(No Model.)

# J. STEINER.

## TELEPHONE SWITCH.

No. 505,070. Patented Sept. 12, 1893.

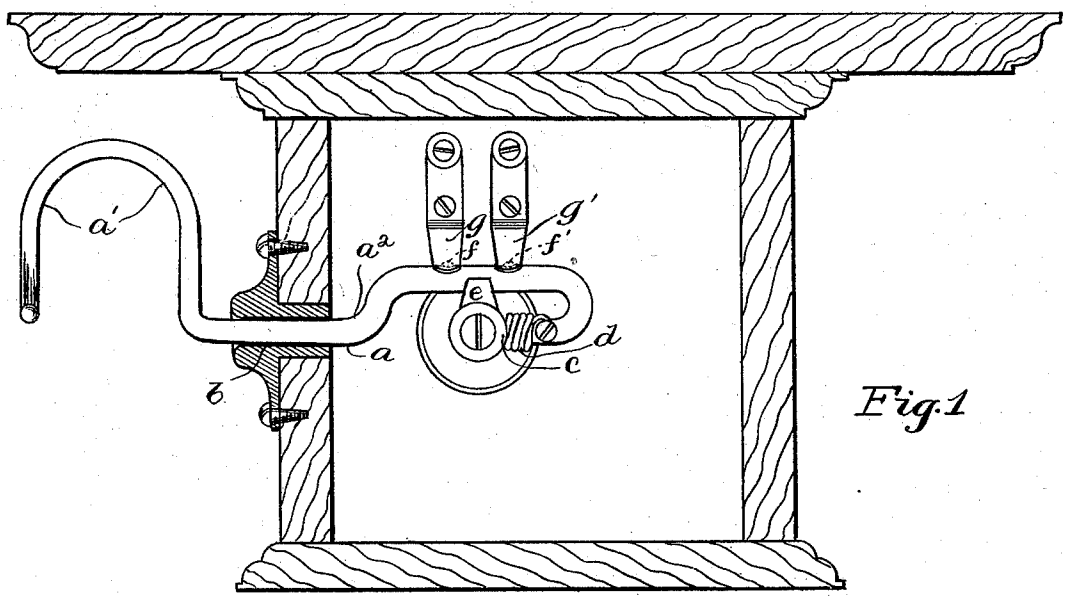
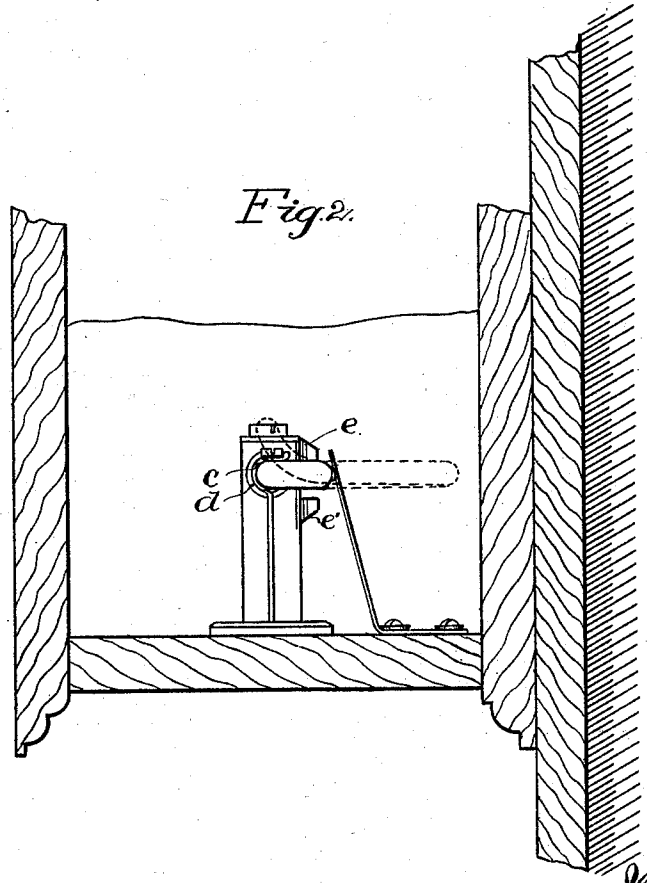



Fig. 1

Fig. 2.




