

Nov. 18, 1924.

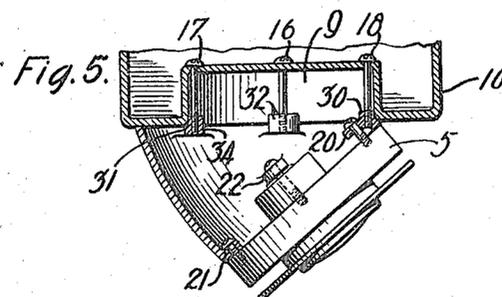
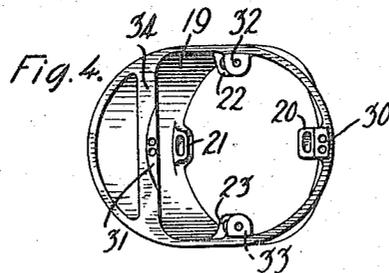
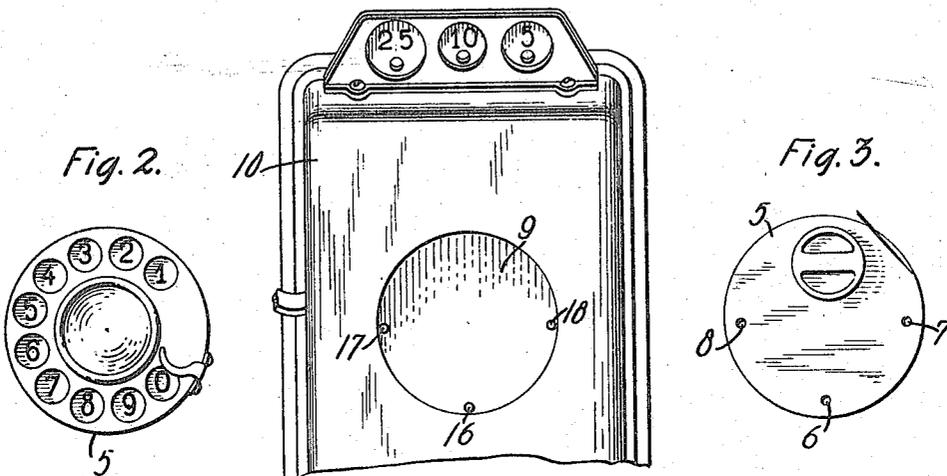
1,515,686

F. A. KUNTZ

MOUNTING FOR CALLING DIALS

Filed Oct. 19, 1922

Fig. 1.



Inventor:  
Frank A. Kuntz  
by J. C. Palmer Atty

# UNITED STATES PATENT OFFICE.

FRANK A. KUNTZ, OF WOODHAVEN, NEW YORK, ASSIGNOR TO WESTERN ELECTRIC COMPANY, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## MOUNTING FOR CALLING DIALS.

Application filed October 19, 1922. Serial No. 595,537.

*To all whom it may concern:*

Be it known that I, FRANK A. KUNTZ, a citizen of the United States, residing at Woodhaven, in the county of Queens, State  
5 of New York, have invented certain new and useful Improvements in Mountings for Calling Dials, of which the following is a full, clear, concise, and exact description.

This invention relates to mountings for  
10 impulse senders in automatic telephones.

The object of the invention is to provide means whereby a calling dial may be readily mounted on a base at any angle thereto.

Automatic telephone instruments of the  
15 so-called "wall set" type are often placed in telephone booths or in corners of rooms where the light only reaches them from the side. It is, of course, desirable to have the calling dial or impulse sender facing the  
20 light so that the characters thereon may be easily seen by the user. It is, however, difficult to readily operate the calling dial when placed on the side of a "wall set." The dial then should be placed on the front  
25 of the "wall set" and yet be so mounted that a maximum of light may be obtained on the characters.

This invention provides means whereby  
30 the dial on a poorly lighted wall set, coin collector, or the like, is so placed that the characters receive a maximum of light consistent with the easy operation of the dial. This means consists in an angular mounting which may be inserted between the dial  
35 and its base so as to tip the former toward the light.

A feature of the invention is the arrangement of the screw holes in the angular  
40 mounting. These screw holes are so arranged that a dial designed to be mounted directly upon the wall set housing may be secured to the mounting instead, which in turn may be fastened to the wall set housing without the provision of any additional  
45 fastening means in either the dial or the housing. Unless the fastening means on the dial and the housing are arranged in symmetrical positions about a horizontal axis, a double set of screw holes may be provided  
50 on the angular mounting, one on each side thereof, so that the latter may be secured to the housing in a manner which will bias the dial either to the right or to the left, and at the same time allow the dial to  
55 be attached in an upright position.

It will be noted that with the apparatus designed as shown in the accompanying drawings, neither the dial nor its mounting may be removed from a coin collector housing by one working from the outside  
60 of the housing with intent to defraud the telephone company, nor may a wire or similar device be inserted in the apparatus to short circuit the dial terminals and register the call free of charge.  
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Fig. 1 is a front view of a coin collector housing ready for attachment to the mounting.

Fig. 2 is a front view of the calling dial.

