March 12, 1940. A. MURDOCH, JR 2,193,536

TELEPHONE SET

Filed May 29, 1937

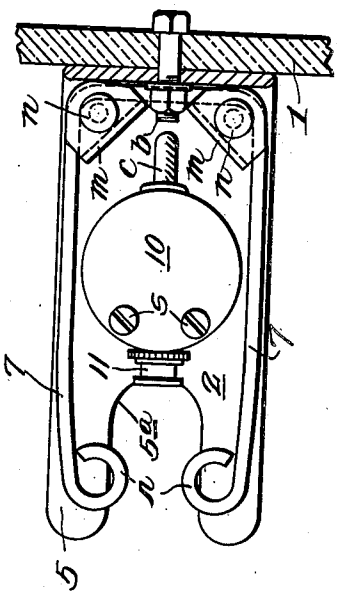

Fig. 2.

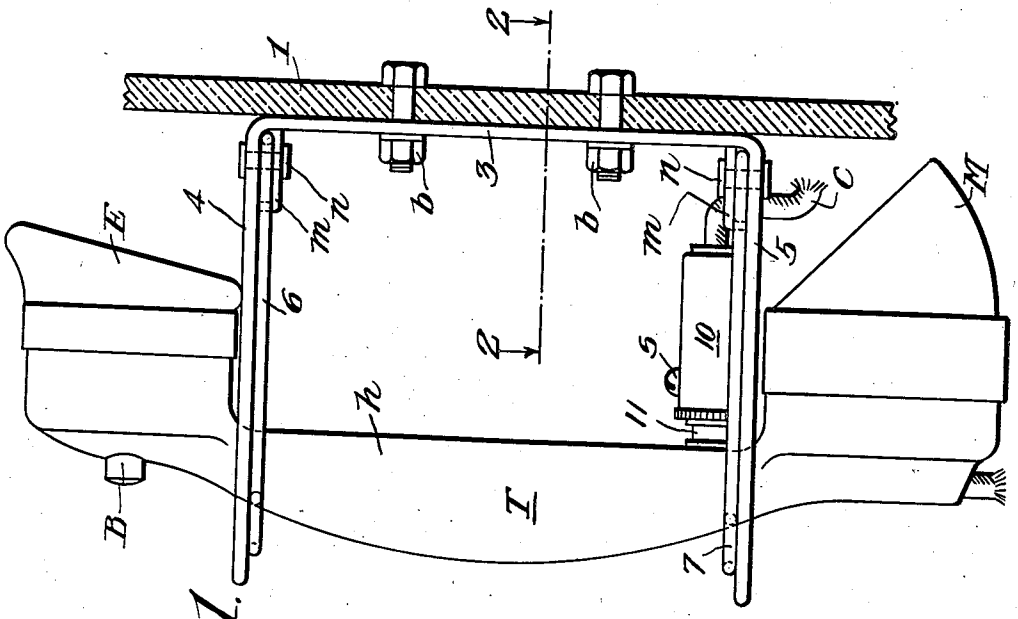

Fig. 1.

Inventor

Alexander Murdoch Jr.

By

Attorney

Patented Mar. 12, 1940 2,193,536

UNITED STATES PATENT OFFICE

2,193,536

TELEPHONE SET

Alexander Murdoch, Jr., Philadelphia, Pa., assignor to Radio Corporation of America, a corporation of Delaware

Application May 29, 1937, Serial No. 145,466

1 Claim. (Cl. 179—146)

This invention relates to telephone sets, particularly to hand sets, and has special reference to the provision of improvements in cradles or holders for such instruments.

The principal object of the invention is to provide a hand-set cradle capable of maintaining the instrument in its cradled or idle position in spite of shocks and tremors of severe intensity, and regardless of the position of the cradle with respect to the horizontal.

Another object of the invention is to provide a radio-telephone hand-set for use in police cars, airplanes, ships and other mobile units.

Still another object of the invention is to provide a simple, inexpensive, compact, trouble-free, shock-proof combined mount and switch for telephone hand-sets.

Other objects and advantages will be apparent and the invention itself will be best understood by reference to the following specification and to the accompanying drawing, wherein:

Figure 1 is a side elevational view, partly in section, of a telephone cradle constructed in accordance with the principle of the invention and showing a hand-set in its idle position thereon, and Figure 2 is a sectional elevation taken on the line 2—2 of Fig. 1, with the hand-set removed. Like reference characters represent the same or duplicate parts in both figures.

In the drawing, 1 designates a portion of a wall or panel, for example, a portion of the instrument panel of an automobile or airplane equipped with two-way radio apparatus. The mount or cradle of the invention is preferably constituted of a flat strip of metal 2 bent in the form of a U and affixed at its base 3, as by bolts *b*, to the panel 1.

The arms of the U, which are designated 4 and 5, respectively, are each bifurcated as indicated at 5*a* in Fig. 2, the bifurcation in each arm being deep enough and wide enough to accommodate the handle or body member *h* of a telephone hand-set T. Each arm carries, preferably within the U, a spring member 6, 7, respectively, which may conveniently be secured thereto as by lugs *m* and rivets *n*. Spring members 6 and 7 preferably are of duplicate U-shaped contour. The open ends of springs 6 and 7 are rounded as shown at *r*, and terminate on opposite sides of the slot or bifurcation *a* (see 5*a*, Fig. 2), which accommodates the handle *h* of the set T.

The rounded ends *r* of the springs normally extend inwardly beyond the side edges of the slots *a*, so that it is necessary to apply some force to the handle *h* of the set T in seating it within, or withdrawing it from, its idle or mounted position. The force inwardly directed against handle *h* by the rounded terminal edges *r* of springs 6 and 7, and incident to the spring action of the material of which members 6 and 7 are constituted, serves to clamp the handle *h* in the slots *a* of the oppositely located arms 4 and 5 and to maintain it against displacement irrespective of the angle which the panel may form with the horizontal.

The cradle 2 likewise carries a switch 10 which is preferably mounted, as by screws *s*, within the U on arm 5. This switch is provided with a spring plunger 11 which extends into the bifurcated or slotted area *a* of arm 5 when the hand-set is off its cradle and is urged inwardly, to electrically disconnect the hand-set from its associated apparatus, when the set is returned to its cradle. The cable shown at C will be understood to extend from switch 10 to conventional equipment (not shown), supported, for example, behind the panel 1. If desired, such conventional apparatus or some of it may be mounted within the U of cradle 2, for example, adjacent the switch 10 and between or upon the arms 4–5.

The hand telephone shown in Fig. 1 is of conventional design and includes a mouthpiece M and earpiece E at opposite ends of the handle or body portion *h*. When the hand-set forms an element in a radio-telephone system using different listening and talking frequencies, a "press-to-talk" button B may be provided, convenient to the operator's fingers on the back of the earpiece casing.

The invention is susceptible of various modifications. It is to be understood, therefore, that the foregoing is to be interpreted as illustrative and not in a limiting sense.

What is claimed is:

A telephone mounting comprising a flat strip of U-shape contour, the arms of said U containing oppositely located slots adapted to receive the handle of a telephone hand-set, a switch mounted on one of said arms and positioned to be actuated by the insertion and withdrawal of said handle therefrom, and spring means mounted on said arm out of the path of the operator's hand for removably maintaining said handle in contact with said switch.

ALEXANDER MURDOCH, JR.