Dec. 11, 1928. 1,694,429

W. L. PEAK

AUXILIARY DIALING TOOL

Filed Aug. 5, 1927

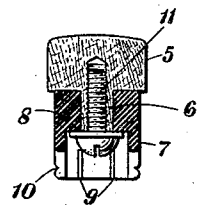


Fig. 1

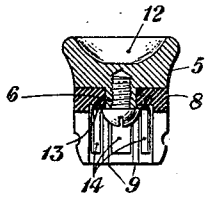


Fig. 2

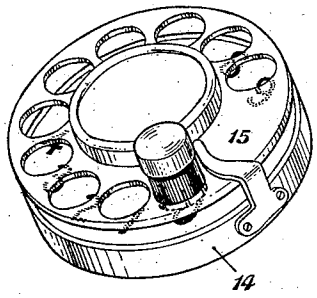


Fig. 3

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UNITED STATES PATENT OFFICE.

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AUXILIARY DIALING TOOL.

Application filed August 5, 1927. Serial No. 210,891.

This invention relates to dial operating devices, and more particularly to devices of this character which are adapted to be used in the operation of dials for telephone instruments or the like.

The movable circular plates or dials for telephone instruments are usually provided with a series of holes, each hole having a number associated with it. To operate the dial, a finger is inserted in a given hole and the plate rotated until the finger strikes a finger stop, after which the finger is removed and a spring causes the plate to rotate back to its normal position. In certain testing operations, it is necessary to dial a given number repeatedly while closely observing the apparatus being tested.

An object of this invention is to provide a device whereby any given number may be dialed repeatedly with a minimum possibility of error and without looking at the dial, thus enabling continuous and close observation of the apparatus being tested.

Another object consists in the provision of a device of this character which will assist the user by making it unnecessary to insert a finger in a hole of the movable plate thus avoiding abrasion or injury to the finger when continuous dialing is necessary as in testing operations.

A further object is to provide a device which will tend to prevent the use of pencils or other makeshift arrangements, the use of which causes injury or excessive wear to various parts of the dial.

A further object is to provide a device which is simple and inexpensive in construction and one which is not liable to get easily out of order.

These and further objects will be apparent from the following description, when considered in connection with the accompanying drawing in which certain novel features of the invention appear.

Referring to the drawing, Figure 1 is a sectional side elevation of the improved device; Fig. 2 is a like view of a modification of the device; and Fig. 3 is a perspective view of a dial with the improved device in position thereon.

In Fig. 1 of the drawing, the numeral 5 designates a top swivel portion or a head which forms a finger-piece. The member 5 may be formed as shown in Fig. 1 and composed of any suitable material, such as hard rubber. An interiorly threaded tubular sleeve 6 may be integral with and extend downwardly from the central portion of the member 5. The sleeve 6 passes through an aperture provided in a cylindrical member 7, whose top is flat, and forms an abutting surface upon which the lower surface of the head 5 may be rotated. The cylindrical member 7 is shown as having a thickened upper portion 8, the bottom of which lies in the same horizontal plane as the end of the sleeve 6. A chamber is formed in the lower portion of the cylindrical member 7 and the wall of this chamber has a plurality of longitudinal slots 9 provided therein. A circumferential groove 10 extends about the outer surface of the wall and is provided for the purpose of engaging the edge of an opening in the movable plate of a dial. The slots 9 serve to provide sufficient flexibility to permit the seating of the circumferential groove of the wall against the edges of the openings in the movable plate. The elasticity of said wall is such that it is retained in this position until it is removed by hand.

The shank of a screw 11 engages the interior threads of the tubular sleeve 6, while the head of the screw and associated washer are seated on the shoulder provided by the flush portions of the member 8 and the end of the sleeve 6.

In Fig. 2 the swivel head 5 may be composed of metal and be provided with a concave portion 12 in its top to form a finger-engaging surface. The sleeve 6, similar to Fig. 1, extends through the top of the cylindrical portion 7 and its interior threaded surface engages the shank of the screw 11. In Fig. 2, however, the head of the screw 11 clamps the flat portion of the member 13 against the bottom of the member 8. The member 13 has a plurality of downwardly extending resilient prongs 14, each of which is positioned against the walls of the chamber portion of the cylindrical member 7 at a point intermediate the longitudinal slots 9. These prongs serve to permit sufficient flexibility for the lower portion of the cylindrical member to engage the edge of the openings in the movable plate of a dial and also provide sufficient rigidity to restore said portion to normal.

The improved device is applied to the dial 14 of a telephone instrument in the manner indicated in Fig. 3. The bottom portion of

the cylindrical member comprising the separated wall portion is inserted into the desired opening of the movable plate and it is rotated until the device strikes the stop-piece 15, after which the movable plate is returned automatically. In testing circuits or devices connected therewith, it will be apparent that after the improved device has been inserted it will not be necessary to watch the dial to see if the proper digit is dialed, permitting closer observation of the switch or other device which may be under test.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described and delineated invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any advantages of the invention.

What is claimed is:

1. A device for operating a telephone instrument having a dial, said dial including a movable circular plate with a series of openings about its surface, said device comprising a lower portion having a casing of sufficient flexibility to be inserted in said openings and sufficient elasticity to be retained by the edges of said openings, and an upper portion comprising a finger-piece in swivel engagement with the first mentioned portion for imparting therethrough a rotary movement to said circular plate.

2. A device for operating a telephone instrument having a dial, said dial including a movable circular plate with a series of openings about its surface, said device comprising a lower portion having a circular casing provided with a plurality of longitudinal slots and a circumferential groove, the slotted casing having sufficient flexibility and elasticity to permit its insertion in said openings with its circumferential groove engaging the edges of said openings to be retained thereby, and an upper portion comprising a finger-piece in swivel engagement with the first mentioned portion for imparting therethrough a rotary movement to said circular plate.

In testimony whereof, I have signed my name to this specification this 16th day of July, 1927.

WARNER L. PEAK.