June 2, 1942. H. B. KIRKMAN 2,285,286

TELEPHONE DIAL MANIPULATING DEVICE

Filed June 5, 1940

Fig. 1

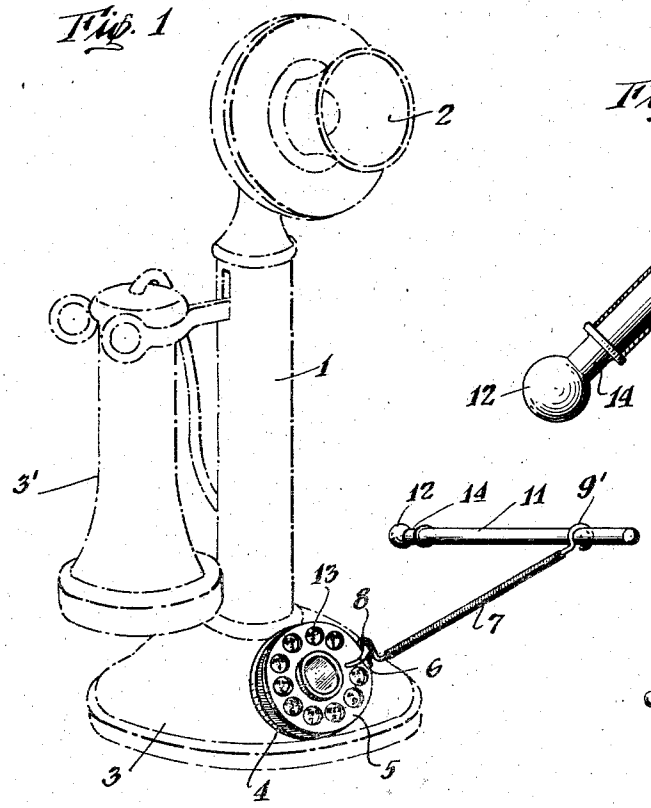


Fig. 2

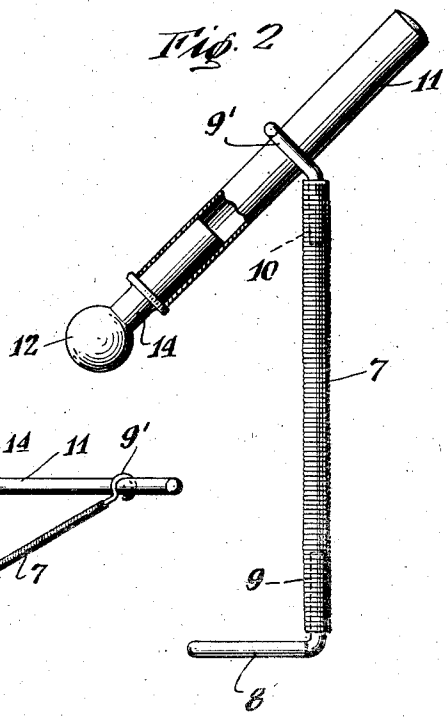
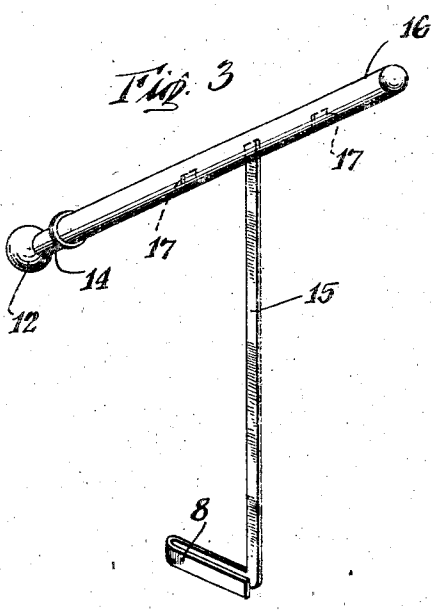


Fig. 3



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TELEPHONE DIAL MANIPULATING DEVICE

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2 Claims. (Cl. 179—90)

This invention relates to telephones generally and more particularly to the conventional dial telephones now employed in which a person is enabled to secure his own number by means of a suitable dialing mechanism without the necessity of first calling a central operator as formerly.

The principal object of the invention is the production of a very simple and inexpensive device or attachment which may be conveniently detachably fastened to the telephone, and preferably to the fixed part of the dialing apparatus thereof, which will materially assist in the dialing operation and permit the number to be dialed with ease and facility and which, furthermore, will obviate any possible injury to the fingers or finger nails of the operator.

Other and further objects and advantages of the invention will become apparent from the subjoined description, the invention consisting in the novel manipulating device hereinafter more particularly described and then specified in the claims.

In the accompanying drawing illustrating a practical embodiment of the invention:

Figure 1 is a perspective view of a dial telephone apparatus (mostly shown in dotted lines) and illustrating the device of the invention detachably connected thereto.

Figure 2 is an enlarged perspective view of the device per se, and

Figure 3 is a perspective view of a modified form of the device.

Referring in detail to the several figures of the drawing:

The standard of an ordinary or conventional telephone is indicated at 1 and is provided, as usual, with a mouth piece 2 at its upper end, a base 3 at its lower end and the usual receiver 3'. The fixed part of the dialing apparatus is indicated at 4 while 5 indicates the movable part which is mounted on the fixed part, all as well known in the art. The usual finger stop 6 is secured to the fixed part and has an arm extending transversely over the movable part but spaced therefrom as ordinarily.

