Sept. 23, 1947. J. C. ROGER-PETIT 2,427,745

MECHANISM FOR CONTROLLING THE DRAWER CARRYING THE COILS OF A WIRELESS RECEIVER

Filed Aug. 9, 1945 2 Sheets-Sheet 1

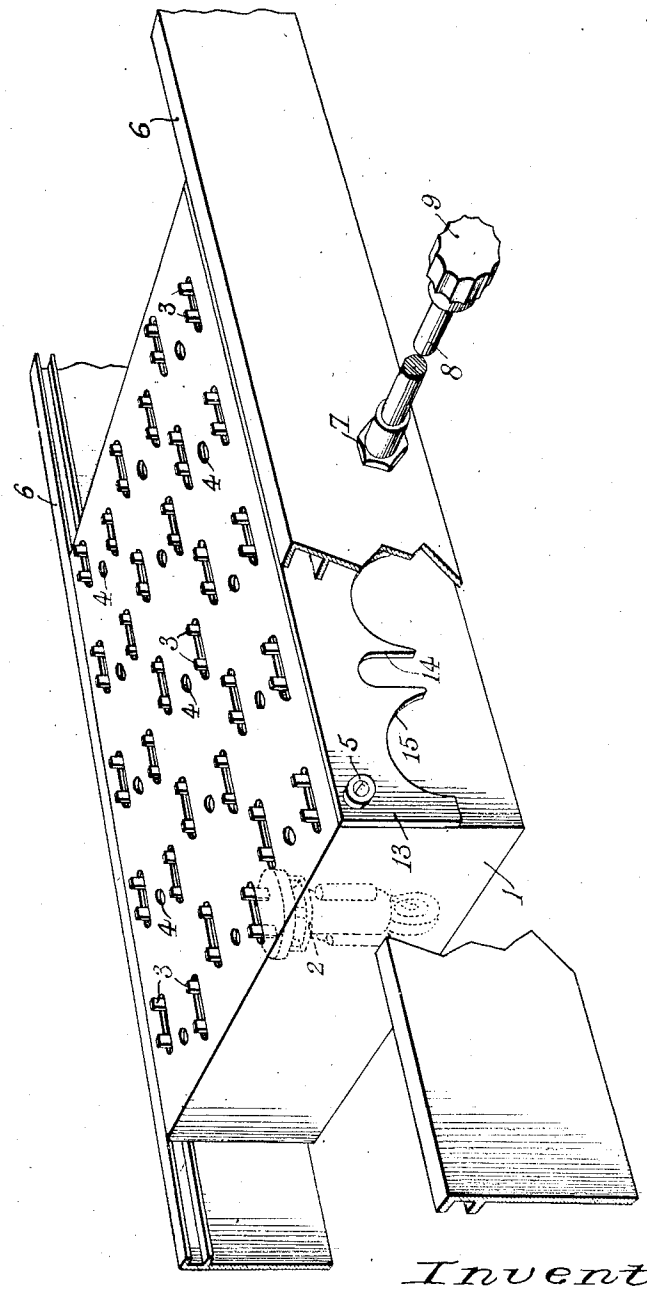


Fig. 1

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Fig. 2

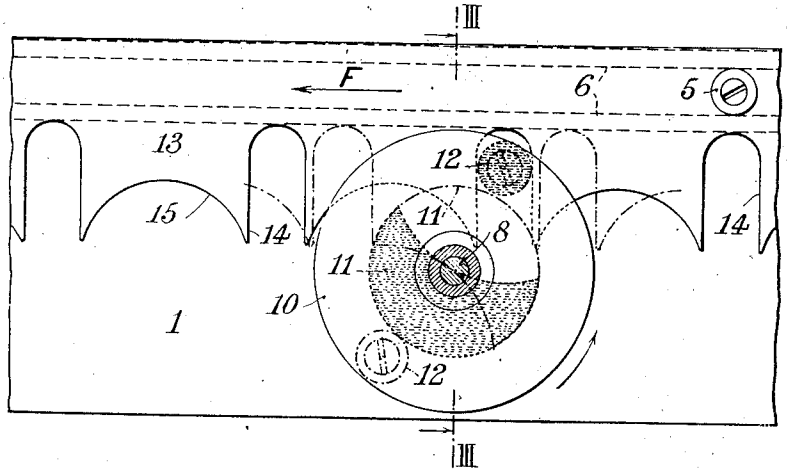
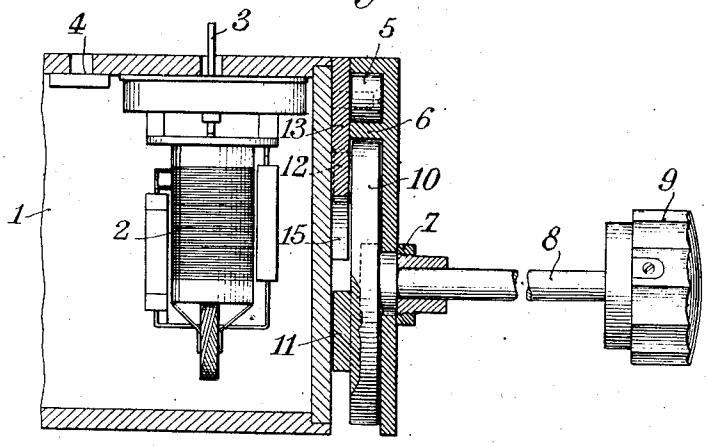


