

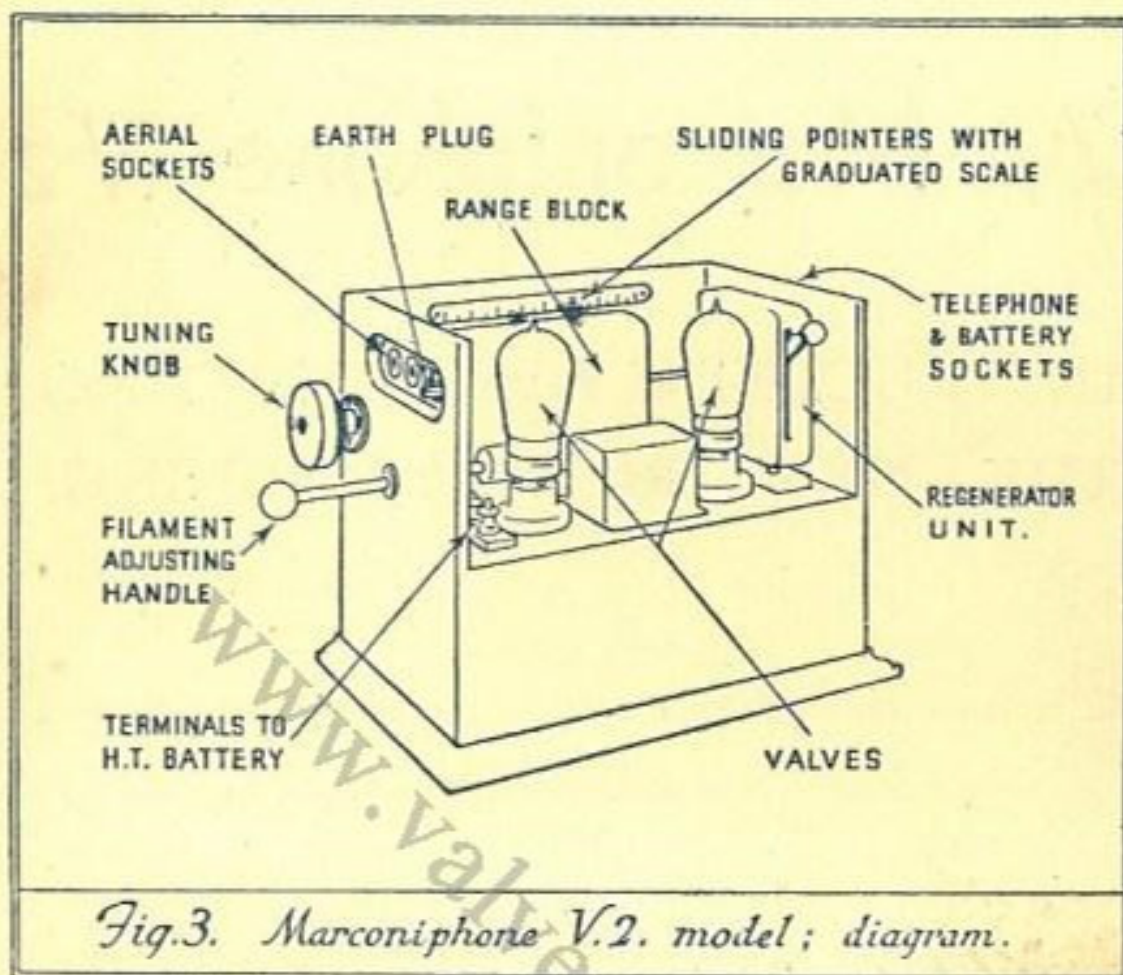
# *The* Marconiophone V2.

## INSTRUCTIONS FOR OPERATING THE NEW ROTARY TUNING.

*It will be found that the most accurate tuning is obtainable by using head telephones, even if it is subsequently intended to operate a loud speaker.*

After ascertaining the exact wavelength of the station required (as given against the name of the station in the broadcasting programme) find the nearest wavelength to this as marked on the tuning chart which is supplied with the instrument, at the same time noting the corresponding "scale-setting" figure which is given.

Now rotate the *right-hand* ebonite knob outside the instrument until the pointer against the engraved scale indicates the "scale setting" figure. Whilst you rotate the right-hand knob also rotate the left-hand knob, but somewhat quicker than the right-hand one. This is not absolutely essential, but expedites the finding of the station you require.



*Fig.3. Marconiophone V.2. model; diagram.*

Continue to rotate the right-hand knob so that the pointer moves slowly about in the vicinity of the "scale setting" figure until signals—the sound of speech or music—are heard in the telephones.

If, however, after two minutes or so, no signals are heard, gently depress the regenerator lever (see Fig 3) about half an inch, or perhaps a little more, until a slight roaring sound is heard. Then raise the regenerator lever until this sound just ceases, slightly readjust both ebonite knobs, and broadcasting will be heard.

If signals are too weak, ascertain that the filament rod (see Fig 3) is sufficiently withdrawn (but not to its fullest extent). Again depress the regenerator lever, and slowly readjust the tuning knobs.

In the case of signals being of too great a strength, the first essential is to decrease the amount of reaction. This is done by raising the regenerator lever, or if this lever is already at its topmost position, by rotation of the left-hand knob in the first place, and if this proves insufficient, a slight rotation of the right-hand knob.

Once you have identified a broadcasting station, make a note of the positions of the pointers against the engraved scale, and also the position of the filament rod and regenerator unit. This will enable you to tune in this station immediately on future occasions.

*It should be remembered that any alteration of either the filament rod, the regenerator unit, or the tuning knobs invariably necessitates a slight readjustment of all three.*

*A rough guide for suitable settings of the filament handle for different batteries is as follows :—*

The filament rod may be withdrawn to a greater extent when using D E R valves with a 2-volt accumulator than when D E 3 valves are in circuit with a  $4\frac{1}{2}$ -volt dry battery. With D E R valves, when the batteries are new, the filament rod

should be withdrawn to within half an inch of its fullest extent. A filament resistance is incorporated in the DE<sub>3</sub> valve combination of this instrument, so that in this case the filament rod need only be withdrawn approximately one-quarter of its length. As the batteries run down the filament rod should be drawn proportionately further out so as to maintain the same brilliancy in the valve.

### IMPORTANT.

When you are using this instrument you should always avoid withdrawing the plugs of your telephones or loud speaker without first switching off the valves. Similarly, do not insert additional pairs of telephones or other loud speakers unless your valves are extinguished beforehand. Failure to take this precaution will throw a strain on various sensitive parts of the receiver and may result in your set failing. In short:—

*“Always switch off your valves before you alter any telephone or loud speaker connection.”*