

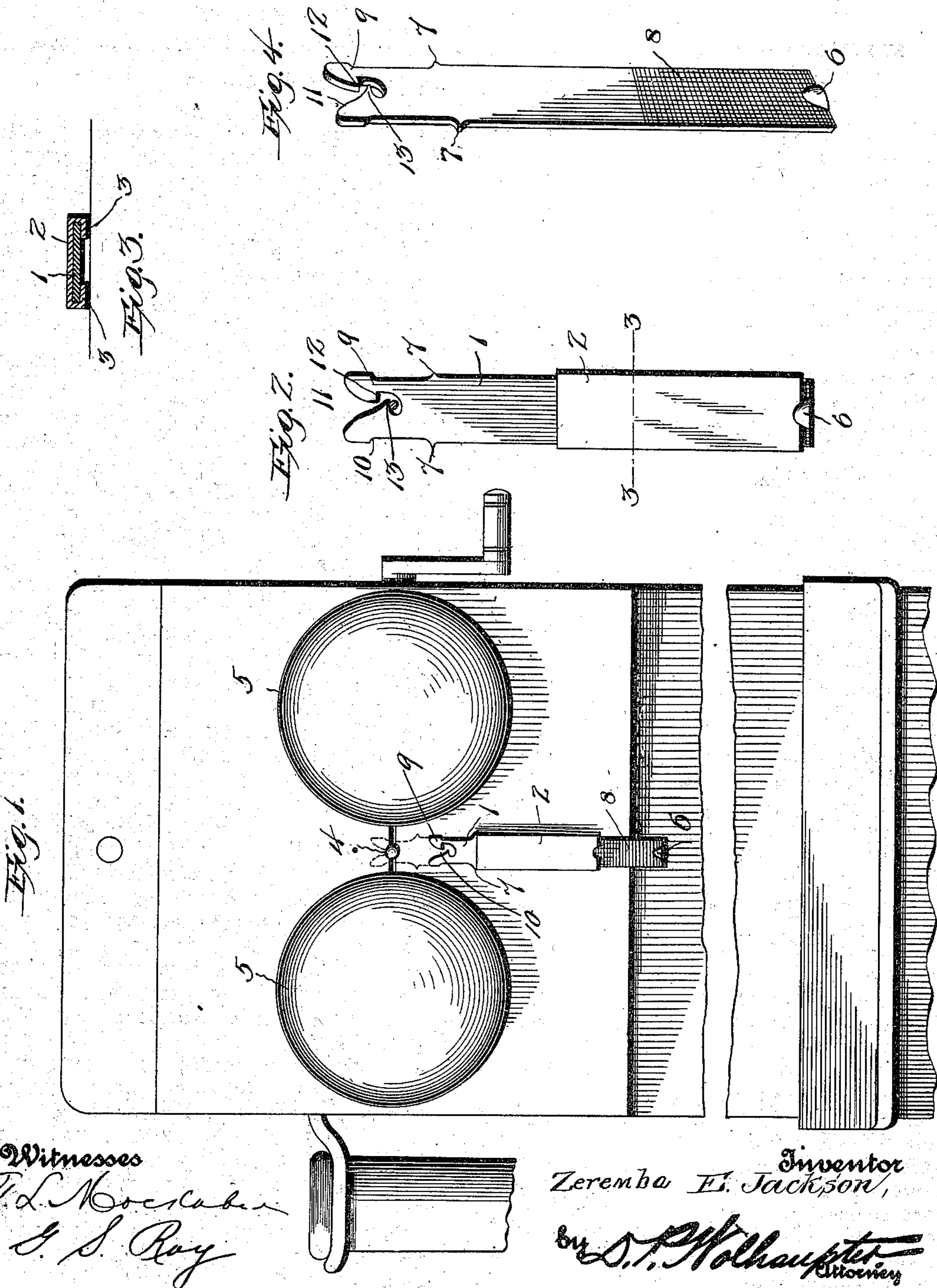
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Z. E. JACKSON.
TELEPHONE CALL ANNUNCIATOR.

(Application filed Mar. 8, 1902.)

(No Model.)



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TELEPHONE-CALL ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 709,327, dated September 16, 1902.

Application filed March 8, 1902. Serial No. 97,233. (No model.)

To all whom it may concern:

Be it known that I, ZEREMBA E. JACKSON, a citizen of the United States, residing at Atchison, in the county of Atchison and State of Kansas, have invented certain new and useful Improvements in Telephone-Call Annunciators, of which the following is a specification.

This invention relates to telephony, and has special reference to calling devices utilized in connection with telephone systems.

To this end the invention contemplates a simple, practical, and efficient telephone-call annunciator designed as an attachment for any of the ordinary telephones and cooperating directly with the calling device or calling-bells, so as to be operated thereby to provide for giving the desired signal or announcement when a call comes over the instrument.

The annunciator attachment for telephones contemplated by the present invention possesses special utility as a signaling auxiliary where a number of telephone instruments are used in the same office, and a confusion of calls would often result if means were not provided for positively indicating the instrument over which the call came. In some localities there are two or more distinct telephone systems operated, and as a business necessity the professional or business man is frequently required to keep both sets of instruments in his office. By reason of having separate instruments belonging to different systems in the same office it is obvious that absence from the locality of the instruments or inattention would make it almost impossible to determine promptly over which telephone a call should come, and it is to meet this and similar conditions that the present invention is designed.

A further object of the invention is to provide an annunciator device for telephones which can be readily attached to any instrument without removing or disturbing any part thereof and without marring the appearance of the phone in the slightest degree.

Also the invention has in view the provision of an attachment which can be fitted or applied in operative position without the employment of driven or screw fasteners, thus

combining simplicity of attachment with simplicity and practicability of construction.