Fig. 3



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MECHANISM FOR CONTROLLING THE DRAWER CARRYING THE COILS OF A WIRELESS RECEIVER

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In France July 1, 1941

1 Claim. (Cl. 250—40)

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For ensuring that a wireless receiver should be able to receive on various ranges of reception, it is necessary that the groups of high frequency, tuning and oscillating coils should be made interchangeable.

The present invention has for object a drawer carrying the coils of a wireless receiver, the displacement of which is controlled by a mechanism allowing to place the drawer in all the positions required by the changes of the coil circuits.

The drawer comprises the series of coils necessitated by the required range of reception and the contacts of which project from the top of the drawer; the latter is provided on one side with a rack and guides which move in two lateral rails. The control mechanism comprises the fixed spindle, provided with a milled knob, of a planet plate which serves as support for a cam and a claw forming eccentric; said claw and said cam move on the rack of the drawer, so as to cause the drawer to slide on its rails with an intermittent advancing movement, that is to say the drawer moves each time such a distance that the contacts of the drawer successively come in engagement with fixed contacts, for obtaining the desired placing in circuit of the high frequency, tuning and oscillating coils with the certitude of obtaining a satisfactory contact, the drawer being locked in each position by the cam of the plate engaging in the corresponding notch of the rack; a certain stress must be exerted in order that the claw of the plate should engage in another groove of the rack and move the drawer a distance corresponding to one or more rows of fixed contacts.

An example of an embodiment of the subject-matter of the invention will now be described in detail, with reference to the accompanying drawing, in which:

Fig. 1 is a perspective view,

Fig. 2 is a view in partial elevation and

Fig. 3 a view in vertical section according to line III—III of Fig. 2, of the device actuating the drawer.

The drawer 1 comprises a certain number of coils 2 the contacts 3 of which project from the upper face of the drawer between the trimmers 4. Said drawer is guided by rollers 5 in the rails 6 so that it can present the various contacts 3 to the fixed contacts, not shown, and thus change the groups of coils on the high frequency, tuning and oscillating circuits.

On one of the rails 6 is secured a nut 7 serving as bearing for the spindle 8 provided with a milled knob 9 for facilitating the actuation.

On the drawer side, said spindle carries a

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planet plate 10 on which are secured a cam 11 and an eccentric claw 12.

Said claw 12 and said cam 11 are in engagement with the rack 13 secured on one of the sides of the drawer and the contour of which is a succession of notches 14 and arcs 15.

In the position illustrated in dotted lines in Fig. 2 of the drawing, the guiding claw 5 is in position in the rail 6, the driving claw 12 is engaged in the notch 14 and pushes the drawer in the direction of the arrow F. In the position shown in dot and dash lines, the claw 12 is no longer in engagement with the rack and the cam 11 is completely in contact with the arc 15, so that the position of the drawer is fixed and that the contacts are well established. A half-revolution after the disengagement of the claw 12, the latter is ready to enter the following notch of the rack and cam 11 is ready to leave a locking arc; each displacement through one revolution of plate 10 corresponds to a new series of coils which engage in the contacts secured above them.

It is to be understood that the invention is not limited to the example of embodiment which has just been described and that the step by step method for driving the drawer, the profile of the rack and the nature of the driving claw may be modified without departing from the invention.

What I claim as my invention and desire to secure by Letters Patent is:

In a mechanism for changing the coils of a wireless receiver by displacing said coils, the combination of a drawer carrying the coils, means for guiding said drawer on two parallel rails, a rack on one of the sides of said drawer and parallel to the guiding rail corresponding to said side and in an edge of which are provided notches in the form of an arc of circle, the centres of which are arranged at regular intervals on a straight line, and U-shaped slots substantially at right angles to said straight line and separating said notches from each other, a control plate rotatably mounted in said guiding rail corresponding to this side of said drawer and the centre of rotation of which is located at the level of said straight line, means for causing said plate to rotate, a locking cam in the shape of an arc of circle on said plate and intended to engage in said notches in the shape of an arc of circle, a driving claw on said plate at a point diametrally opposite said locking cam and intended to engage in said U-shaped slots during the rotation of said plate.

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