Nov. 9, 1943. F. DE HOFFMANN 2,333,787

LOCK FOR RADIO RECEIVERS OR THE LIKE

Filed July 3, 1941

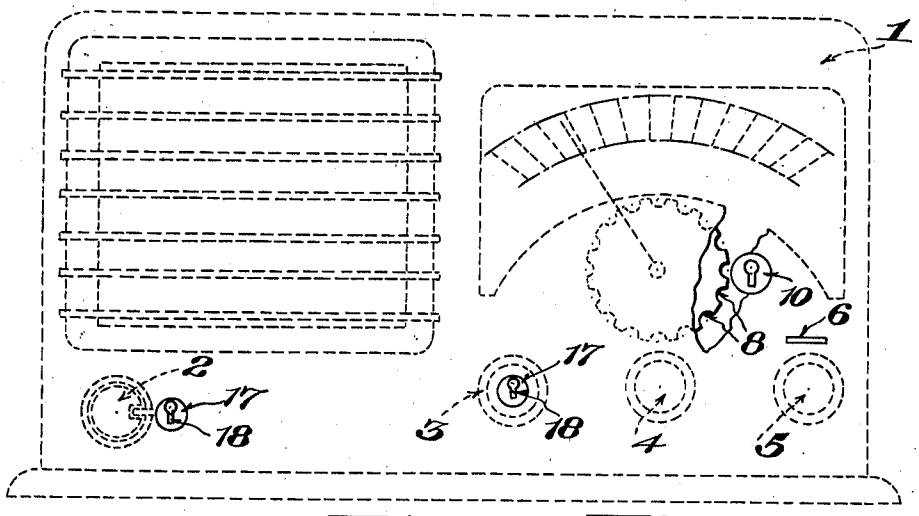


Fig. 1. Fig. 3.

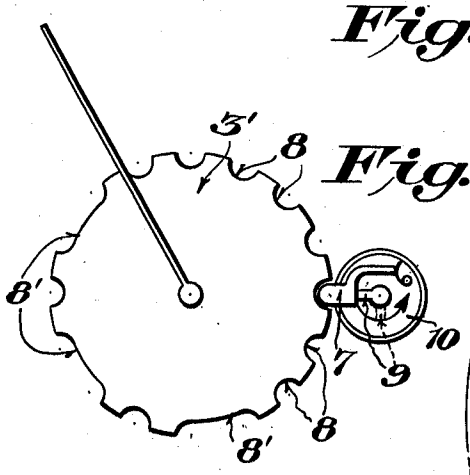
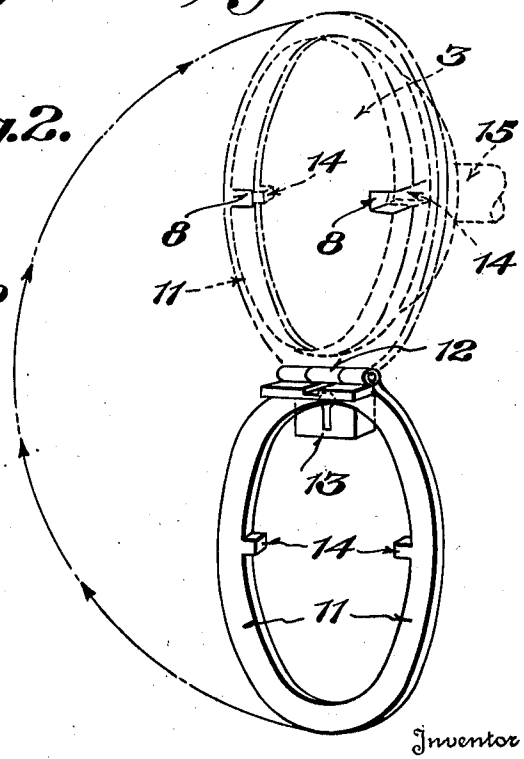


Fig. 2.



Inventor

Felix DeHoffmann,

By Wallenstein & Wolff

Attorneys

Patented Nov. 9, 1943

2,333,787

UNITED STATES PATENT OFFICE

2,333,787

LOCK FOR RADIO RECEIVERS, OR THE LIKE

Felix de Hoffmann, Buenos Aires, Argentina

Application July 3, 1941, Serial No. 401,034
In Argentina June 9, 1941

1 Claim. (Cl. 70—186)

This invention relates to improvements in radio receiving and transmitting apparatus and the like, and substantially has for its object to provide said apparatus with locking means for performing at will the engagement or disengagement of one or more of the elements or members which control the operation of said apparatus.

The trouble and annoyance by the unauthorized use or misuse of radiotelephonic receivers by unskilled persons are well known, being frequently a cause of disarrangement or deterioration of the set, which may require more or less expensive repairs.

In some cases, the receiver is used without any control by persons not authorized therefor and may thus be a cause of withholding or distracting them from proper attention to their business, with the consequent loss of time required for study or personal work.

In order to avoid these troubles, an improved method has been devised in accordance with the present invention which essentially consists in providing the above mentioned apparatus, either receivers or transmitters, with a locking or retention means adapted, as stated before, for engaging or releasing at will, the operation of its elements or members of control.

Said retention means may consist, for instance, of a locking device, adapted to be operated by means of a key of any suitable type, or by a combination lock, or any other convenient means. For the same purpose, a retention means adapted to be operated by the insertion of a coin, marker or the like, might also be used.

