No. 821,247. PATENTED MAY 22, 1906.

W. B. LEHMKUHL.

TELEPHONE SUPPORT.

APPLICATION FILED JUNE 9, 1905.

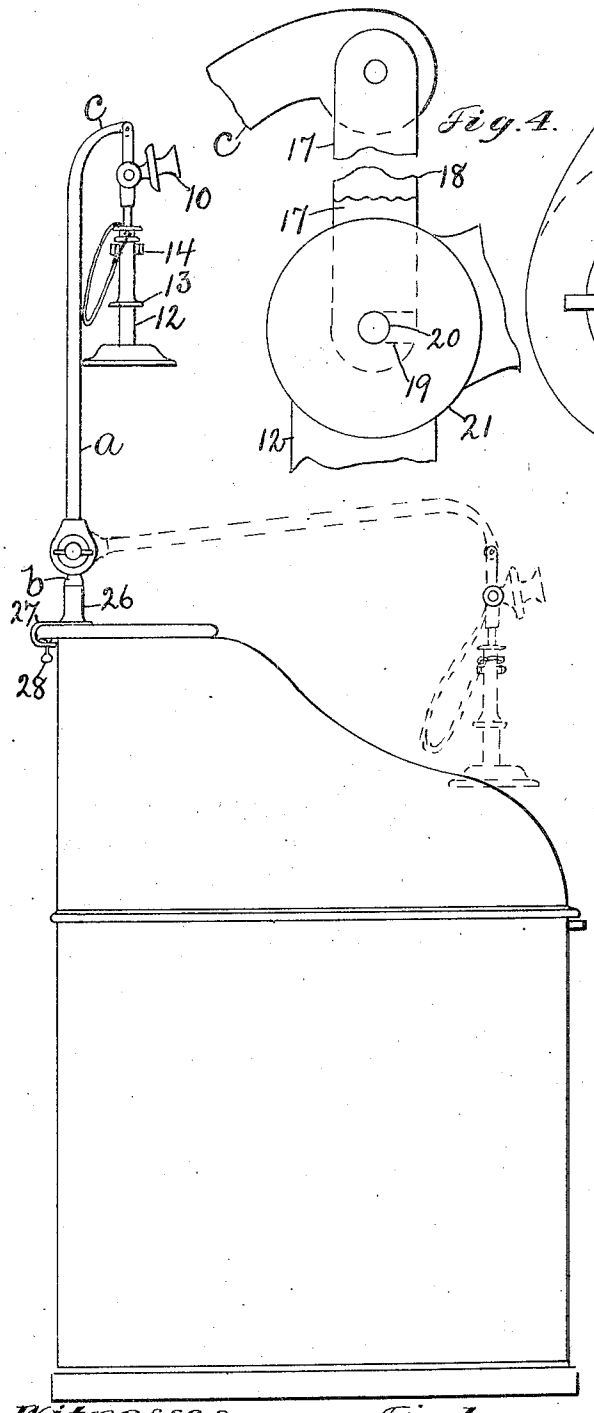


Fig. 1.

Fig. 4.

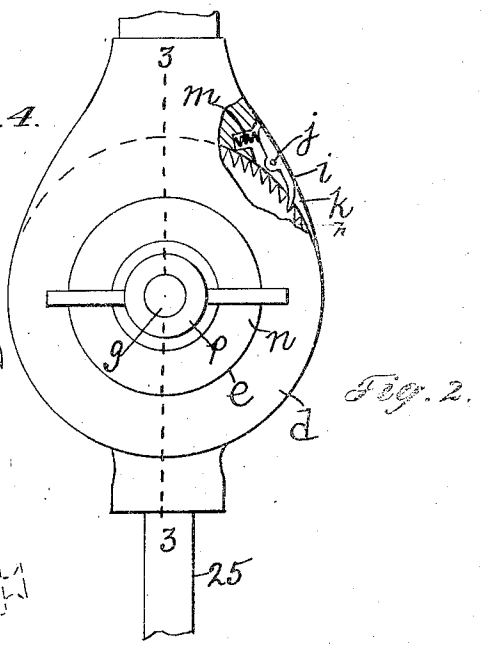


Fig. 2.

