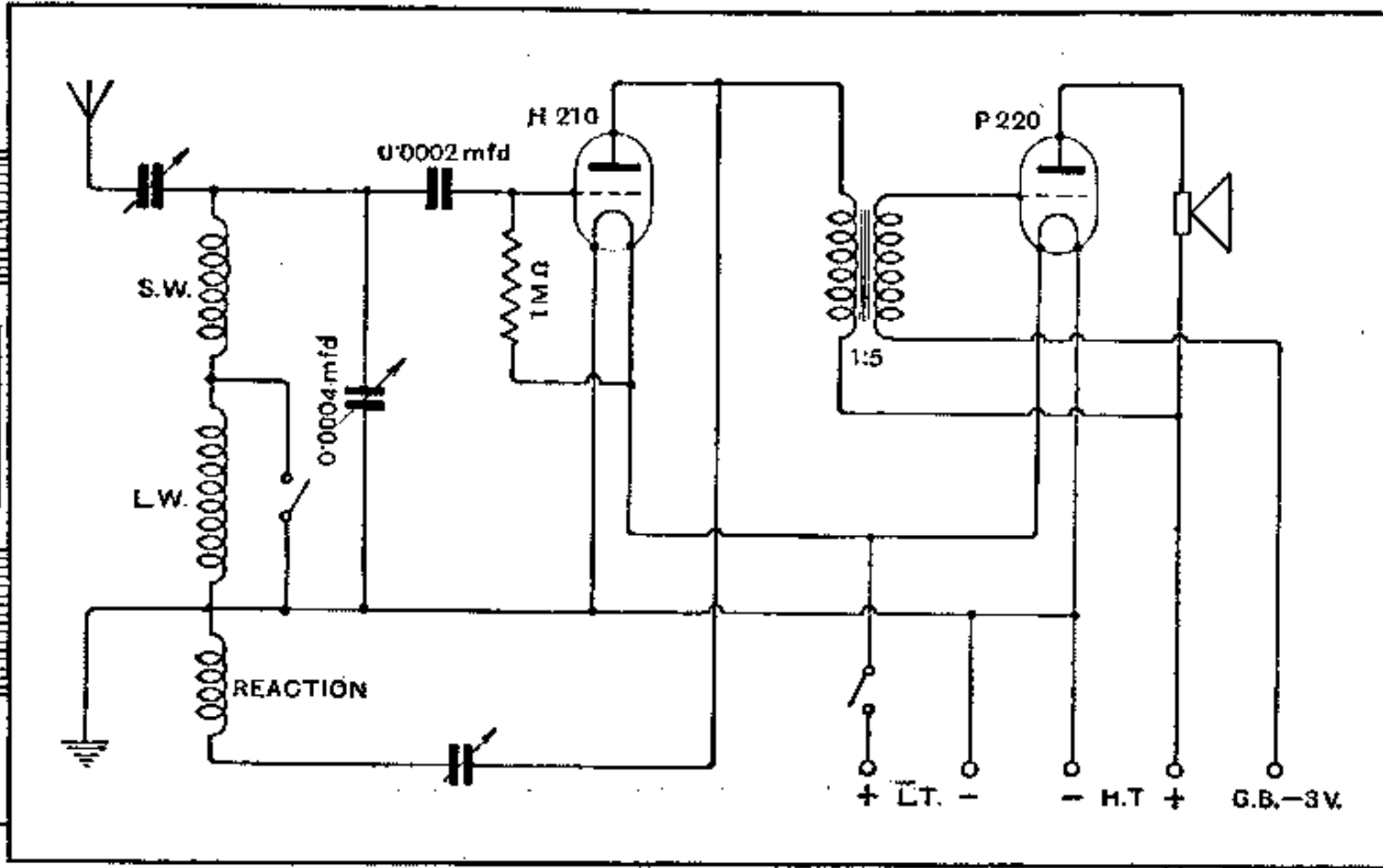
SPECIFICATION.

CIRCUIT: Two valves. Reacting leaky grid detector, transformer coupled to power output valve.

CONTROLS: (1) Tuning. (2) Reaction. (3) Selectivity (series aerial condenser). (4) Combined wave-range and on-off switch.

PRICE: £5 15s. including valves, combined H.T. and grid bias battery and 2-volt 20 a.h. accumulator.

MAKERS: Burndept Wireless Ltd., Blackheath, London, S.E.3.



Circuit diagram and chassis layout in the Burndopt Merrymaker Two.