No. 641,663. Patented Jan. 16, 1900.

A. A. LOW.

TELEPHONE.

(Application filed Feb. 5, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

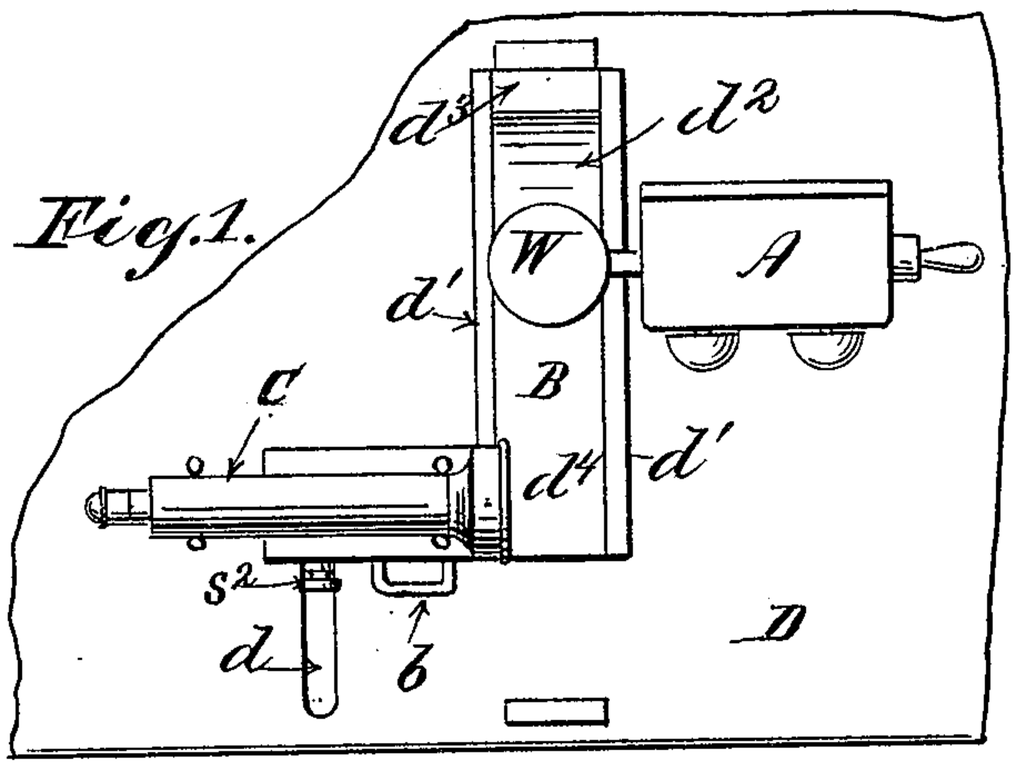


Fig. 5.

