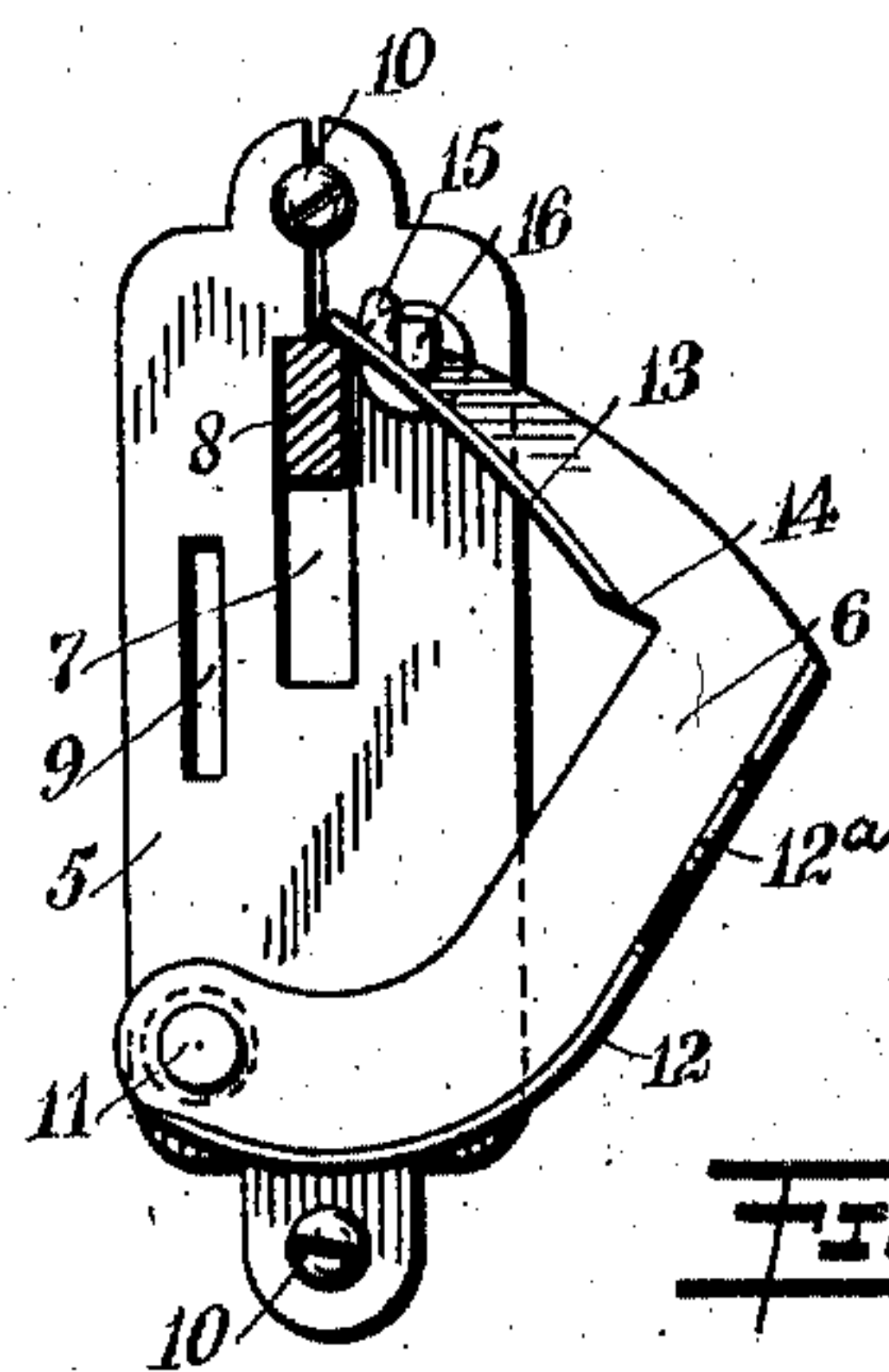