The essential features of the invention in the manner of mounting and operating the annunciator are necessarily susceptible to a wide range of modification in structural details without departing from the spirit or scope of the invention; but a preferred embodiment of the latter is shown in the accompanying drawings, in which—

Figure 1 is an elevation of a portion of a telephone instrument, showing the attachment arranged in operative relation to the striker of the call-bells. Fig. 2 is an enlarged detail elevation of the annunciator, showing the indicator-shutter held in its inactive non-signaling position. Fig. 3 is a cross-sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail in perspective of the sliding indicator.

Like numerals designate corresponding parts in the several figures of the drawings.

In carrying out the invention any suitable type of indicator and means for holding the same in operative relation to the bell-striker may be employed, so long as provision is made for normally holding the indicator in an inactive non-signaling position through the medium of a trip-latch connection with the striker-wire of the call-bell device; but a simple and practical embodiment of the invention is shown in the drawings, in which the numeral 1 designates the indicator. In the construction shown the indicator 1 is in the form of a sliding shutter-plate slidably supported by and within a holder 2, which constitutes the stationary element of the attachment and provides means for supporting the latter in operative position upon the telephone instrument. To provide for properly supporting and guiding a sliding shutter-plate such as shown in the drawings, the holder 2 is preferably in the form of a closed sleeve-casing of the same cross-sectional shape as the shutter-plate and provided at its longitudinal side edges with the intumed guiding-flanges 3, which embrace the longitudinal side edges of the shutter-slide 1, as may be plainly seen from Fig. 3 of the drawings.

To provide a simple and practical means for supporting the attachment in proper po-

sition upon the instrument, this may be accomplished without the use of driven or screw fasteners by simply applying to the rear surfaces of the inturned guiding-flanges 3 glue or other equivalent adhesive material which will serve to firmly retain the holder in place. The applied position of the holder within which is mounted the shutter-slide is plainly shown in Fig. 1 of the drawings, it being observed that the attachment is designed to be mounted upon the front wall of the generator-box below and within the vertical plane of the striker 4, playing between and operating against the usual call-bells 5, which are also mounted upon the front wall of the generator-box.

The indicator-shutter slide 1 is of a greater length than the holder through which it slides, so as to work above and below the holder and to provide for limiting the movement of the shutter-slide, so as to prevent the same from moving out of its holder in either direction. The said slide is provided at its lower end with a guard stop projection 6, adapted to engage with the lower end of holder, and contiguous to the upper end thereof the indicator-slide is further provided, upon opposite sides thereof, with the laterally-offset arresting stop projections 7, adapted to engage with the top edge of the holder to arrest downward movement of the slide when the same drops to expose the signal thereon. The lower portion of the indicator-shutter slide 1 (designated by the reference-numeral 8) constitutes a signal-bearing portion upon the face of which, as shown in Fig. 4, may be painted a color, a number, or any character of signal which it may be desired to expose by the shutter when the same drops to a signaling position. When held in its elevated position, the signal-bearing portion 8 of the slide is drawn within and concealed by the holder 2. To provide for normally holding the shutter-slide elevated in its inactive non-signaling position, the said slide is designed to have a tripping latch connection with the striker 4, or, at least, with the wire or stem portion of said striker. While this latch connection may be effected in different ways, a simple construction is shown and consists in providing the indicator-slide, at its upper end, with what may be properly termed a "latching-keeper" 9. This latching-keeper is preferably an integral part of the slide and has formed therein an engaging notch 10. This engaging notch is provided with a flared mouth 11 and contiguous to the base thereof and at its opposite edges with the transversely-disposed inwardly-projecting trip-shoulders 12 and 13. The trip-shoulders 12 and 13 are respectively disposed one above the other and are consequently transversely disaligned, while at the same time being disposed within the same longitudinal plane, thus breaking the perpendicular line of the engaging notch or opening. The "dodged" arrangement of the oppositely-located trip-shoulders absolutely

prevents accidental disengagement of the striker-wire from the engaging notch and requires vibratory motion of the striker-wire to permit the latter to disengage itself and release the shutter, so that it may drop to a signaling position. The arrangement of trip-shoulder described is also essential for the reason that when at rest the striker or striker-wire of the call-bells stands at times at the right side and at other times on the left. Hence in either position the keeper-notch may be engaged with the striker-wire, while the slamming of a door or the jar of the building will not cause accidental disengagement. However, upon the lateral vibration of the striker when a call comes over the phone the same will necessarily work itself out of engagement with both trip-shoulders, thus permitting the shutter-slide to drop and uncover the signal-bearing portion 8 thereof. This affords a simple and effective signal to announce or annunciate that the call has come over the instrument having the attachment with the shutter dropped.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described telephone-call annunciator will be readily apparent without further description, and it will be understood that various changes in the form, proportion, and minor details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

A telephone-call annunciator comprising a stationary holder consisting of a closed sleeve-casing having at its longitudinal edges inturned combined guiding and attaching flanges, and also having an imperforate outer side constituting a cover member, and a flat indicator shutter-plate slidably working through the casing and provided at its lower extremity with an offset guard-stop for engagement against the lower end of the casing and contiguous to its upper end with opposite offset arresting stop projections for engagement with the top edge of the casing, the guard-stop and the side arresting-stops being spaced a greater distance apart than the length of the casing, said shutter-plate being further provided at its upper end with engaging means for releasable connection with the call-bell striker, and at its lower end and upon the outer face thereof being provided with a signal adapted to be normally housed and concealed entirely within the closed sleeve-casing behind the outer side or cover thereof, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ZEREMBA E. JACKSON.

Witnesses:

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