

UNITED STATES PATENT OFFICE.

OTTO KRAUS, OF NEW YORK, N. Y.

TELEPHONE-SUPPORT.

No. 883,811.

Specification of Letters Patent.

Patented April 7, 1908.

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To all whom it may concern:

Be it known that I, OTTO KRAUS, citizen of the United States, and resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Telephone-Supports, of which the following is a specification.

This invention relates to telephone holders or supports and has for its main object to provide a simple, durable and ornamental support of a construction which will facilitate its use in connection with the commonly called desk telephone instrument.

The construction of the device is such that the instrument may be grasped and instantly brought to a convenient position for use, independently and indefinitely maintained in such position and, after service, pushed aside again.

The novel device is preferably fastened to the floor, or to the base portion of the desk within easy reach of the user or users.

There are other important features in connection with the invention which, besides those alluded to, are clearly set forth in the subsequent detailed description.

In the accompanying drawings forming part of this specification: Figure 1—is a side elevation of the support, broken center lines indicating some of the positions to which it may be brought. Fig. 2—is a top view of the parts that hold the base of the telephone instrument, also showing the spring clip for holding the receiver when it is desired not to break the connection when conversation is temporarily suspended. Fig. 3—is a sectional view of the base of the support when fastened to the floor. Fig. 4—is a sectional view at right angles to Fig. 3. Fig. 5—is a detailed side elevation showing some of the parts of Fig. 2 on an enlarged scale. Fig. 6—is a top view of the base portion of the support when modified for attaching it to the base portion of the desk.

Similar reference characters are employed to designate corresponding parts in the several figures of the drawings wherein they occur.

As disclosed, the novel support embodies a base or housing A Figs. 1, 3 and 4, in the shape of a cup, into which fits a ball B. Flat springs C inserted through slots *a* are pressed against the lower surface of the ball B and are held in position by angle pieces D and D¹. Angle piece D is provided with an

adjusting screw *d* for regulating the tension of springs C. As shown, the angle pieces D and D¹ rest with their upper portions against the sides of base A. The bottom portions of D and D¹ being at a downward angle toward the center of the base A, it will clearly be seen that any tension on springs C will tend to press D and D¹ against the sides of A, thus securely holding them in position. By this simple arrangement slots *a* also are closed to prevent the entering of dust or other foreign matter into housing A. Since the springs C extend into slots *a* of equal width and their longitudinal movement being prevented by angle pieces D and D¹, their accidental displacement in any direction will be effectively prevented. Screws E serve to secure base A to the floor Q.

Securely fastened into ball B is tube F telescoping loosely with tube or rod G. A clip H, Fig. 1, adapted to tightly grip tube G, forms a stopping device for the height adjustment of tube G. Tightly secured to the upper end of tube G is the collar I, Fig. 5, provided with extensions *i* to which are secured arms K. The third arm K¹ Fig. 2, extends through an opening in collar I and tube G and is at its threaded end provided with nut L. Arms K and K¹ with their inwardly bent end portions as clearly shown clasp the base of the telephone instrument M.

The wire spring clip N bent to engage the arms K adjacent to collar I has two arms extending beyond the base plate M of the instrument. These arms form at their outer end bends *n*. The bend *n*¹ resting against collar I, Figs. 1 and 2, forms a stop to prevent the arms of clip N from dropping below the position indicated in the drawing. The base plate M serves as a stop in the upward direction.

In modification, Fig. 6, the base A is provided with lugs A² and A³ at right angles and adapted to be secured to bottom portion P of a desk.

In assembling this support, the ball B is placed into position in base A, the tube F extending through the opening *o*. The springs C are then inserted through the slots *a* and the angular pieces D and D¹ placed into position. The adjusting screw *d* is then tightened until the pressure of the spring C against the ball B will cause sufficient friction to hold the tube F with all the additional parts of the apparatus, as well as the instrument, safely at any angle in which the support may be

placed, and as indicated to some extent in Fig. 1. Continuing the operation of assembling, the tube or rod G is pushed into tube F and adjusted to a suitable height with the aid of clip H. The spring wire clip N is then placed into position on arms K. The base of the telephone instrument is then placed into position to be clasped by arms K and the tightening of nut L will cause arm K¹ to also clasp the base of the instrument, which will then be held securely in position. A liberal degree of oscillation of the tube F is permitted by the opening O and this in connection with the length of tube F and G, and the fact that tube G loosely revolves in tube F permits the use of the telephone instrument in a wide range of positions in all directions. In pressing the receiver R into clip N, the arms *n* separate accordingly and close again after the receiver has passed the bends on arms *n* holding same effectively in position against the base of the telephone instrument.

