(No Model.)

A. F. BOARDMAN.

TELEPHONE HOLDER AND CUT-OUT.

No. 545,191. Patented Aug. 27, 1895.

Fig. 1.

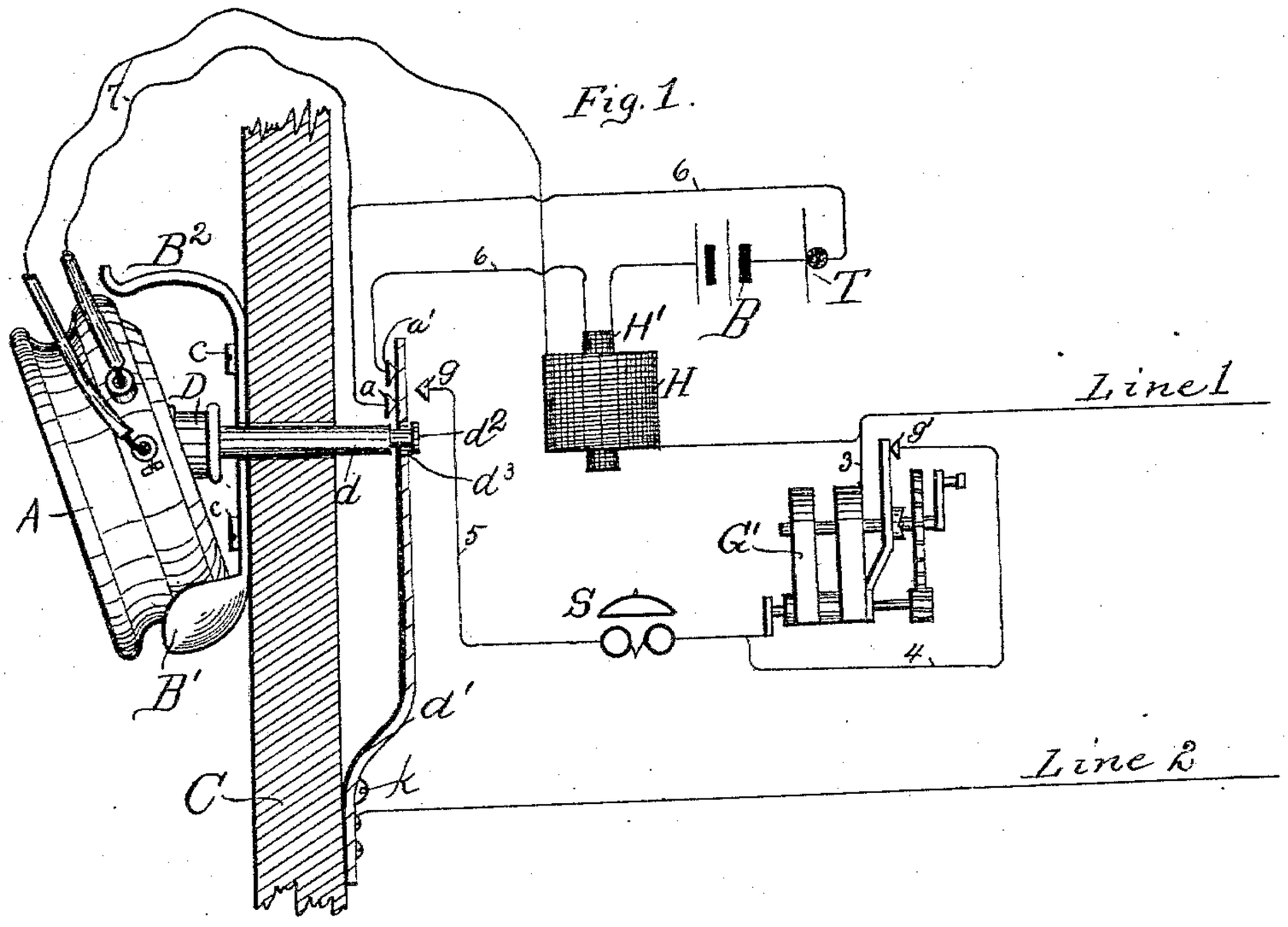
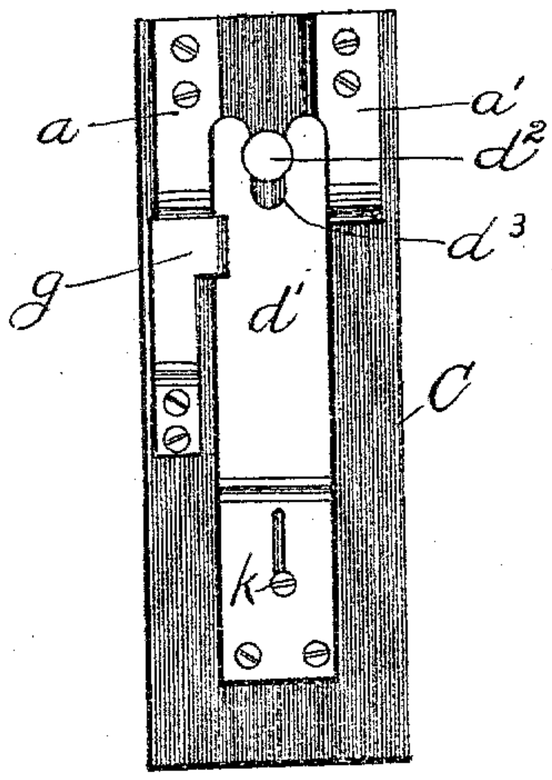


Fig. 2.