Witnesses.
George L. Cragg.
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# UNITED STATES PATENT OFFICE.

JOSEF STEINER, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE WESTERN ELECTRIC COMPANY, OF CHICAGO, ILLINOIS.

## TELEPHONE-SWITCH.

SPECIFICATION forming part of Letters Patent No. 505,070, dated September 12, 1893.

Application filed October 19, 1891. Serial No. 409,199. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEF STEINER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Telephone-Switches, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to gravity switches for telephone call boxes.

Its object is to provide an improved form of switch of simple and cheap construction.

My invention consists of a rod journaled at one or more points and adapted to rotate, and provided with a hook formed integral therewith, which is adapted to support the telephone receiver; the hook is yieldingly held in a horizontal position by means of a spring, and suitable contacts are provided adapted to be closed or separated by the rotation of the rod.

My invention is illustrated in the accompanying drawings.

Of the drawings—Figure 1 is a plan of my improved switch and Fig. 2 is an end elevation thereof.

I will indicate parts in the drawings by letters of reference, like parts being designated by similar letters of reference.

*a* is the switch lever journaled at *b* in a bushing secured to the side of the box, and at *c* in a post fastened to the box. The piece *a* is formed into a hook, *a'*, at that extremity which projects outside the box, extending horizontally and adapted to receive the telephone receiver. The bar *a* is also curved outward at $a^2$ to pass around the post *c*, and returned upon itself in the axial line to journal in post *c*. A coiled spring *d*, one end of which is secured to post *c* and the other to lever *a*, tends to retain the hook *a'* in a horizontal position. Stops *e e'* upon the post *c* limit the rotary motion of bar *a*. Contact points *f f'* are provided upon the curved portion $a^2$ of lever *a*, and contact springs *g g'* secured at one end to any suitable support, as the base of the box, one adapted to bear upon the contact points, *f f'*, when the lever is in one of its positions. When the telephone is hung upon hook *a'*, its weight is borne by points at some distance from the point of support *b* of the lever and the lever is thus caused to rotate in opposition to the spring *d*, thereby breaking connection between the contact points *f f'*, and their respective contact springs *g g'*.

I do not limit myself to the use of any particular number of contact points in connection with the lever *a*, nor to their particular disposition. As many contact points may be used as are necessary to make or break the various circuits of the call box, and they may be disposed as convenient. By this construction of switch hooks, I am enabled to avoid the opening in the side of the box made necessary by the various forms of oscillating lever now in use, and hence to prevent the access of dust to the mechanism of the call box. Moreover, the form of the switch hook enables the telephone to be removed from or placed upon the hook with greater facility than before.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a bar journaled at one point in the side of the call box, so as to be capable of limited rotary motion, of a radially extending hook formed at one extremity of said bar, and adapted to receive the telephone, a spring acting to rotate said bar to maintain said hook in a horizontal position, said bar being bent to form a radial extension provided with contact points, and fixed contact points with which said contact points are adapted to make contact in one position of the bar, substantially as described.

2. The combination with the bar *a* journaled in the side of the call box, of the hook *a'* upon the exterior end of said bar, said hook lying upon one side of said bar with its mouth in the same straight line with the journaled portion of said bar, a radial extension upon the interior end of said bar provided with contact points, and fixed contact points adapted to be engaged thereby, in one

position of said bar, substantially as described.

3. The combination with fixed contact points, of a telephone hook formed from a single bent bar and comprising the hook $a'$, journal $b$, radial extension $a^2$ and end journal, and spring $d$, substantially as described.

In witness whereof I hereunto subscribe my name this 24th day of September, A. D. 1891.

JOSEF STEINER.

Witnesses:
GEORGE P. BARTON,
GEORGE L. CRAGG.