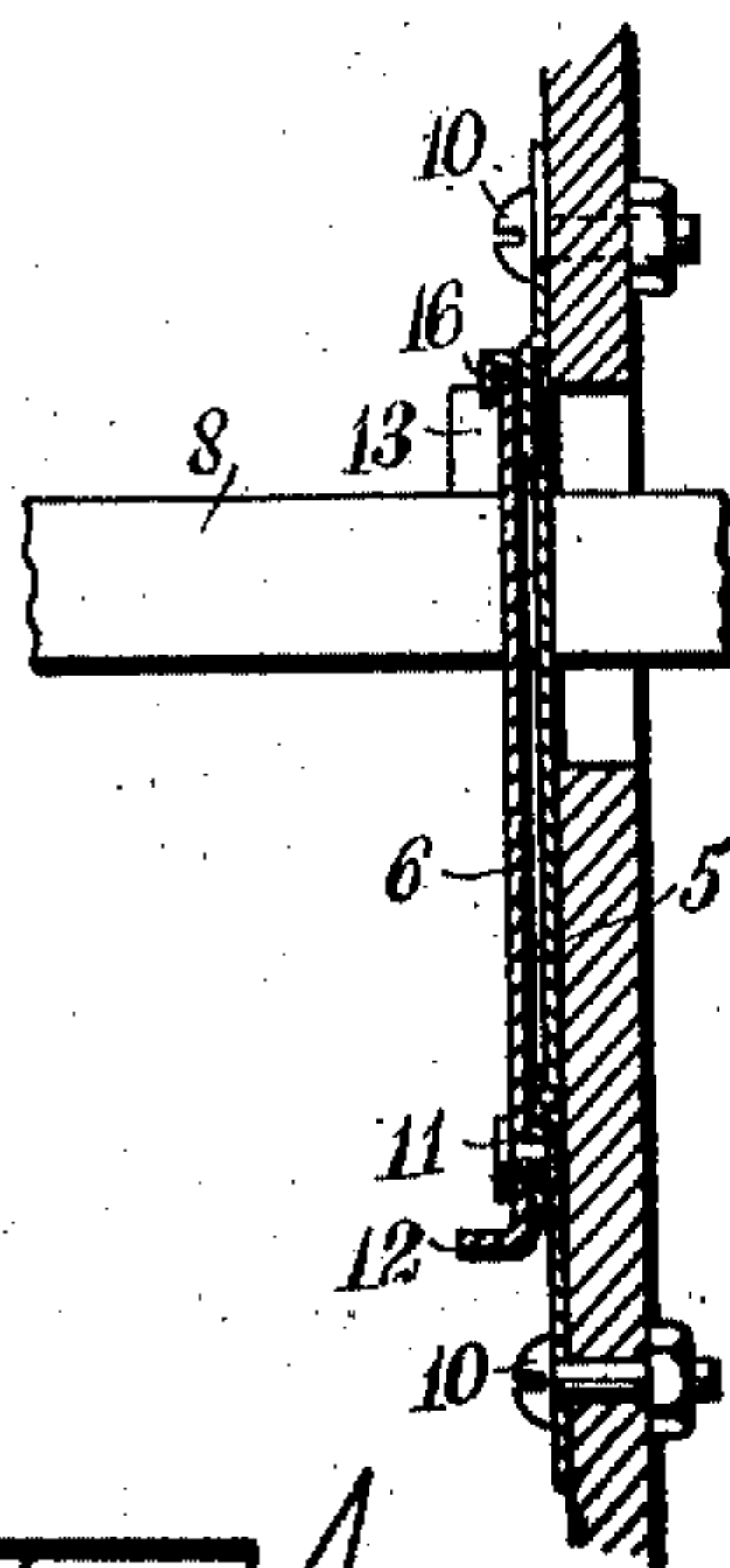
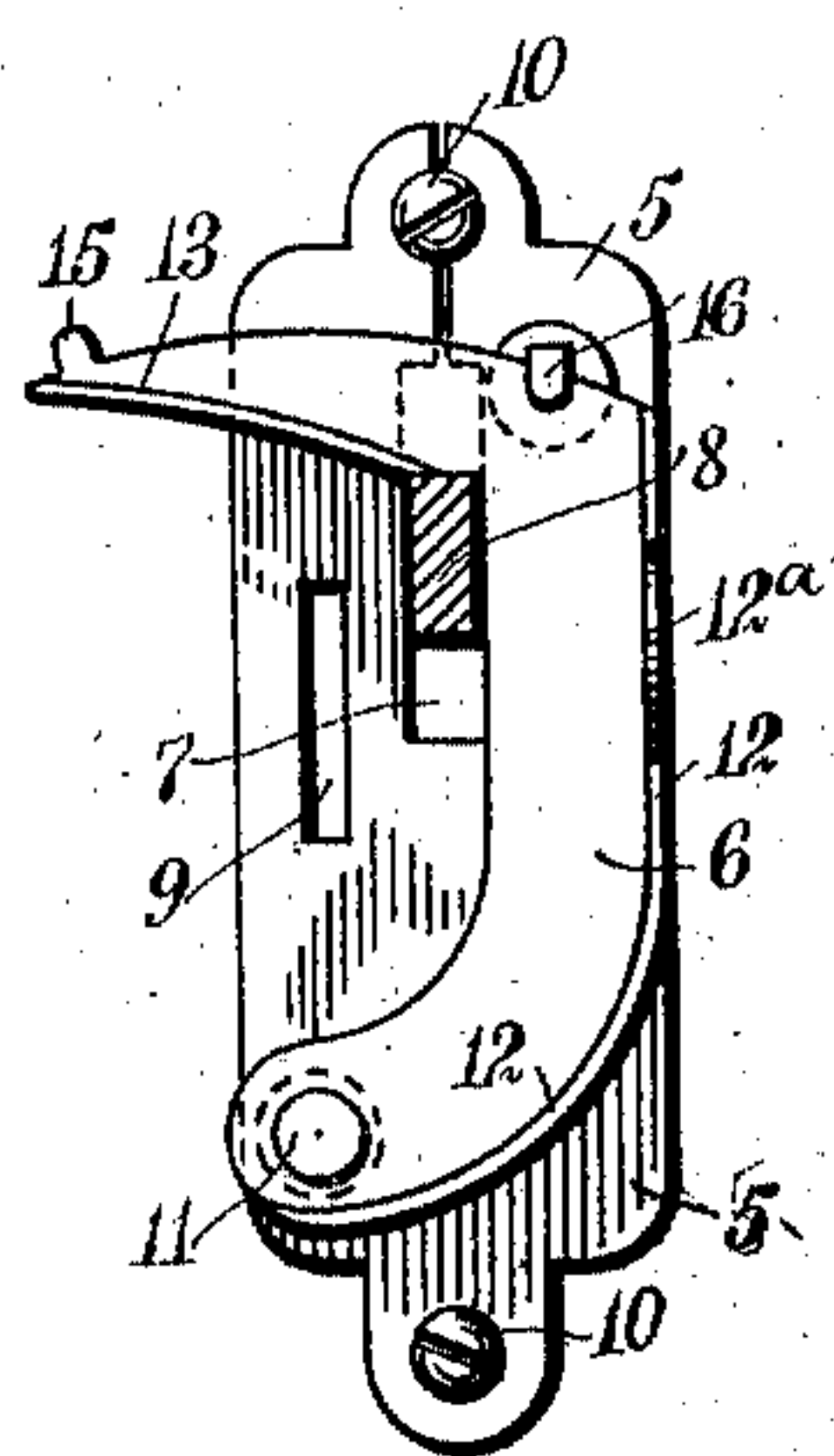