It will be evident that any of the said retention devices may be arranged to operate the switch of the apparatus, the device for tuning in the stations, or even the change-over controlling means for short and long waves, or any other of the controlling devices of the apparatus and, may also be arranged in conjoint or separately in connection with two or more of the elements referred to.

If desired, said retention means might also be made to directly act on the rotatory shaft of the controlling device, or on elements made integral therewith, or in any other suitable way which may be desired in order to perform the purpose aimed at, viz: the total or partial locking, as may be required, of any of the aforementioned controlling means.

By means of this efficient and novel arrangement, it will be possible to control at will not only the starting of the respective apparatus, but also to assure the operation of the same in connection with short or long waves, or with one or several particular stations.

The invention also has in view other objects which will more fully be understood from a consideration of the following specification.

In order that this invention may be clearly understood and carried into practice, several of the preferred forms of construction of the same have been shown by way of example in the accompanying drawing, in which—

Figure 1 illustrates a diagrammatical front view of a receiver set of the ordinary type, provided with some of the locking or retention means in accordance with this invention, for performing the control of its operating element.

Figure 2 shows a manner of retaining the dial or similar means of control by the use of a locking tooth or latch.

Figure 3 illustrates another form of retaining means, formed, in this particular case, by a hingedly mounted ring, adapted to be engaged or disengaged at will by a lock of any usual type, and

Similar numbers of reference have been used to indicate like or corresponding parts in all the different views.

In the form of construction shown in Figure 1, the number 1 indicates a radiotelephonic receiving set of any well known type, provided as usual with a rotating switch 2, a volume control 3 and a tuning control 4, as well as with an operating button 5 for the control of short and long waves.

The said controlling devices are provided with retaining means, adapted, as before stated, to act conjointly or separately on one or more of said devices; said means may consist of a device of a different nature, operated, for instance, by the introduction of a coin, check, token, or the like, inserted through a suitable slot 6, provided at the front panel or any other suitable place of the set and adapted to act by weight on a suitable retention device, arranged to control any of the shafts or accessory elements of said controlling devices.

According to other forms of arrangement, the retention means of the dial 3, or of any other of the controlling members of the set, consists of a latch device, such as shown in Figure 2, formed by a small slidable latch 7, adapted to engage with one of the notches 8 formed on the periphery of a disk 3', integral with said dial, the displacement of which is obtained by means of a small projection 9, formed on a rotatable

barrel 10, operated by an ordinary key, or by means of the key itself. Said notches 8 may be of the same length or may be arranged to extend over a certain sector of said disk, as shown by the reference number 8', so as to allow of a suitable extent of rotation of said disk within a desirable range.

The dial 3 or any other of the elements of control may also be locked in any suitable position by means of the locking or retaining device shown in Figure 3, consisting, in this particular case, of a circular ring 11, pivoted by a hinge pin 12 and adapted to swing in a downward direction after the unlocking of a locking device 13, operated by a key or other convenient means; in this case, on the inner face of the ring 11, two or more teeth 14 are provided, adapted to engage with suitable notches 8, formed, as in the foregoing case, on the periphery of a disk mounted on said dial or on the dial itself, when said ring is swung backwards in an upward direction, as indicated in said Figure 3. In this position, said disk or dial may be locked in its inoperative position or, if desired, in an intermediate position, corresponding with a particular station, either of short or of long wave, and it will then only be possible to perform the rotation of said disk or dial and of its integral shaft 15 after previously opening the lock 13 and thereupon turning down the ring 11, till obtaining the disengagement of said teeth 14 from the notches 8.

Another form of locking means may include a key lock operable to prevent or permit rotation of a dial or knob 3 and the key lock may include a barrel 17 concentric with the dial and having a keyway 18, as shown in Fig. 1. A similar key lock may be used to control a locking element engageable with a rotating switch 2.

Although in the forms of construction above described it has been assumed that the locking device used as a retention means for the several controlling elements of the receiver set are of a type operated by a key, it will be evident that said locking means may also be of the combination type, or of any other suitable or known construction; it will also be evident, as has been explained above, that any of the said devices, operated by a key, ring, latch or by the insertion of a coin or token, may if desired be arranged on any of the controlling elements of the receiver set, either individually on a single one of said elements, or in a combined manner on two or more of the same.

In a similar manner as above described, the improvement which forms the object of this invention, might also be applied to radiotelephone receiver sets applied to motor cars, motor boats or the like, as well as to radiotelephone transmitter sets or similar apparatus in general.

From the foregoing description, the nature of this invention will have fully been understood and no further explanations are deemed necessary for those skilled in the art.

It will be evident that several modifications of construction and detail may be introduced without departing from the scope of this invention, as will particularly be set forth in the claiming clauses annexed to this specification.

Having now clearly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim and desire to secure by Letters Patent is:

A lock for a radio receiver or the like, including, a panel having a slot, a control shaft connected to the operating elements of said receiver, a disc keyed on said shaft and having a plurality of peripheral notches, certain of said notches being of greater angular width than others, and a latch mounted for slidable movement radially of the disc at the inner face of the panel for projection into and withdrawal from selected notches by a key or the like insertable through said slot in the panel.

FELIX DE HOFFMANN.