June 24, 1930. A. GUSTAVSON 1,766,901

DISAPPEARING TELEPHONE BRACKET

Filed Oct. 24, 1925

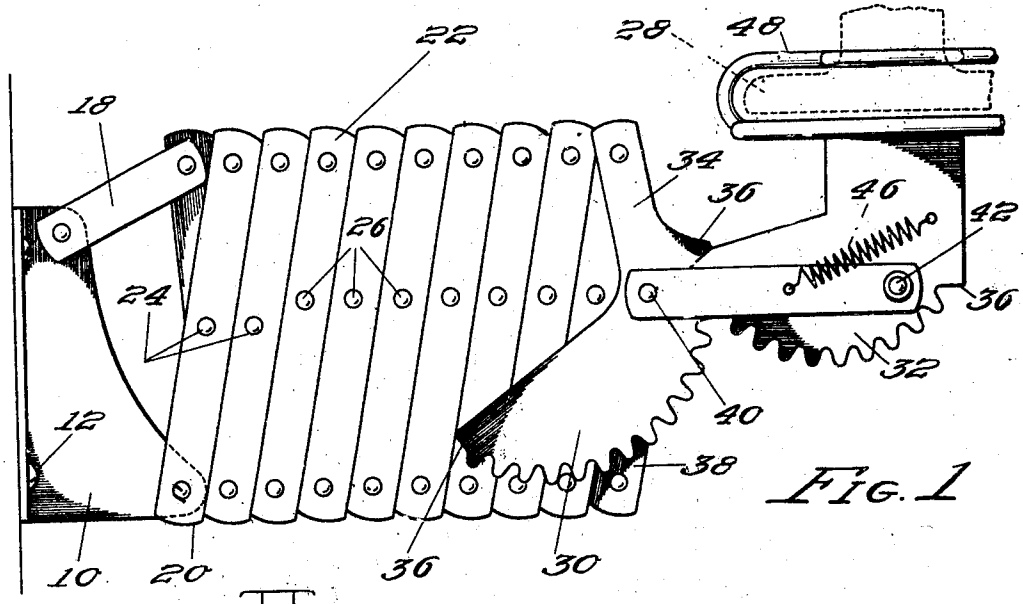


FIG. 1

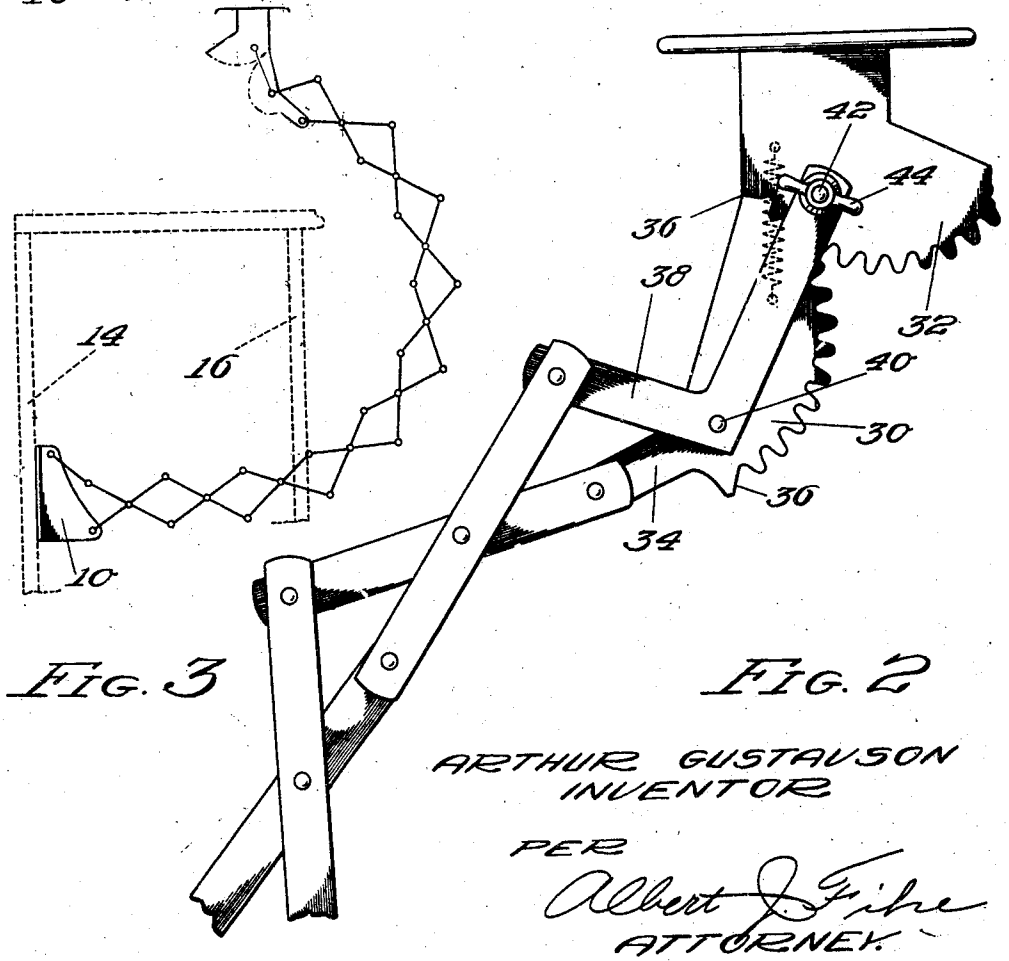


FIG. 3

FIG. 2

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DISAPPEARING TELEPHONE BRACKET

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This invention relates to improvements in disappearing telephone brackets, and has for one of its principal objects the provision of a supporting bracket for telephones or the like, which, besides being extensible, will atomatically raise the telephone or other object from a lower concealed position to a higher open position upon a simple pull, and with a minimum expenditure of time and effort.

One of the important objects of this invention is to provide, in a disappearing telephone bracket, means for supporting the telephone, said means being somewhat in the nature of a lazy-tongs, but having certain of the links shorter than others so as to afford an upward movement approximately in the arc of a circle whereby the telephone or other object to be supported is raised into operative position and positively supported in such position.

Another and further important object of this invention is to provide, in an extensible support for telephones or the like, means for automatically maintaining the telephone or other object in desired vertical or other position throughout the entire range of movement of the supporting element, and with further means provided for locking the bracket in any desired position for convenient use.

Other and further important objects of the invention will be apparent from the disclosures in the accompanying drawings and following specification.

The invention, in a preferred form, is illustrated in the drawings and hereinafter more fully described.

In the drawings:

Figure 1 is a vertical side elevation of the improved telescopic bracket of this invention, shown in closed position.