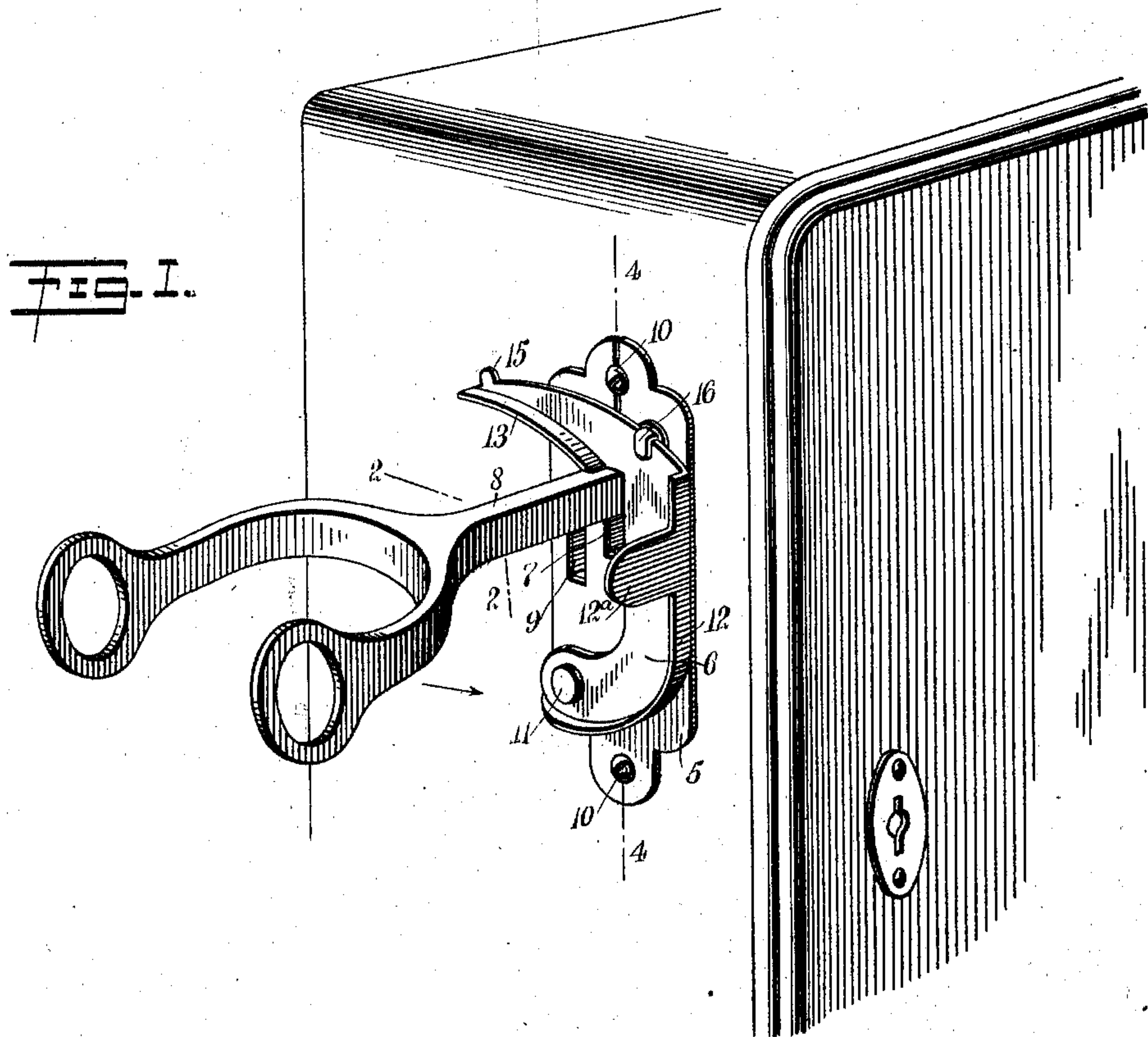