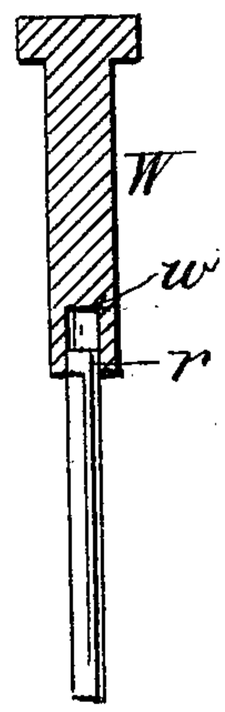
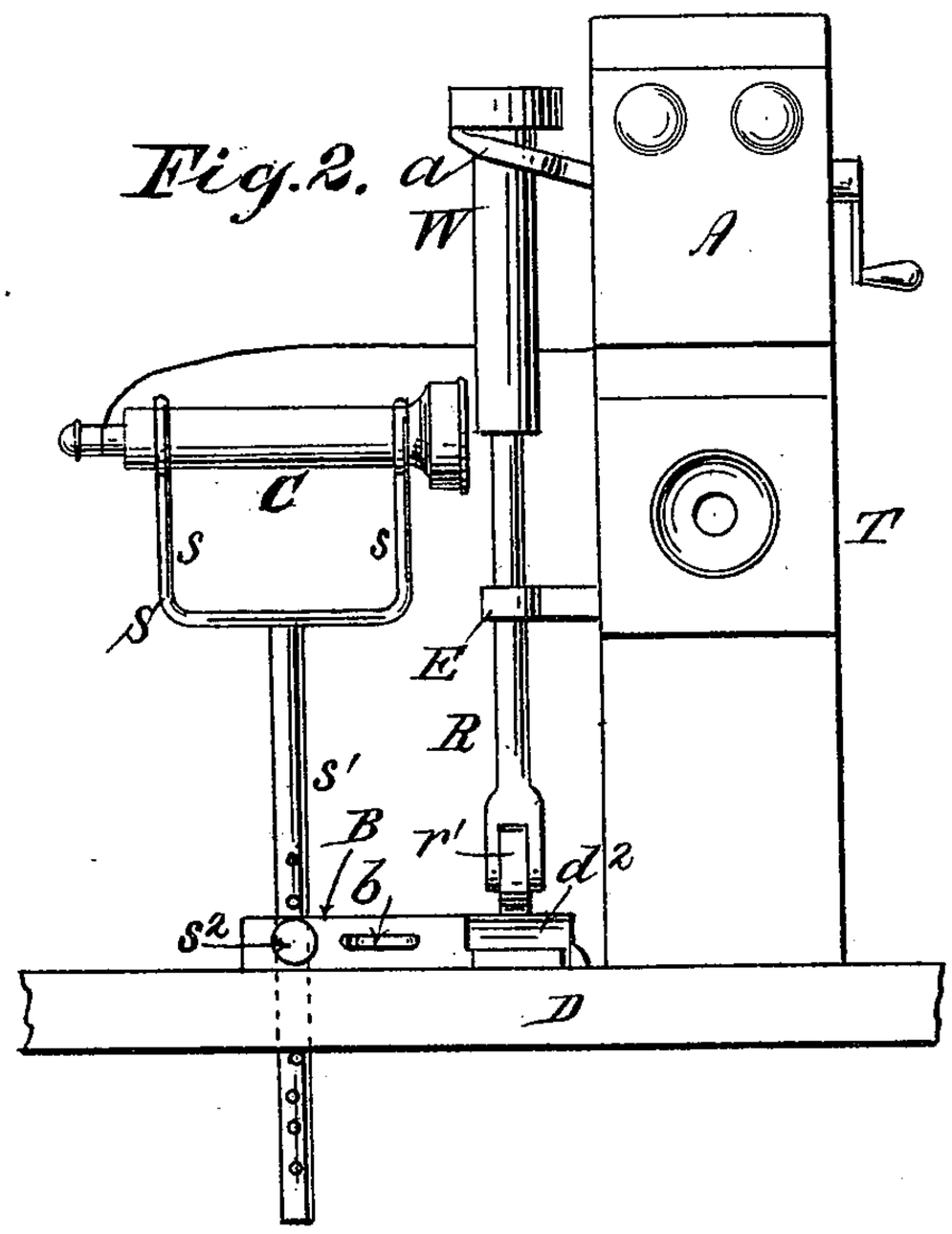


Fig. 2.



Witnesses:
D. W. Gardner.
D. A. McConnell

Inventor:
Abbot Augustus Low
By his attorney
George William Mott

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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Fig. 3.