Figure 2 is an elevation of the end portion of the bracket when in extended position, taken from the side opposite to that shown in Figure 1.

Figure 3 is a diagrammatic view, illustrating the fully extended position of the device and showing its relation to a concealed containing cabinet or the like.

As shown in the drawings:

The reference numeral 10 indicates generally a bracket or wall plate adapted for the support and forming a portion of the improved disappearing telephone bracket of this invention. This bracket or wall plate is provided with suitable means such as screws 12 or the like for its application to the wall 14 of a containing cabinet 16 or the under portion of a desk or similar article of furniture.

Pivotally mounted on the bracket 10 are the end links 18 and 20 of a lazy-tongs 22 comprising a series of pivoted links or bars, as in the usual well known construction. The central pivotal points 24 of the first two sets of links are positioned at the middle point thereof, as is ordinarily done, but the remaining pivotal points 26 comprising suitable rivets or the like are pivoted above the middle of the links or bars so as to force the bracket or lazy-tongs to swing upwardly in the arc of a circle when extended, as best shown in Figure 3.

In order to force the telephone 28 or other object to maintain a vertical position at all times a pair of semi-circular gears 30 and 32, respectively, are mounted at the outward end of the lazy-tongs element 22, the segmental gear 30 having an integral upwardly extending element 34 which is in the shape of one of the half links of the lazy-tongs 22. The upper end of this element 34 is pivoted to the outermost link, as best shown in Figures 1 and 2. The teeth of the segmental gears 30—32 are continuously in mesh and are maintained in such meshed position by means of stops 36 positioned at each extremity of the said gears.