W. E. BURT.
 TELEPHONE NOISE EXCLUDER AND CURRENT SAVING DEVICE.
 APPLICATION FILED MAY 11, 1910.

967,719.

Patented Aug. 16, 1910.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM EBENEZER BURT, OF YUBA, WISCONSIN.

TELEPHONE NOISE-EXCLUDER AND CURRENT-SAVING DEVICE.

967,719.

Specification of Letters Patent.

Patented Aug. 16, 1910.

Application filed May 11, 1910. Serial No. 560,603.

To all whom it may concern:

Be it known that I, WILLIAM E. BURT, a citizen of the United States, and a resident of Yuba, in the county of Richland and State of Wisconsin, have invented a new and Improved Telephone Noise-Excluder and Current-Saving Device, of which the following is a full, clear, and exact description.

The invention is an attachment for telephones, to exclude the local noise and save the battery current.

Many of the leading makes of telephones are constructed so that when the receiver is hanging in the automatic receiver hook, the talking circuit is broken and the ringing circuit closed. The primary circuit of the induction coil, the battery circuit and the transmitter are in circuit, and this circuit is opened or closed through the automatic switch afforded by the receiver hook. When the hook is down, the ringing circuit is closed. The secondary circuit of the induction coil, the receiver, the condenser and a make-and-break in the hook switch are directly connected to the lines. One can hear well without the battery transmitter or the primary winding of the induction coil, but cannot be heard over the line without them, except through the receiver, which is unsatisfactory.

Many telephones are designed, and all, or the majority of them, can be easily changed, so that the battery circuit is completely broken before the breaking of the talking circuit. By the talking circuit I mean the circuit in which the receiver and secondary winding of the induction coil are connected. In a telephone of this character it is clear that if the receiver hook is gradually pulled down there will be a point reached in which the battery circuit is broken and one can hear but cannot be heard over the line. If the receiver hook is fully opened and the transmitter in action, the transmitter picks up any local noise, the noise being heard by the operator in the receiver.

