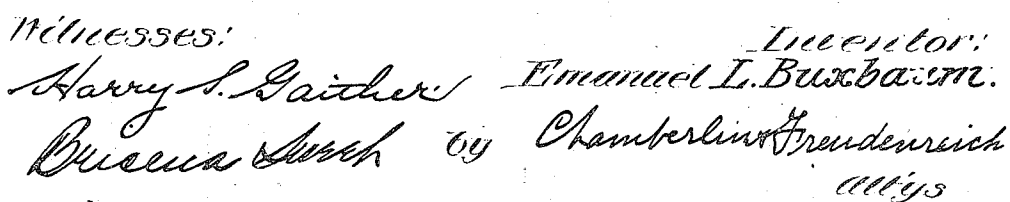


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2 SHEETS—SHEET 1.

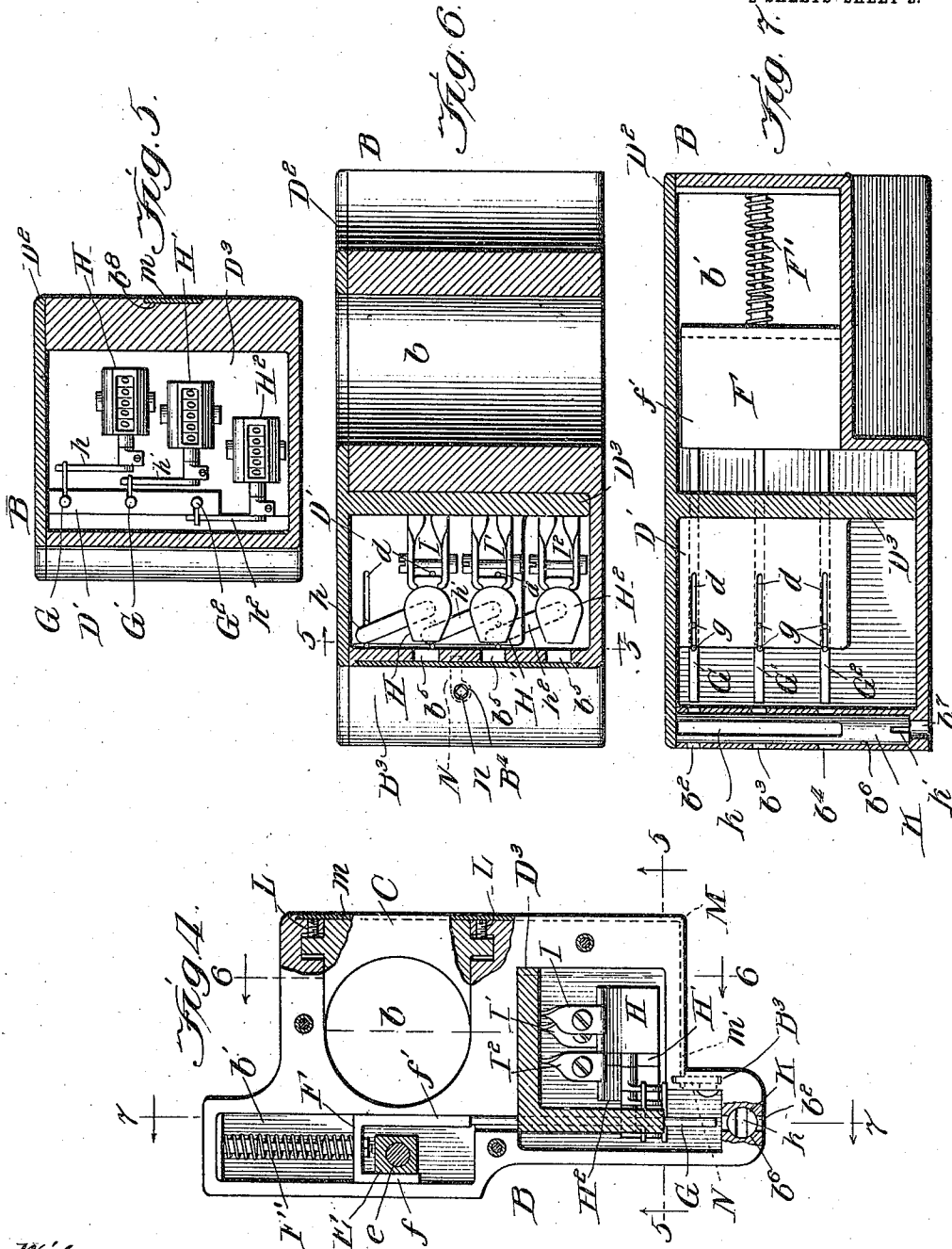


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 TELEPHONE LOCK AND CALL REGISTER.
 APPLICATION FILED MAY 17, 1909.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

EMANUEL L. BUXBAUM, OF CHICAGO, ILLINOIS.