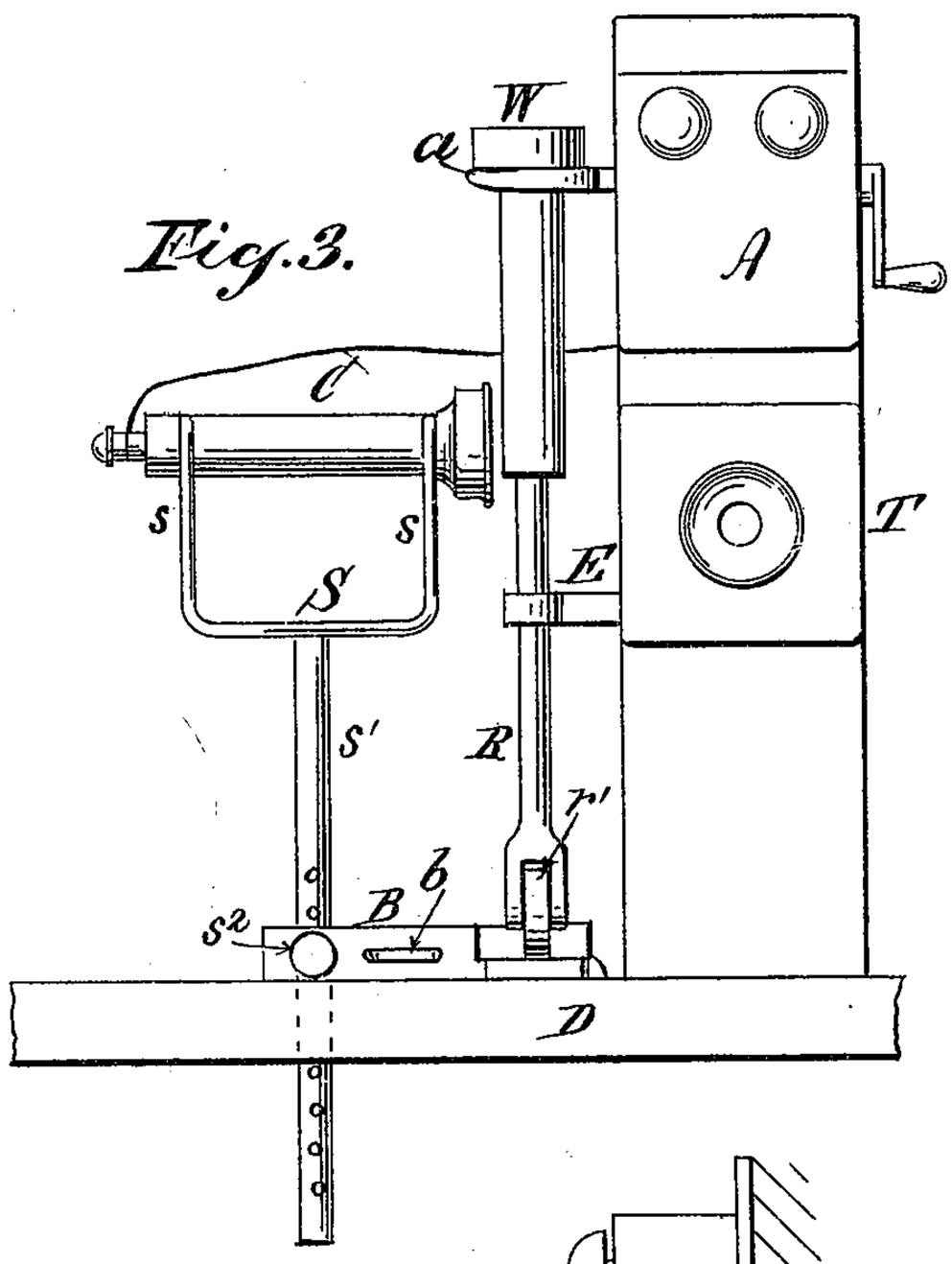