My invention is an attachment for the telephone, which is designed to hold the receiver hook at a point at which the battery circuit is broken and the talking circuit completed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of ref-

erence indicate corresponding parts in all the views.

Figure 1 is a perspective view of a noise excluder and current saving device embodying my invention, the attachment being shown applied to the telephone and engaged with the receiver hook to retain the latter in a position in which the battery circuit is broken and the talking circuit closed; Fig. 2 is a section on the line 2—2 of Fig. 1, looking in the direction of the arrow; Fig. 3 is a section similar to Fig. 2, with the locking or holding hook of the attachment released from the receiver hook; and Fig. 4 is a vertical section on the line 4—4 of Fig. 1.

In a practical embodiment of my invention I provide a fastening plate 5 and a locking or holding hook 6, the fastening plate being provided with a vertical slot 7 for the passage of the receiver hook 8, and also provided with a narrower vertical slot 9, shown to be arranged at one side of the slot 7. The ends of the fastening plates are constructed with the customary screw openings for receiving the fastening screws 10; and from the slot 7 one end of the plate is vertically split so that the divided portions of the plate can be sprung apart and passed over the receiver hook to place the latter in the slot 7. The hook 6 is preferably of C-form, and is fulcrumed at its lower end to the fastening plate, as indicated at 11, and provided at its outer vertical edge with a stiffening flange 12, and is also provided with a similar flange 13 at the inner edge of its upper laterally-extending arm. The flange 12 is extended at a point intermediate its length to form a thumb-piece 12^a, by which the hook is returned to a retaining position. At the junction of the vertical and laterally-extending arms of the hook, the same is flattened at the inner side, as indicated at 14, to seat, when in its locking position, on the upper edge of the receiver hook 8, as shown in Figs. 1 and 2. By the construction of the retaining hook or member 6 in the manner shown and described, when in its locking or holding position it will be frictionally held in place by the action of the receiver hook tending to move upwardly. When, however, the receiver hook is slightly depressed, the retaining hook will swing back under the action of gravity. To limit the outward movement of the retaining hook and hold the upper portion of

the hook close to the fastening plate 5, the point of the laterally-extending arm of the hook is provided with a stop projection 15, and the fastening plate 5 is provided with a combined stop projection and retaining clip 16, engaging over the upper edge of the laterally-extending arm of the hook, this edge of the hook, as shown, being concentrically curved to the fulcrum 11.

10 In applying the attachment to the telephone, after the receiver arm has been passed into the slot 7, the fastening plate is temporarily secured through the slot 9, by a screw or similar device. This temporary 15 fastening on the plate allows the latter to be vertically adjusted until a point is found, which, when the hook is in retaining position, will hold the receiver hook so that the battery circuit will be cut off while the talking circuit remains completed. The plate is 20 then secured by the permanent fastenings 10.

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

25 1. In combination, a telephone hook for controlling the battery and talking circuits, a fastening member, and a retaining member carried by the fastening member and arranged to engage the hook and retain it at 30 a point where the battery circuit is broken and the talking circuit completed.

2. In combination, a telephone receiver hook for controlling the battery and talking circuits, and a retaining member arranged 35 to move into engagement with the hook and hold it at a point where the battery circuit is broken and the talking circuit completed.

3. In combination, a telephone receiver

hook, and a retaining hook arranged to engage the receiver hook and hold it at an 40 intermediate point of its range of travel, and pivotally supported to swing from engagement with the receiver hook when released by the latter.

4. A telephone attachment comprising a 45 fastening plate having a receiver hook slot, and a retaining hook for the receiver hook, fulcrumed to the plate to swing across the said slot.

5. A telephone attachment comprising a 50 fastening member, and an approximately C-shaped retaining hook for engaging the receiver hook of the telephone, fulcrumed at its lower end to the fastening member.

6. A telephone attachment comprising a 55 fastening plate, and a gravity-retained retaining hook for engaging the receiver hook of the telephone, fulcrumed to the fastening plate.

7. A telephone attachment comprising a 60 fastening plate, an approximately C-shaped retaining hook for engaging the receiver hook of the telephone and holding the latter in a depressed position, and stops respectively carried by the hook and by the 65 fastening plate, arranged to limit the outward movement of the hook, with the stop of the fastening plate engaging over the outer face of the hook.

In testimony whereof I have signed my 70 name to this specification in the presence of two subscribing witnesses.

WILLIAM EBENEZER BURT.

Witnesses:

G. M. THOMPSON,
THOS. P. BURT.