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ARTHUR F. BOARDMAN, OF SOMERVILLE, ASSIGNOR OF ONE-HALF TO JAMES D. LEATHERBEE, OF SOUTH BRAINTREE, MASSACHUSETTS.

TELEPHONE HOLDER AND CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 545,191, dated August 27, 1895.

Application filed January 2, 1894. Serial No. 495,315. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR F. BOARDMAN, of Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improved Telephone Holder and Cut-Out, of which the following is a specification, reference being had to the accompanying drawings, making a part hereof.

My invention relates to a telephone-switch operated manually by the insertion and withdrawal of the telephone-receiver in and from a spring-clamp adapted to hold the receiver while it is not in use.

Figure 1 represents a side view of the spring-clamp and a diagram view of the circuits controlled by the switch. Fig. 2 shows a rear view of the preferred construction of the switch.

In Fig. 1 the spring-clamp comprises a curved portion B′, adapted to fit the conformation of the receiver A. A spring-finger B^2 is so shaped as to catch and hold the receiver when it is pushed completely into place. The receiver preferably used with this switch is of the so-called "watchcase" variety. A spring d' normally rests against back contacts a and a'. This spring has a hole or slot d^3, into which is fitted the end d^2 of a spindle d. This spindle d has an enlarged head D. This head is adapted to be pushed by the receiver when it is inserted into the spring-clamp, with the result that the switch-spring d' is forced away from the back contacts a and a', and forced into contact with the front contact g. Thus it will be seen that the leaf-spring d' not only tends to hold the spindle d outward, but controls certain circuit arrangements. The spring-clamp is mounted upon the insulating-support C by means of small screws or other devices c c. The spindle d is journaled in a hole through this support C.

When the receiver is in the clamp and not switched for use, the circuit in the diagram may be traced from line 2 to leaf-spring d', contact g, wire 5, including the polarized call-bell S, the magneto-call generator G′, thence by wire 3 to line 1. The magneto-generator is normally short-circuited by the conductor 4, and normally-closed contacts g' opened automatically whenever the generator is operated by the usual automatic device, well known to telephone-engineers.

When the receiver is switched for use and is no longer held by the spring-clamp, the circuit is transferred as follows: Line 2, leaf-spring d', back contact a, flexible conductors 7, including the coils of the telephone-receiver A, a secondary H of the induction-coil, back to line 1. At the same time the local transmitter-circuit is closed as follows: Back contact a, wire 6, including the microphone T, battery B, the primary H′ of the induction-coil, and the back contact a'. The tension of the leaf-spring d' may be adjusted by an adjusting-screw k.

Fig. 2 shows one of the possible arrangements of the various switch-contacts referred to. It is obvious that this arrangement may be greatly varied without departing from the essence of my invention. It is obvious, also, that the spring-clamp may be greatly varied in its construction, the trough-shaped base B′, for example, taking any suitable form adapted to support the lower side of the receiver. Various other changes may be made without departing from the scope of my invention.

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

1. In a telephone switch, a receiver, a clamp therefor comprising a trough and a spring adapted to grasp and hold said receiver, telephone and call circuits, a spindle operated by inserting said receiver into and withdrawing it from said clamp to open or close said circuits.

2. In a telephone switch, a case, a receiver, a clamp for said receiver mounted on the outside of said case comprising a trough and spring adapted to grasp and hold said receiver, telephone and call circuits, switch contacts within said case controlling the continuity of said circuits, a spindle operating said switch contacts, operated by inserting the receiver into and withdrawing it from said clamp.

3. In a telephone switch, telephone and call apparatus, and circuits, a switch controlling said circuits, a "watch case" telephone receiver, a clamp comprising a curved trough and spring adapted to fit the face and edges

of said receiver, and adapted to grasp and hold said receiver, said switch being operated by the insertion of the receiver into said clamp.

4. In a telephone switch, a telephone circuit, a call circuit, a switch for controlling said circuits, a "watch case" telephone receiver, a clamp comprising a curved trough and spring adapted to fit the face and edges of said receiver and adapted to grasp and hold said receiver, a spindle, said switch being operated by said spindle when said receiver is inserted into and withdrawn from said clamp.

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