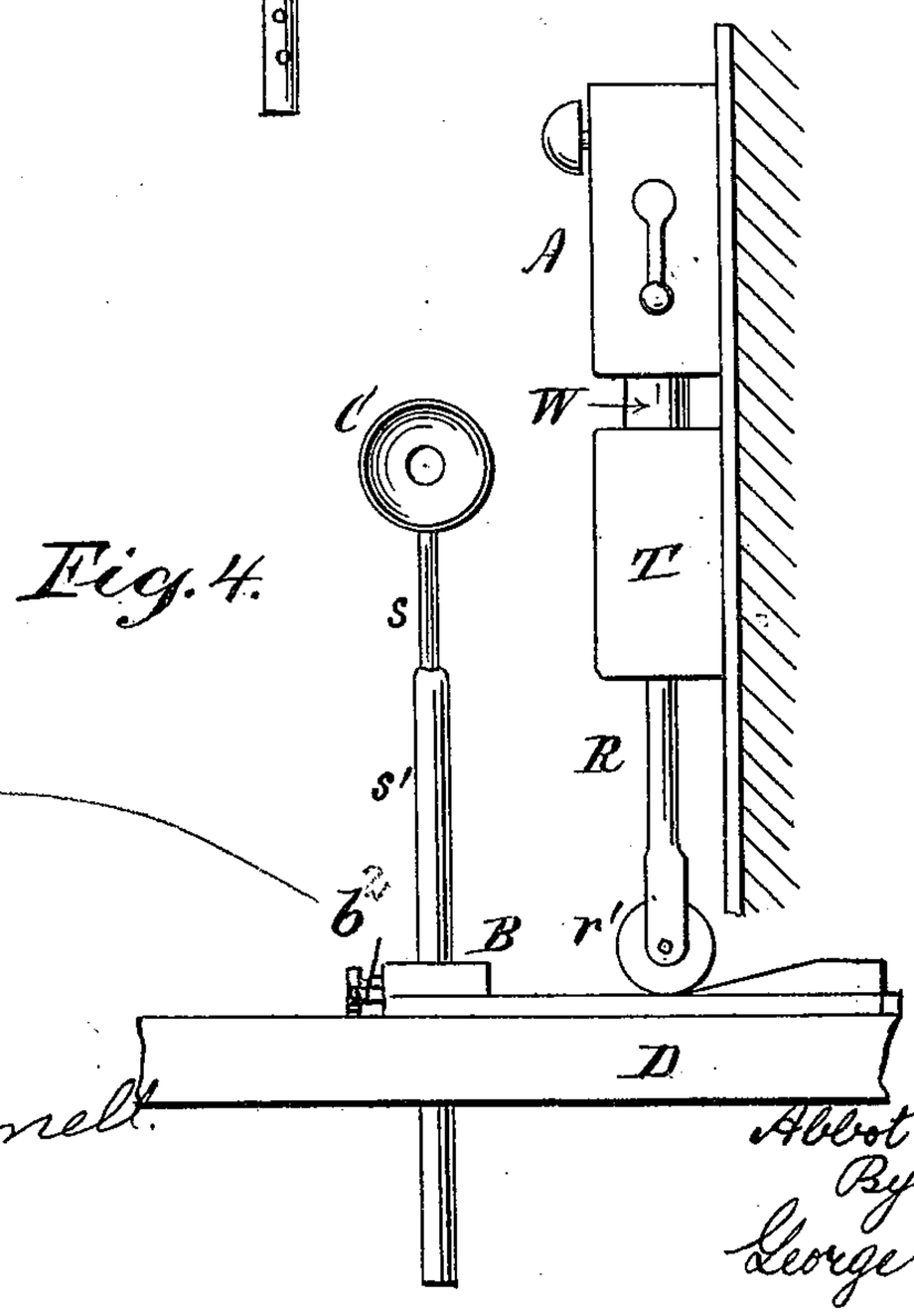