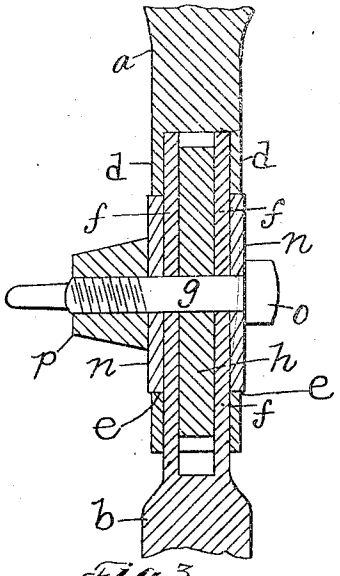


Fig. 3.

Witnesses.
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TELEPHONE-SUPPORT.

No. 821,247. Specification of Letters Patent. Patented May 22, 1906.

Application filed June 9, 1905. Serial No. 264,448.

To all whom it may concern:

Be it known that I, WILLIAM B. LEHMKUHL, a citizen of the United States, residing in Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Telephone-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a supporting apparatus especially designed and adapted to be employed as a support for telephones, and more particularly telephones of that class known as "desk-telephones." For this purpose the telephone is connected to a pivoted member which is capable of being positively moved by the operator and is restrained from movement by the weight of the telephone when released by the operator.

Other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is a side elevation of a desk provided with a telephone-support embodying this invention; Fig. 2, a detail, in side elevation with parts broken away and on an enlarged scale, of a portion of the support shown in Fig. 1; Fig. 3, a sectional detail on the line 3 3, Fig. 2, to be referred to; and Fig. 4 a detail of the means preferred by me for attaching the telephone to the support.

The support herein shown as embodying this invention consists, essentially, of two members *a b*, pivotally connected together. The member *a* is made in the form of a substantially long arm, preferably provided with a curved or bent portion *c* at its outer end and provided at its opposite end with two substantially circular forks *d*, (see Fig. 3,) having circular openings *e* in line with each other for a purpose as will be described.

The member *b* is provided with two substantially circular forks *f*, which are designed to be embraced by or have fitted over them the forks *d* of the member *a*. The forks *f* support a center pin or shaft *g*, which is extended through them and upon which is loosely mounted a ratchet-wheel *h*, with which cooperates a pawl *i*, (see Fig. 2,) carried by the member *a* and in the present instance represented as pivoted at *j* in a groove or slot *k* in the member *a* in line with the ratchet-wheel *h*. The pawl *i* is normally held in engagement with the ratchet-wheel *h* by a spring *m*. The pivot pin or shaft *g* has mounted on it friction-disks *n*, which fit the circular openings *e* in the forks *d* of the member *a* and serve as bearings for the forked member *a* to turn upon. The disks *n* are retained in position on the pin *g* by the head *o* and nut *p*, and by turning the said nut in one direction the disks *n* are drawn toward each other, so as to force the forks *f* of the member *b* into more or less frictional engagement with the ratchet-wheel *h*, thereby offering more or less resistance to the rotation of said ratchet-wheel for a purpose as will be described.

The telephone set herein shown comprises the transmitter 10, its stand 12, the receiver 13, and the hook 14, pivoted to the stand 12, and in accordance with this invention this set is attached to the member *a* of the supporting apparatus. In the present instance I have shown one means for accomplishing this result, and for this purpose I employ two links 17 18, pivoted to the opposite sides of the curved end of the member *a* and provided at their opposite ends with slots 19, (see dotted lines, Fig. 4,) which engage the pivot 20 for the transmitter, the said links being firmly clamped on the pivot 20 by the thumb-screw 21 which is employed to secure the transmitter in frictional engagement with the stand 12.