The device of the present invention includes a coiled spring 7 or other resilient, spring-like and yieldable member to which a laterally extending clip or hook 8 is connected by means of a shank 9 forming part of the hook and detachably and frictionally received within said spring 7. The upper end of said coiled spring 7 is provided with a hook 9' connected thereto by means of a shank 10 which is detachably and frictionally received within the upper end of the spring 7. The hook 9' is directed laterally from the plane of the spring 7 and frictionally grips a dialing arm 11 which normally is in inclined position and which preferably is of rigid construction. This dialing arm, furthermore, may be either hollow or solid as desired.

The dialing arm 11 may be constructed of any suitable material and preferably is either metallic or plastic in character. Said rigid dialing arm 11 carries a dialing element 12 on the end thereof which may be spherical in configuration and which is adapted to enter and selectively engage within any of usual dialing openings 13 in the movable dialing member 5. Said dialing element 12 may be secured, if so desired, to the dialing arm 11 by means of a hollow shank 14 forming a part of the dialing element and entering and frictionally engaging within the dialing arm 11.

The device may be detachably fastened to any fixed part of the telephone apparatus, as for instance, the finger stop 6 which I have found to be the most practicable and convenient place for attachment. When attached to said finger stop, it assumes the position shown in Fig. 1 in non-interfering position with the dialing mechanism which is unobstructed and it is spaced therefrom so that the dialing mechanism of the telephone is then plainly visible and may be manipulated, as ordinarily, by means of the finger of the operator if so desired, without bringing the device into play. When it is desired to use the device, the upper end, preferably, of the dialing arm 11 is gripped by the operator and the dialing element 12 is forced downwardly against the action of the spring 7 and into engagement with the selected opening 13 to permit dialing of the desired number in the same manner as it would be dialed ordinarily by means of the finger of the operator. After the desired number has been dialed, the rigid arm 11 is released whereupon the movable parts of the device automatically restore themselves to their original initial position under the influence of the action of the spring 7. To suit the will and convenience of the operator it will be noted that the operating length of the rigid arm 11, or the length thereof from the hook 9' to the knob or dialing element 12, may be varied, that is, it may be shortened or lengthened, by simple adjustment of the position of the hook 9' on said arm 11, as is obvious. This, of course, will vary the normal distance from the dialing mechanism to the dialing element 12.

In the modification illustrated in Fig. 3, the coiled spring 7 shown in the preferred form of the invention is superseded by a flat, spring-like

and yieldable metallic arm 15 which is capable not only of a bending movement but is also capable of a turning or twisting movement whereby, to a great extent at least, all the desirable and necessary attributes of the spring 7 of the preferred form of the invention are retained. The rigid dialing arm in the modification, which I have indicated at 16, is preferably provided with several slots or openings 17 and the upper end of the arm 15 is selectively and frictionally engaged within any desired one of said slots or openings 17. Thus, the operating length of the dialing arm may be varied as in the preferred form of the invention and, as is manifest, and the hook 9' and its shank 10 of the preferred form are dispensed with. As shown in the drawing, for convenience and cheapness of manufacture, the arm 15 and clip 8 may be formed of a single strip of metal if so desired.

Various modifications may be employed without departing from the spirit of the invention as set forth in the appended claims.

The invention claimed is:

1. In a dialing attachment for a telephone dialing mechanism having a fixed part and a rotary dial provided with finger receiving openings, a normally straight, self-sustaining universally resilient supporting member, a fastening element rigidly fixed to one end of said member and disposed at an angle thereto and engaging said fixed part of the dial mechanism to hold the supporting member supported at one side of and out of alinement with the dial and inclined at an upward and outward angle relative to and away from the face of the dial, a supporting element rigidly fixed to the free end of the supporting member and disposed at an angle thereto, and a manually operable dialing member having an end portion engageable with the openings in the dial and normally held by said supporting element at an angle to the supporting element so as to be disposed therewith at one side of and in advance of the dial but with its engaging end portion facing in the general direction toward the dial, whereby the attachment is normally disposed in an out of the way position to adapt the dial to be operated if desired by a finger of the hand in the conventional way, said dialing member being movable through lateral bending movements of the supporting member in planes at right angles to each other into and out of alinement with the dial and toward and from the same and also being operable through bending and twisting movements of the supporting member upon itself to adapt it to be manipulated in a rotary path to rotate the dial.

2. In a dialing attachment for a telephone dialing mechanism having a rotary dial provided with finger receiving openings and a finger stop, a normally straight, self-sustaining universally resilient supporting member, a fastening clip rigidly fixed to one end of said member and disposed at an angle thereto and detachably engaging said finger stop of the dial mechanism to hold the supporting member supported at one side of and out of alinement with the dial and inclined at an upward and outward angle in a direction relative to and away from the face of the dial, a supporting element rigidly fixed to the free end of the supporting member and disposed at an angle thereto, and a manually operable dialing member having an end portion engageable with the openings in the dial and normally held by said supporting element at an angle to the supporting member so as to be disposed at one side of and in advance of the dial but with its engaging end portion facing in the general direction toward the dial, whereby the attachment is normally disposed in an out of the way position to adapt the dial to be operated if desired by a finger of the hand in the conventional way, said dialing member being movable through lateral bending movements of the supporting member in planes at right angles to each other into and out of alinement with the dial and toward and from the same and also being operable through bending and twisting movements of the supporting member upon itself to adapt it to be manipulated in a rotary path to rotate the dial.

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