Fig. 4.



Witnesses:
D. W. Gardner.
D. A. McConnell.

Inventor:
Abbot Augustus Low
By his attorney
George William Mott

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF NEW YORK, N. Y.

TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 641,663, dated January 16, 1900.

Application filed February 5, 1898. Serial No. 669,263. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing in the borough of Brooklyn, city of New York, county of Kings, and State of New York, have invented certain new and useful Improvements in Telephones, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention relates to telephones in general use in which an automatic switch is used to cut out the call and throw the receiver into circuit, the act of lifting the receiver from the switch being relied on to effect the result. I design to obviate the necessity for lifting the receiver from the switch, and to support the receiver under normal conditions in such manner that it may be quickly drawn into position with relation to the transmitter, at the same time simultaneously releasing the switch automatically, so as to disconnect the alarm and connect the transmitter.

Although this invention may be applied to various forms and arrangements of telephones and receivers, I have designed and shown it herein as specially adapted to the requirements of telephones already in use.

The invention consists, essentially, in an auxiliary weight connected with the switch and operated and controlled by mechanism actuated by the transmitter-support, so that the drawing of the latter into position for use cuts out the alarm, while the pushing back of the receiver disconnects the said receiver and throws the alarm into circuit, both operations being automatic, so far as the actuation of the switch is concerned, and the parts being constructed and arranged substantially as herein described and claimed.

In the accompanying drawings, Figure 1 is a plan of a portion of a table supporting parts embodying my invention. Fig. 2 is a front elevation of the same, the parts being in position in which the call is disconnected and the receiver thrown into circuit. Fig. 3 is a similar view showing the parts as situated when the receiver is disconnected and the call thrown into circuit. Fig. 4 is a side elevation. Fig. 5 is a sectional detail of the weight.

A is a call-box of any ordinary construction, T the transmitter device, and C the receiver. The call or signal mechanism in the box A is furnished with the usual bifurcated switch-lever *a*, upon which the transmitter has heretofore been suspended when not in use, thereby throwing the alarm into circuit, the act of lifting the receiver from its switch for use releasing the switch *a*, as heretofore used, and allowing it to automatically throw the transmitter into circuit.

The receiver C is held substantially or approximately in a horizontal position by a suitable support S, which may be of the character and provided with the several appliances for adjustment described in my concurrent applications, Serial No. 664,821, filed December 31, 1897, and Serial No. 664,626, filed December 30, 1897.

As shown in the drawings, the bifurcated arms *s s* are attached to a standard *s'*, which is adjustable vertically upon a sliding base or support B, by means of a set-screw s^2, the table or other support D being formed with a longitudinal slot *b* to accommodate the lower end of the said standards *s'*.

The base or slide B is held laterally upon the table or support D by rabbets or guides *d'* and is provided with an inclined plane d^2, separating an upper plane d^3 and a lower plane d^4.

The supplementary weight W may be made to represent in external configuration more or less the transmitter T and is designed to be hung on the switch *a* in a like manner. The lower end of the weight W is formed with a recess *w* for the reception of the upper end *r* of the vertical rod R, the opposite or lower extremity of which is provided with a roller *r'*, resting or traveling upon the planes d^2 d^3. A guiding and steadying arm or bracket E may be provided for the rod R, or equivalent means of support may be furnished.

The operation is as follows: The parts being in the position shown in Figs. 1, 3, and 4, the person desiring to use the telephone draws forward the base B by means of the handle b^2 or other suitable device until the receiver C is in proper relation horizontally to the transmitter T—that is, so that the receiver will be in convenient proximity to the ear of the user when his mouth is in proper relation to the transmitter. This action draws the inclined plane d^2 under and beyond the roller

r' upon the lower end of the rod R, so that said roller rests upon the upper plane d^3, the rod in the meantime having raised the weight W sufficiently to release the switch a and allow it to act automatically in throwing the receiver in circuit. After use the pushing back of the receiver-slide B causes the roller r' to again descend the incline d^2 onto the lower plane d^4, thereby withdrawing the upper end r of the rod R from the auxiliary weight W, which thus presses down the switch a, disconnecting the receiver and throwing the alarm or call device into circuit.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a telephone the combination with a transmitter T, alarm A, provided with the automatic switch a, the auxiliary weight W, the lifting-rod R, provided with the roller r', the sliding base B, formed with the inclined plane d^2, interposed between the upper and lower planes d^3, d^4, the receiver-support S, and said receiver C, the whole arranged and operating substantially in the manner and for the purpose described.

ABBOT AUGUSTUS LOW.

Witnesses:
D. W. GARDNER,
FLORENCE MIATT.