Pivotally mounted to the lower end of the outermost companion link to that to which is attached the element 34 is one end of a bell-crank lever 38, the central portion of which is pivoted to the gear 30 at a point 40 in line with the co-operating pivots 26 and the fore end of the longer arm of the bell-crank lever 38 is pivotally attached at 42 to the gear 32, and a winged nut 44 is positioned at this point whereby this pivotal attachment may be locked against revolution, thereby holding the bracket in any desired posi-

tion. A helical spring 46 is provided in order to maintain the gears against the stops 36 when the bracket is either closed or full extended, this action being shown in both Figures 1 and 2.

A clamp 48 is provided for holding the telephone or other object on the stand, and the cord or wire of the telephone may be passed through loops fixed at suitable intervals along the lazy-tongs 22 so as to prevent tangling.

It will be seen that herein is provided an extensible support for telephones or the like, which, in addition to providing a means for readily bringing a telephone or other instrument or object within convenient range of the operator or user, affords at the same time a means for concealing the instrument when not in use and also for protecting the same from rough usage or from dust, dirt, or the like. Further, one of the important features is the raising of the device to any desired elevation and the positive maintaining of the same at any such elevation as desired. Again, a novel system of gears insures a vertical position of the instrument at all times, which is particularly essential in a telephone.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted hereon otherwise than as necessitated by the prior art.

I claim as my invention:

1. An extensible bracket including a base, two extremities of a lazy tongs connected to the base, and the other two extremities terminating in an object supporting platform, together with means for moving said platform through an arc upwardly, and for maintaining said object supporting platform in a horizontal position at all times, said means including a pair of gears, and a bell crank lever, said bell crank lever being connected to the gears and extremity of the lazy tongs.

2. An extensible bracket including a base plate, a lazy tongs, the intermediate pivotal points of which are spaced from the center thereof, two extremities of each pair being pivotally connected to the two extremities of the next succeeding pair, an object supporting platform at the outer end of said series of links, and means for maintaining said platform in a horizontal plane at all times, said means including a system of gears and a bell crank lever connection between the gears and the outermost links.

3. An extensible bracket including a base plate, a lazy tongs, the intermediate pivotal points of which are spaced from the center thereof, two extremities of each pair being pivotally connected to the two extremities of the next succeeding pair, an object supporting platform at the outer end of said series of links, and means for maintaining said platform in a horizontal plane at all times, said means including a pair of mutilated gears, one gear connected to the platform and the other to the outermost links.

4. An extensible bracket including a base plate, a lazy tongs, the intermediate pivotal points of which are spaced from the center thereof, two extremities of each pair being pivotally connected to the two extremities of the next succeeding pair, an object supporting platform at the outer end of said series of links, and means for maintaining said platform in a horizontal plane at all times, said means including a pair of mutilated gears, one gear connected to the platform and the other to the outermost links, stops on the gears and resilient means to maintain said stops in relation to each other at the extremity of movement of the support.

5. An extensible bracket including a base plate, a lazy-tongs, the intermediate pivotal points of which are spaced from the center thereof, two extremities of each pair being pivotally connected to the two extremities of the next succeeding pair, an object supporting platform at the outer end of said series of links, and means for maintaining said platform in a horizontal plane at all times, said means including a pair of mutilated gears, one gear connected to the platform and the other to the outermost links, a bell crank lever connecting the two gears and the end of the outermost link, together with stops on the gears, resilient means to maintain said stops in the desired relation to each other at the extremity of movement of the support, and additional means for locking the support in any desired position.

6. An extensible bracket including a base, two extremities of a lazy-tongs, the intermediate pivoted points of which are spaced from the center and terminating in an object supporting platform, together with means for maintaining said platform in a horizontal plane at all times, said means including a system of gears.

In testimony whereof I affix my signature.

ARTHUR GUSTAVSON.