

Jan. 6, 1931.

J. H. PENN

1,788,030

TELEPHONE INSTRUMENT

Filed Nov. 8, 1928

FIG. 1.

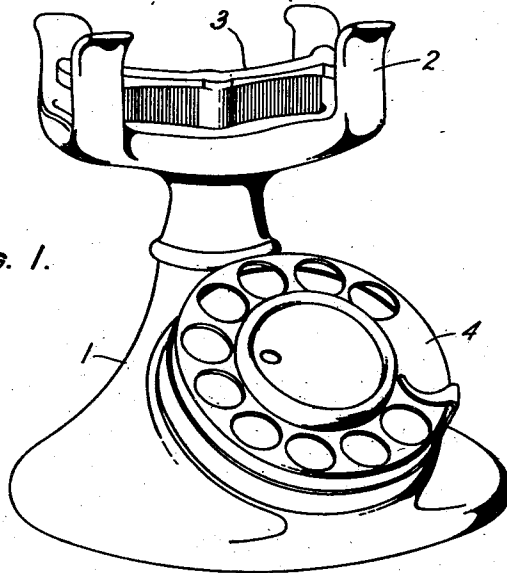


FIG. 8

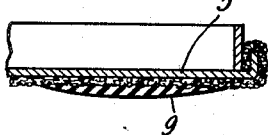


FIG. 2

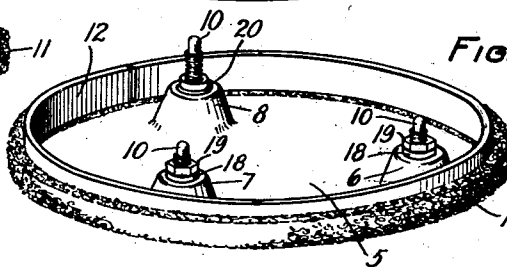


FIG. 3

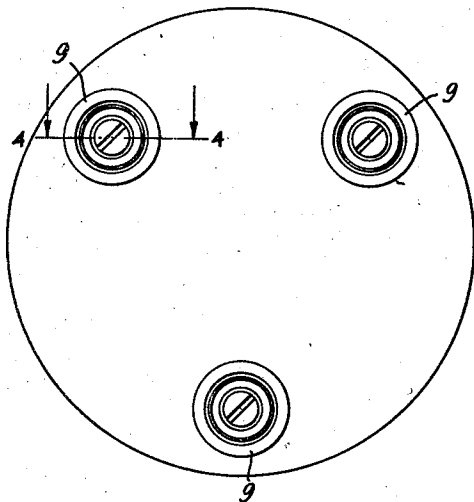


FIG. 4

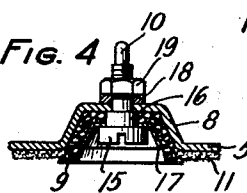


FIG. 5

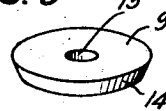


FIG. 6

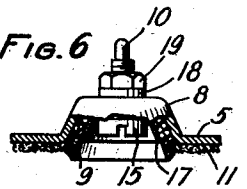
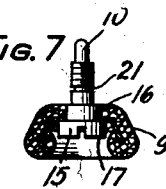


FIG. 7



INVENTOR
J. H. PENN
BY *John C. Palmer*
ATTORNEY

UNITED STATES PATENT OFFICE

JULIUS H. PENN, OF NEW YORK, N. Y., ASSIGNOR TO BELL TELEPHONE LABORATORIES, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW-YORK

TELEPHONE INSTRUMENT

Application filed November 8, 1928. Serial No. 317,886.

This invention relates to telephone substation instruments which are designed to rest upon a flat surface such as a desk or table top and more particularly to that type equipped with an automatic calling dial.

The object of this invention is to prevent undue slippage of the telephone on the desk or table top when a call is being dialed.

The means employed for accomplishing this object comprise members of non-slippage material which are suitably attached to the under surface of the telephone instrument.

In telephone instruments of the above mentioned type not equipped with the non-slip members there is a tendency to move across a flat surface when a call is being dialed. This is particularly true of telephone instruments in which a supporting member is employed to hold a transmitter-receiver instrument commonly known as a handset. In this type of instrument the calling dial is usually located on the handset supporting member and when the handset is removed from the supporting member which is an initial operation in putting through a call, the handset mounting or supporting member, being relieved of the weight of the handset, has a tendency to rotate or move across the desk or table top when the calling dial is manually rotated. This movement of the handset mounting during the dialing of a call often results in the dial not being rotated sufficiently to put through the required signal impulses to get the desired call connection and causes a wrong number call to be made.