TELEPHONE LOCK AND CALL-REGISTER.

989,761.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that I, EMANUEL L. BUXBAUM, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Telephone Locks and Call-Registers, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to provide a simple and novel device which may be attached to an ordinary telephone for locking it normally and accurately registering the calls.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its object and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawings, wherein:

Figure 1 shows in side elevation a fragment of an ordinary desk telephone and in cross section a device embodying the present invention secured in operative position on the telephone; Fig. 2 is a side elevation of a device removed from the telephone; Fig. 3 is a front elevation of the device; Fig. 4 is a section taken on line 4—4 of Fig. 2; Fig. 5 is a section taken on lines 5—5 of Figs. 4 and 6; Fig. 6 is a section taken on line 6—6 of Fig. 4; and Fig. 7 is a section taken on line 7—7 of Fig. 4.

Referring to the drawings, A represents the standard of a desk telephone and A¹ the usual hook for supporting the receiver.

B is a casing having a socket *b* bounded on one side by means of a movable and adjustable wall C, this socket being of a size and shape to receive and fit upon the standard of the telephone.

D is a slot in the top wall of the casing directly beneath the telephone hook. Secured to the hook is a lug or dog E which projects through the slot into the casing. When the lug or dog is made separate from the hook, it is preferably secured thereto by some means which is inaccessible when the casing is in place as, for example, a set-screw *e* extending upwardly from the underside of the hook.

In the usual telephone and in that illustrated the hook is pivoted so that the lower end of the dog swings in an arc of a circle when the hook is raised. Consequently, by providing a movable abutment for engaging with the side of the lug, the lug and therefore the hook may be locked against movement and be prevented from assuming its operative position upon the removal of the receiver.

In the arrangement shown, I have provided an L-shaped plate F slidably mounted in a recess *b*¹ in the casing, together with a spring F¹ for holding the plate in a position wherein its short arm *f* lies between the lug E and the side of the casing. When the plate is retracted so that the arm *f* clears the lug, the hook is free to rise and when it is up the lug swings in front of the arm *f* and holds the plate retracted. As soon, however, as the hook is depressed, the lug clears the arm *f* and the plate swings forward into its locking position, so that the hook cannot again be raised until the plate is again retracted. For the purpose of retracting the locking plate, I have provided a number of sliding plungers G, G¹, and G², these plungers being mounted in a depending wall D¹ carried by the cover D². The front ends of these plungers project into proximity to the front wall of the casing and register with openings *b*², *b*³, and *b*⁴, in said wall. The rear ends of the plungers extend into the front end of the long arm *f* of the locking plate. It will be seen that by inserting a suitable instrument through any one of the openings in the front wall of the casing, one of the plungers will be forced backward into engagement with the locking plate and will carry the locking plate into an inoperative position. If the receiver be then taken from the hook the hook will rise but, if the instrument be withdrawn before the receiver is taken off, the locking plate will resume its normal position.

Associated with each of the plungers is a register of any suitable form so that whenever the telephone is unlocked a registration will be made. Three registers H, H¹, and H², of any usual type are shown, the arm *h* and the register H being operatively connected with the plunger G, the arm *h*¹ and the register H¹ being operatively connected with the plunger G¹ and the arm *h*² and the register H² being connected with the plunger G². This connection between

the registers and the plungers may be effected in any suitable manner as, for example, by providing each plunger with a pair of separated pins g which play within slots d in the wall D^1 , the pins of each pair being spaced far enough apart to receive between them one of the actuating arms for the registers. The registers may conveniently be supported by means of clips I , I^1 , and I^2 , projecting forwardly from a transverse wall D^3 depending downwardly from the cover D^2 . The registers may be read through openings b^5 in the front wall of the casing.

I have shown three lock-releasing plungers and three registers so that one will record the number of in-calls, one the number of out-calls, and the other the number of busy signals. In this way a positive record will be made of each and every call and the user can tell exactly the number of out-calls which he has made during a month or other period. When the out-call register is actuated and a busy signal is received, the user replaces the receiver and then actuates the busy signal plunger. If the line is now clear the previous record made on the out-call will indicate the proper number of out-calls which have been made. If desired, after the receipt of a busy signal, the busy signal plunger may be actuated without lifting the receiver and in this case the total number of out-calls will always be equal to the difference between the totals shown by the out-call register and the busy signal register. When there is an in-call the user, before he can use the telephone, must unlock the hook and this can be done by operating the in-call plunger. It will thus be seen that the hook is always locked and one of the registers must be operated before the telephone can be used.

