Aug. 3, 1937. J. F. CASEY ET AL 2,088,688

TELEPHONE DIALING DEVICE

Filed April 15, 1935

Fig. 1

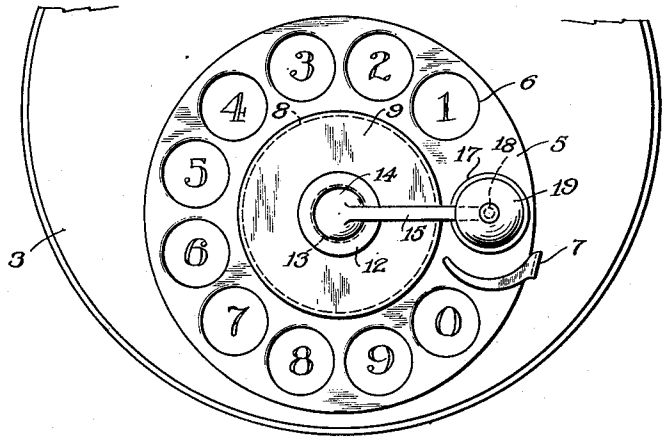
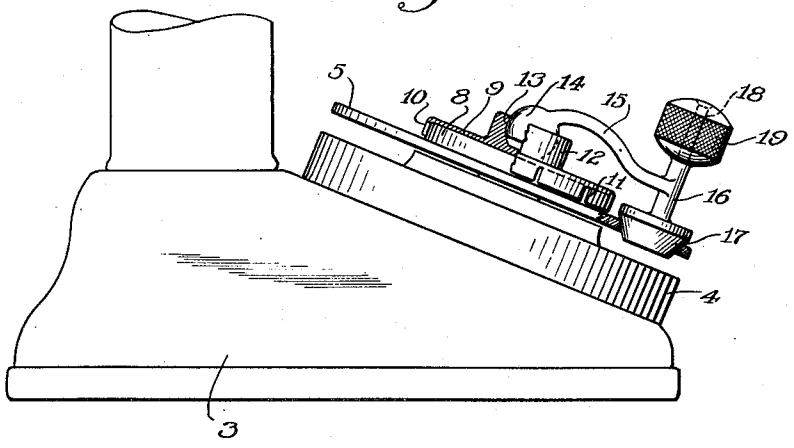


Fig. 2



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TELEPHONE DIALING DEVICE

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2 Claims. (Cl. 179—90)

This invention relates to devices for facilitating the dialing of telephone numbers.

The primary object of our invention is to provide a device of particularly simple and economical construction which may be readily attached to the standard automatic telephone dial, by which to facilitate the operation of the dialing disc.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawings which form part of the application, with the understanding, however, that the improvement is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

In the drawing:

Fig. 1 is a plan view of the base of an automatic telephone instrument incorporating our dialing device; and

Fig. 2 is a side elevational view, with parts broken away, of the device as shown in Fig. 1.

In that the operation of our dialing device appertains to the automatic telephone instrument as now in universal operation, a brief description of the latter follows. The numeral 3 indicates the usual telephone base upon which is mounted a dialing drum 4, the upper surface of which bears a series of numerals or other characters arranged in an annular ring and equally spaced from each other. A dialing disc 5 is rotationally mounted on the drum 4 and is provided with a series of finger holes 6 corresponding to and in registry with the characters on the dialing drum in the normal position of the disc. Rigidly mounted on the dialing drum 4 and projecting over the disc 5 is a finger bar 7 which functions during the dialing operation to stop the dial at the position corresponding to the number or character being dialed, that is to say, should it be intended to dial the number 5 the operator's finger is placed in the aperture in the dialing disc directly over that number and the dial disc is rotated to the right until the operator's finger comes into engagement with the bar 7. As soon as the dial disc is released the same is returned to its normal position by spring means within the dial proper during which movement a series of electrical impulses are sent to the central telephone station.

In the standard telephone instrument a raised portion 8 is provided in the center of the automatic dial proper. It is upon the peripheral surface of the member 8 that our dialing device is attached by providing a plate 9, the peripheral depending flange 10 of which grips the periphery of the member 8. Into the flange 10 is cut a series of slots 11 to render the flange more flexible. At the center of the plate 9 a boss 12 is formed into which is cut a spherical socket 13. The socket 13 is so shaped as to retain within it a ball 14 which is segmental in cross-section. From the exposed surface of the ball 14 projects a radial arm 15 which has at its free end a rod 16 disposed perpendicularly to the face of the dial disc 5.

At the lower end of the rod 16 is attached a conical tip 17 at a radial distance from the center of the dial equal to that of the finger holes 6. The periphery of the conical tip 17 is so tapered as to be conveniently placed within one of the finger holes 6, in which position the tapered periphery of the tip 17 will cause the rod 16 to maintain a perpendicular position. The upper end of the rod 16 is reduced in diameter to form a spindle 18 onto which is rotatably mounted a spherical grip 19, a portion of the periphery of which is knurled. The spherical shape of the grip 19 is preferred in that the grip in the manipulation of the device is both raised and revolved about the dialing center.

The operation of our device in facilitating the dialing of telephone numbers is as follows. The grip 19 is grasped and the tip 17 is raised out of the dialing disc 5. The tip 17 is then moved to a position over the character to be dialed and is lowered into the finger hole 6 over that character. During this manipulation the arm 15 guides the tip 17 in its orbit movement so that the latter may be readily engaged in the desired finger hole. The grip 19 is then swung to the right carrying with it the dialing disc 5 until the tip 17 engages with the bar 7. The tip 17 is then raised permitting the dialing disc 5 to return to its normal position whence the operation is repeated until the entire telephone number is dialed.

It will be observed from this description that the ball and socket mounting by which our dialing device is operably retained provides a simple and efficient construction by which the various movements of the dialing grip are expedited in that the ball and socket arrangement provides for both vertical and rotational movement of the tip 17.

What is claimed as new is:

1. A device of the character described, comprising attaching means, a socket on said means, a ball in said socket, an arm integral with and extending from said ball, and means extending from said arm adapted to engage the holes of a telephone dialing plate for the purpose of turning the latter.

2. A device of the character described, comprising attaching means, a socket on said means, a ball in said socket, an arm integral with and extending from said ball, means extending from said arm adapted to engage the holes of a telephone dialing plate for the purpose of turning the latter, and means whereby the mentioned hole-engaging means may be conveniently operated.

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