A wrong number call is an annoyance to both the calling and called party and frequency in the occurrence of these wrong number calls can be considerably reduced by preventing movement of the handset mounting while the calling dial thereon is being manually rotated. Greater accuracy in the manual rotation of the calling dial is obtained by having the handset mounting remain substantially stationary during the call dialing operation.

To illustrate this invention it has been shown in the accompanying drawing as applied to a handset mounting.

Fig. 1 is a view in perspective of a handset mounting minus the base and equipped with a calling dial.

Fig. 2 is a view in perspective of a base member for the handset mounting shown in Fig. 1. This base member shown in Fig. 2 is equipped with the non-slip members.

Fig. 3 is a plan view of the under surface of the base member of Fig. 2 and shows the location of the non-slip members.

Fig. 4 is a fragmentary view of a portion of the base member taken on the line 4-4 of Fig. 3 in the direction of the arrows and showing some of the parts in cross-section.

Fig. 5 is a view in perspective of one of the non-slip members as it appears before being attached to the base of the handset mounting.

Fig. 6 is a fragmentary view of a portion of the base member shown in Fig. 2 and is an illustration of one of the conical embossings shown therein with a certain portion broken away so that the various parts can be seen. This view is very similar to that shown of the same part in Fig. 4 but shows the non-slip member inverted as compared with the Fig. 4 illustration as will be later explained.

Fig. 7 is a cross-sectional view of a non-slip member which has been molded onto a conical washer instead of being made conical by being drawn into one of the conical embossings.

Fig. 8 is a fragmentary cross-sectional view of a portion of the base member of a handset mounting and illustrates still another type of non-slip member, the non-slip member in this case being a comparatively thin rubber disc which has been cemented or otherwise attached to a base covering.

To more fully describe this invention reference will now be made to the various parts shown in the drawing in which 1 is the main body portion of a handset mounting, 2 is the cradle or pronged supporting member for holding the handset and 3 is the upper portion of a switch operating plunger which when the handset is placed in the cradle 2 is depressed and moves the contacts of a switch not shown but located within the main body portion 1. Attached to the main body portion 1 is a calling dial 4 which, upon being rotated when the handset is removed from the

cradle 2, will send certain impulses over the telephone line to operate switches at a central station to put through the call connection.

5 A base member 5 is provided for the handset mounting and in this base member 5 is preferably a plurality of hollow conical embossings 6, 7 and 8, each adapted to receive a non-slip member 9 which is secured therein by a bolt 10. The under surface and outer edge portions of the base member 5 are covered by a piece of felt or textile material 11 which is stretched over and held to the base member 5 by a ring 12 which is sprung within the base member 5. The base covering 15 11 is cut out at the embossings 6, 7 and 8 so that an opening is left in the base covering 11 for the open end of each of the embossings 6, 7 and 8. Each of these openings in the base covering 11 is of a diameter slightly less than the inside diameter of the embossing at its widest portion and is made smaller than the diameter of the embossing for a purpose as will be later explained. The base member 25 5 is secured to the main body portion 1 of the handset mounting by one of the bolt members 10 which projects through the embossing as illustrated in embossing 8 and is screwed into a bracket not shown but located within the main body portion 1 of the handset mounting.

The non-slip member 9 preferably is a flexible rubber disc centrally perforated as at 13 and ground off on the outer edge to form a bevel as at 14 to provide a non-slip surface for engagement with a flat surface, such for instance, as a desk or table top. The non-slip member 9 is drawn into a conical embossing by a bolt 10. The bolt 10 has a comparatively large flat slotted head 15 and an enlarged shank portion 16. Fitted onto the enlarged conical washer 17. The diameter of the non-slip member 9 is slightly greater than the diameter of the embossing at its widest point and is also greater than the diameter of the corresponding cut-out portion in the base covering 11. As the bolt 10 is tightened the non-slip member 9 is drawn into the embossing and the conical washer 17 makes the non-slip member 9 conform to the shape of the conical embossing and fit snugly against the wall thereof. The outer edge of the non-slip member 9 overlaps the edge of the cut-out portion of the base covering 11 and draws the edge of the cut-out portion slightly into the conical embossing thereby serving not only to stretch the base covering 11 across the flat surface of the base 5 but also to hold the edge of the cut-out portion of the base covering 11 from overlapping the flat surface engaging portion 14 of the non-slip member 9. The bolts 10 in the embossings 6 and 7 are each equipped with a washer 18 and a nut 19 to keep them drawn up within the embossings