I do not wish to be understood as limiting myself to the precise arrangement and construction of parts shown and described, but reserve the right to all modifications within the scope of my invention.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is

1. A telephone support comprising a housing containing an opening, a spherical member a portion of which frictionally bears within said housing contiguous to the opening thereof, an instrument-supporting part carried by said member, and a leaf spring comprising a plurality of leaf elements super-imposed on each other, the ends of said spring being free to move longitudinally, and removably supported within said housing and bearing against the spherical member to maintain the latter in its frictional engagement within the housing, and means located on the under side of one end of said spring for adjusting the degree of pressure of said spring against said spherical member.

2. A telephone support comprising a housing containing an opening, a member having a rounded portion frictionally bearing within said housing contiguous to the opening thereof, an instrument-supporting part carried by said member, a spring comprising a plurality of leaf elements super-imposed on each other, the ends of said spring being free to move longitudinally, and removably supported within said housing and bearing against the member to maintain the latter in its frictional engagement within the housing, and means for adjustably varying the pressure of the spring.

3. A telephone support comprising a housing containing an opening, a member having a rounded portion frictionally bearing within said housing contiguous to the opening thereof, an instrument supporting part carried by

said member, a spring comprising a plurality of leaf elements super-imposed on each other, the ends of said spring being free to move longitudinally, within said housing and bearing against the member to maintain the latter in its frictional engagement within the housing, and means for detachably holding the spring in position.

4. A telephone support embodying a housing containing an opening, a member having a rounded portion frictionally bearing within said housing contiguous to the opening thereof, an instrument supporting part carried by said member, and a spring comprising an element in a single piece horizontally disposed, and continuously spanning the space within said housing, said element bearing against said member to maintain the latter in its frictional engagement within the housing, and means for detachably holding the spring element in position and for adjustably varying the pressure of said element.

5. A telephone support comprising a housing containing an opening and slots, the latter diametrically located with respect to each other, a member having a rounded portion frictionally bearing within said housing contiguous to the opening thereof, an instrument-supporting part carried by said member, detachable angle pieces masking the housing-slots, horizontal portions of said pieces extending within the housing, and a leaf spring the ends of which rest upon said portions, said spring bearing against the member to maintain the latter in its frictional engagement within the housing.

6. A telephone support comprising a housing containing an opening and slots, the latter diametrically located with respect to each other, a member having a rounded portion frictionally bearing within said housing contiguous to the opening thereof, an instrument-supporting part carried by said member, detachable angle pieces masking the housing-slots, horizontal portions of said pieces extending within the housing, a leaf spring the ends of which rest upon said portions, said spring bearing against the member to maintain the latter in its frictional engagement within the housing, and means associated with one of the angle pieces for varying the pressure of the spring and for holding the angle pieces in position.

7. A telephone support comprising a transversely perforated part having rigid arms, an additional arm having a threaded end passing through the part perforation and secured by a nut, said additional arm adapted to coact with the rigid arms for clamping a telephone instrument.

8. A telephone support comprising a housing containing an opening, a spherical member a portion of which frictionally bears within said housing contiguous to the opening thereof, an instrument supporting part car-

ried by said member, and a leaf spring within said housing and having its ends supported for longitudinal play, said spring bearing against said spherical member to maintain the latter in its frictional engagement within the housing.

9. A telephone support comprising a housing containing an opening, a spherical member within said housing and carrying means for supporting a telephone instrument, said housing also containing openings adapted to support the ends of a spring, a spring in said housing, the ends of which rest in said last named openings, and means for adjusting the tension of said spring.

10. A telephone support embodying a housing containing an opening and having leaf-spring supporting means, a member within said housing with a rounded portion contiguous to the housing opening, an instrument supporting part carried by said member, and a removable leaf spring continuously spanning the housing and acting to maintain the frictional engagement of the member within the housing, said spring being retained in position by having its end portions held

upon the supporting means, through the intermediate contact of the spring with said member.

11. A telephone support embodying a housing containing an opening and having leaf-spring supporting means, a member within said housing with a rounded portion contiguous to the housing opening, an extended vertical part carried by said member and provided with means for detachably supporting an instrument, and a removable leaf spring continuously spanning the housing and acting to maintain the frictional engagement of the member within the housing, said spring being retained in position by having its end portions held upon the supporting means, through the intermediate contact of the spring with said member.

Signed at New York in the county of New York and State of New York this 31st day of August A. D. 1906.

OTTO KRAUS.

Witnesses:

MADALINE WICKHILLER,
ALBERT MENDELSON.