From the above description it will be seen that the member *a* may be turned on its pivot in one direction—as, for instance, from its elevated position (shown by full lines in Fig. 1) into its lowered position (shown by dotted lines)—and that such movement of the member *a* is communicated to the ratchet-wheel *h* by the pawl *i*. In order that the movable member *a* may be arrested in any position into which it is desired that the telephone should be brought, a frictional resistance sufficient for this purpose is created between the forks *f* and the ratchet-wheel *h*, and this frictional resistance may be obtained, as herein shown, by turning up the nut *p* so as to cause the forks *f* of the member *b* to clamp the ratchet-wheel with sufficient force to prevent it being turned by the weight of the telephone, and especially when the latter is in its lowered position. (Indicated by dotted lines.) When the operator has finished using the telephone, it may be turned up out of the way, and for this purpose the member *a* is

turned by the operator into its full-line position in Fig. 1. It will be observed that on this backward movement of the member *a* the ratchet-wheel is not rotated and the pawl merely clicks by the teeth thereon until the operator releases his hold upon the member *a*, whereupon the said pawl engages a tooth of the ratchet-wheel and locks the member *a* to said wheel, which is frictionally held from turning, as above described, until such frictional resistance is positively overcome by the operator. The member *b* of the supporting apparatus may be rigidly secured to the desk or other structure; but it is not desired to limit the invention in this respect, as it may be desirable to have the member *b* capable of turning on a pivot, and for this purpose the member *b* is provided with a pivot stud or pin 25, which enters a socket in a post 26, attached to a bracket 27, which may be permanently secured to the desk or, as is preferred, which may be detachably clamped thereto by the set-screw 28. (See Fig. 1.) By pivoting the member *b* as described the support for the telephone may be turned in a complete circle, so that the telephone is accessible for use from any point in the circle having the pivot 25 as a center. Such an arrangement is especially serviceable when two desks are located back to back, as the telephone-support can be quickly and easily turned so as to be used from either desk.

I may prefer to provide the member *a* with a curved or bent outer end to enable the telephone set to hang in a vertical plane when not in use, as represented in Fig. 1; but I do not desire to limit my invention in this respect.

I claim—

1. In a support of the character described, in combination, two members pivotally connected, a ratchet-wheel carried by one of said members, a pawl carried by the other of said members and coöperating with said ratchet-wheel, and means to create resistance to the movement of said ratchet-wheel, substantially as described.

2. In a support of the character described, in combination, a member pivoted to turn in one direction, a second member pivoted to the first-mentioned member to turn in a direction substantially at right angles to the direction in which the first-mentioned member is turned, a ratchet-wheel carried by the first-mentioned member, a pawl carried by the second-mentioned member and coöperating with said ratchet-wheel, and means to frictionally hold said ratchet-wheel from turning until positively moved, substantially as described.

3. In a support of the character described, in combination, a member provided at one end with forks having openings, a second member provided with forks which are embraced by the forks of the first-mentioned member, a pivot pin or shaft supported by the forks of the second member, a ratchet-wheel mounted on said shaft or pivot between the forks of the second member, a pawl carried by the first member and engaging said ratchet-wheel, disks mounted on said pivot and extended into the openings in the forks of the first member to engage the forks of the second member, and means to move said disks toward each other, for the purpose specified.

4. In a support of the character described, in combination, a member pivoted to turn in one direction, means for supporting a telephone connected to said member, a second member pivoted to turn in a direction at an angle to the first-mentioned direction, a rotatable device carried by said second member, means carried by said first member to engage said rotatable device and effect movement thereof when the first-mentioned member is moved in one direction, and to permit movement of said first-mentioned member in the opposite direction independent of said rotatable device, substantially as described.

5. In a support of the character specified, in combination, a pivoted arm, means for supporting a telephone connected to said arm, a rotatable device, means carried by said arm and coöperating with said rotatable device to effect rotation thereof when said arm is moved in one direction, and means to retain said rotatable device stationary while under the influence of the weight of the telephone, substantially as described.

6. In a support of the character specified, in combination, a pivoted arm, a rotatable device, means carried by said arm and coöperating with said rotatable device to effect rotation thereof when said arm is moved in one direction, and means to retain said rotatable device stationary when the pivoted arm is moved in the opposite direction, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM B. LEHMKUHL.

Witnesses:

JAS. H. CHURCHILL,

J. MURPHY.