6 and 7. The bolt 10 in the embossing 8 is not equipped with a washer and a nut but when the base 5 is attached to the main body portion 1 is held drawn up within the conical embossing 8 by being screwed into a bracket not shown but located within the main body portion 1 of the handset as aforesaid. To prevent the bolt 10 from dropping out of the embossing 8 when the base 5 is removed from the main body portion 1 a split ring 20 is sprung into a groove 21 shown in Fig. 7 in the shaft of the bolt 10.

When the flexible non-slip member 9 is drawn into an embossing as illustrated in Fig. 4 the ground-off bevel edge portion 14 is aligned with a flat surface so that when a handset mounting equipped with the non-slip members is rested upon a flat surface, frictional contact will be made by the non-slip members 9 with the flat surface as the base covering 11 comes in contact with the flat surface.

In Fig. 6 the non-slip member 9 has been inverted as compared with Figs. 4 and 5 so that a sharp edge is presented by the non-slip member 9 to a flat surface. Under pressure of the weight of the handset mounting this sharp edge portion of the non-slip member 9 will have a tendency to slightly spread and frictionally engage a flat surface.

In the construction shown in Figs. 4 and 6 the non-slip member 9 is a flexible disc separable from the conical washer 17 and the bolt 10 and depending upon its being drawn into one of the conical embossings to give it effective shape. The non-slip member 9 may, however, be molded onto a conical washer 17 as shown in Fig. 7. In this figure also the non-slip member 9 is rounded on the flat surface engaging portion and has an abundance of material at this point. With the weight of the handset mounting the rounded surface engaging portion of the non-slip member 9 would be spread out and flattened to make frictional contact with a flat surface upon which it was rested.

Telephone substation instruments may also be equipped with non-slip members as shown in Fig. 8 in which a non-slip member 9 or disc of non-slip material is cemented or otherwise attached to a base covering 11 of a base member 5.

While in the drawing three non-slip members have been shown as attached to a base member 5 and only one of the bolt members 10 has been shown in Fig. 2 as a means for securing the base member 5 to the main body portion 1, it is considered within this invention to employ any number of non-slip members and to secure the base member 5 to the main body portion 1 by any number of bolt members 10 or in any other manner found desirable.

What is claimed is:

1. In the base portion of a desk telephone

or the like, in combination a flat surface for engagement with a table, a fabric covering for the flat surface, and a plurality of non-slip members secured to the flat surface with their bearing surfaces substantially flush with the fabric covering.

2. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a fibrous protective covering secured to the flat surface, and a plurality of non-slip members secured to the flat surface with their engaging surfaces substantially flush with the surface of the protective covering.

3. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a fibrous covering for the flat surface, a plurality of indentations in the flat surface, and non-slip members secured within the indentations and having surfaces substantially flush with the surface of the fibrous covering.

4. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a fabric covering for the flat surface, a plurality of indentations in the flat surface and flexible non-slip members removably secured within the indentations and having surfaces for engagement with a table.

5. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a fibrous covering for the flat surface, a plurality of conical embossings in the flat surface and non-slip members partially drawn within the embossings and having surfaces for engagement with a table.

6. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a protective covering for the flat surface, a plurality of embossings within the flat surface and removable flexible non-slip members partially drawn within the embossings and having flat edge portions for engagement with a table.

7. In the base portion of a desk telephone or the like, in combination a flat surface for engagement with a table, a protective covering for the flat surface, a plurality of indentations in the flat surface, and flexible non-slip members partially drawn within the indentations by screws and cup-shaped washers and having substantially flat edge portions for engagement with a table, said screws and cup-shaped washers being countersunk below the flat surface and the table engaging portions of the flexible non-slip members.

In witness whereof, I hereunto subscribe my name this 3rd day of November, 1928.

JULIUS H. PENN.