Fig. 3 is a back view of the calling dial  
70 showing the screw holes therein.

Fig. 4 is a back view of the mounting.

Fig. 5 is a cross-sectional view of the dial and mounting attached to the coin collector housing.  
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A calling dial 5, having screw holes 6, 7, and 8 on its lower half circle, is designed to fit in a circular depression 9 in a fixed member, such as a coin collector housing 10. This depression has projecting from its  
80 lower half circle screws 16, 17, and 18 corresponding to screw holes 6, 7, and 8 of the dial. When it is desired to bias the dial in respect to the housing, however, the former is attached to a hollow angular mounting  
85 19, which has a projection 20 projecting inwardly from its vertex or narrow arcuate edge (the edge towards the light), and having a long vertical opening therein; a projection 21 placed on its broad edge,  
90 opposite projection 20, and having a long vertical opening therein; a projection 22 placed on its lower edge (when mounting is attached with its vertex at the right), and having a round opening therein; and a projection  
95 23 opposite projection 22 and having a round opening therein. If the light is coming from the right, screws are inserted in the opening in projection 22, and the ends of openings in projections 21 and 20 nearest thereto, and are screwed into holes 6,  
100 7, and 8, respectively, in the dial. If, on the other hand, the light is coming from the left, the mounting is inverted, and the dial in order to retain its upright position, is  
105 attached to projection 23 and the ends of the projection 20 and 21 nearer to it.

On the rear face of the mounting are bosses 30, 31, 32, and 33 which correspond in position to projections 20, 21, 22, and 23,  
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respectively, except that boss, 31, instead of being placed at the base of the broad edge of the mounting, is formed in circumference 33, 31, 32, upon a cross piece 34; while the edge extends back from this circumference so as to enable a screwdriver to be inserted between cross piece 34 and the edge so as to more easily adjust a screw in the opening of the projection 21. Bosses 30 to 33, inclusive, are designed to enable the alignment of the mounting 19 to the circular depression 9 in the coin collector housing 10, from which screws 16, 17, and 18 project. In bosses 32 and 33 are single screw holes, and in bosses 20 and 21 are upper and lower screw holes so that, no matter whether the dial is faced to the right or to the left, there will be screw holes in the mounting corresponding to screws 16, 17, and 18. If the light is from the right, screws 16, 17, and 18 fit into the screw hole on boss 32, and the nearer screw holes on bosses 31 and 30 respectively, whereas if the light is from the left, screws 16, 17, and 18 fit into screw hole on boss 33 and the screw holes on bosses 30 and 31, respectively, nearest to it. If the light is from the front, the dial may be fitted directly on the housing 10 with screws 16, 17, and 18 fitting directly into screw holes 6, 7, and 8 respectively, on the dial 5.

It will be understood that the invention is not limited to the particular device shown, but includes any device having the general features covered in the appended claims.

The invention claimed is:

1. In a telephone substation set, a mounting having a slanting circular face which slopes toward a narrow arcuate edge, a broad arcuate edge opposite the narrow edge, and approximately perpendicular to the face, a coin collector housing and a calling dial, said mounting mounted upon said housing and said dial affixed to the mounting in such a manner that a person working outside the coin collector housing will be prevented from tampering with any mechanism enclosed within the mounting on the housing.

2. In a telephone substation set, a fixed member, an angular mounting closed except on its face and its base, an impulse sender, means in the fixed member and means in the impulse sender whereby the impulse sender

may be attached to the fixed member, means within the angular mounting for cooperating with said first-mentioned means for attaching the mounting to the fixed member, and means within the angular mounting cooperating with said second-mentioned means for attaching the impulse sender to the angular mounting.

3. In combination, an apparatus housing, an automatic calling dial, an angular mounting for attaching the dial to the housing so as to bias the dial with respect thereto, screws in the housing, corresponding screw-holes in the dial, inwardly projecting lugs on the base of the mounting bearing screw-holes corresponding to the screws in the housing, and inwardly projecting lugs on the face of the mounting bearing openings corresponding to the screw holes in the dial.

4. In combination, a coin collector housing, an automatic calling dial, an angular mounting for attaching the dial to the housing so as to bias the dial with respect to the housing, screws in the housing, screw holes in the dial corresponding to said screws, two sets of screw holes in the base of the mounting, one of said sets corresponding to the screws in the housing when the dial is biased to the right and the other set corresponding thereto when the dial is biased to the left, two sets of openings in the face of the mounting for the insertion of screws, one of these sets corresponding to the screw holes in the dial when the dial is biased to the right and the other corresponding thereto when the dial is biased to the left, none of said screws being removable from the outside of the housing when the dial and the mounting are attached.

5. In combination a calling dial, an apparatus housing provided with means for mounting the dial thereon, and an angular mounting means for the dial adapted to mount upon the dial mounting means of the housing without change in said mounting means, said angular mounting being so constructed that once the assembly is completed neither the dial nor the mounting may be detached except from inside the housing.

In witness whereof, I hereunto subscribe my name this 18th day of October, A. D., 1922.

FRANK A. KUNTZ.