In order that the owner of the telephone may prevent others from using it, I provide means for closing the openings b^2 and b^4 when desired. This may conveniently be accomplished by boring a vertical hole b^6 in the front wall of the casing across the openings b^2 to b^4 and placing within this opening a plunger K slotted throughout a portion of its length as at k . When the plunger K occupies the position shown in Fig. 7, the openings b^2 to b^4 are closed, but when the plunger is turned through an angle of 90 degrees from that position the slot k registers with these openings and an instrument can be inserted through any one of them. The lower end of the plunger K is slotted as at k^1 so that the plunger may be turned by inserting a key through a small opening b^7 in the lower wall of the casing. It will be seen that the plunger may be dropped in place and be locked by simply placing the cover upon the casing, no other fastening means being required.

It is desirable that the casing be held in position upon the telephone in such a way that it cannot be disturbed and, where the movable wall C is clamped against the standard by means of screws L , I prefer to employ a plate M for covering these screws. This plate is preferably made L-shaped so that one arm m lies within a groove b^8 in the side of the casing, the other arm m^1 lying within a dove-tailed groove b^9 in the front wall of the casing. The member m^1 has a notched lip m^2 which projects into the wall B^3 of the casing and in this wall is pivoted a dog N which normally lies within the notch in the lip m^2 . The dog N is provided with a square opening n which registers with an opening B^4 in the wall of the casing so that upon the insertion of a key the dog may be lifted and the plate removed. The member m^1 of the plate is preferably made wide enough to cover the openings through which the registers are visible and therefore when the owner desires, he may not only lock the telephone against use, but may conceal the registers so that only a plain case is visible.

While I have illustrated and described in detail only a single embodiment of my invention having three lock-releasing plungers and three registers, I do not desire to be limited to the particular arrangement shown or to one in which there are three lock-releasing plungers or three registers or wherein there is a register associated with each plunger, but desire to cover all forms of my invention falling within the terms of the definitions of my invention constituting the appended claims.

What I claim is:

1. In combination, a casing constructed and arranged to be secured upon the stem of a desk telephone directly beneath the hook, a locking bar for the hook movably mounted in the casing, a register in the casing, a device for controlling the locking bar, and means associated with said device for actuating said register.

2. In combination, a casing, means for fastening the casing to a telephone directly beneath the hook, a locking bar for the hook movably mounted in the casing, a register in the casing, a device for actuating the locking bar, and means associated with said device for actuating said register.

3. In combination, a casing provided with a socket to receive the stem of a desk telephone, a locking bar for the telephone hook mounted in the casing, a register in the casing, a device for controlling the locking bar, and means associated with said device for actuating said register.

4. In combination, a casing constructed and arranged to be secured to a desk telephone beneath the hook, said casing having a slot immediately below said hook, a lug

projecting from said hook through said slot, a locking member in said casing for engaging said lug, a register in the casing, a device for controlling the lock, and means associated with said device for actuating the receiver.

5. In combination, a casing constructed and arranged to be secured to a desk telephone beneath the hook, said casing having a slot immediately below said hook, a lug adapted to be secured to said hook and project into said slot, a locking member in said casing for engaging said lug to hold the hook in the inoperative position, a register in said casing, a device for releasing said lock, and a connection between said device and said register.

6. In combination, a casing constructed and arranged to be secured to a desk telephone beneath the hook, said casing having a slot immediately below said hook, a lug adapted to be secured to said hook and project into said slot, a spring-pressed locking member in said casing for engaging with said lug to hold the hook in its inoperative position, a register in said casing, a slide for moving said spring-pressed member into unlocking position, and a connection between said slide and said register.

7. In combination, a casing constructed and arranged to be secured to a desk telephone beneath the hook, said casing having a slot immediately below said hook, a lug adapted to be secured to said hook and project into said slot, a spring-pressed locking member in said casing for engaging with said lug to hold the hook in its inoperative position, a register in said casing, a slide for moving said spring-pressed member into unlocking position, and a connection between said slide and said register, said casing having an opening therethrough for the insertion of an instrument with which to actuate said slide, and means for closing said opening.

8. In combination, a casing having a socket for receiving the standard of a desk telephone, an adjustable member forming one wall of said socket, adjusting means for said member, a detachable plate overlying said adjusting means so as to conceal it, and a lock for holding said plate in position.

In testimony whereof, I sign this specification in the presence of two witnesses.

EMANUEL L. BUXBAUM.

Witnesses:

WM. F. FREUDENREICH,
H. S. GAITHER.